

**BACHELOR OF TECHNOLOGY**

**in**

**CIVIL ENGINEERING**

**4 YEARS PROGRAMME**

**Choice Based Credit System**

**w. e. f. July 2019**

**(70:30)**



**DEPARTMENT OF CIVIL ENGINEERING**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY**

**HISAR-125001, HARYANA**

**Department of Civil Engineering**  
**Guru Jambheshwar University of Science and Technology, Hisar**

**Programme Educational Objectives (PEOs)**

1. To develop a professional to pursue career as a Civil Engineer with adequate technical knowledge and skills while using modern tools for problem-solving and exhibiting qualities of communication, team membership, and leadership.
2. To develop the ability to practice ethically focusing on social relevance, environmental sustainability, optimal solutions and safety of stakeholders.
3. To develop abilities of lifelong learning to continuously strive to enhance decision-making abilities to investigate, design and develop complex facilities.

**Programme Outcomes (POs)**

To achieve the PEOs, we expect our students to attain the following outcomes by the time of their graduation. The Programme graduates will have:

- 1. Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis, and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
- 6. The engineer and society:** Apply to reason informed by the contextual knowledge to assess

societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

- 7. Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and teamwork:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### **Programme Specific Outcomes (PSOs)**

1. Able to analyze various Civil Engineering structures and systems by using basic and advanced technologies.
2. Able to design civil engineering facilities and their elements and also the use of modern software tools for the same.
3. Able to plan, monitor and supervise construction activities to complete civil engineering facilities satisfactorily.
4. Able to practice as a construction professional through ethical practice while focusing on sustainability and the economy.

<b>Department of Civil Engineering</b>		
<b>B. Tech CE (3<sup>rd</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
BSC201-T	Mathematics-III	
ESC-ME201-T	Engineering Mechanics	<p>CO1 Students will be able to describe scalar and vector techniques for analyzing forces in statically determinate structures.</p> <p>CO2 Students will be able to locate centroid, centre of gravity of different types of symmetrical and unsymmetrical sections.</p> <p>CO3 Students will be able to apply Newton's laws of Motions to solve real-world problems.</p> <p>CO4 Students will be able to examine the physical significance of moment of inertia e.g in railway, flyovers, Bridges, automobiles etc.</p>
HSMC-CVE201-T	Introduction to Civil Engg.	<p>CO1. Introduction to what constitutes Civil Engineering L1(Remembering)</p> <p>CO2. Identifying the various areas available to pursue and specialize within the overall field of Civil Engineering L2(Understanding)</p> <p>CO3. Analyzing various possibilities of a career in this field L4(Analyzing)</p> <p>CO4. Evaluate the depth of engagement possible within each of these areas L5(Evaluating)</p>
PCC-CVE201-T	Surveying-I	<p>CO1 Calculate angles, distances and levels L1(Remembering)</p> <p>CO2 Identify data collection methods and prepare field notes L2(Understanding)</p> <p>CO3 Demonstrate the working principles of survey instruments L3(Applying)</p> <p>CO4 Estimate measurement errors and apply corrections L5(Evaluating)</p> <p>CO5 Interpret survey data and plot topographical maps L6(Creating)</p>

PCC-CVE203-T	Engineering Geology	<p>CO1 Describe weathering process and mass movement of rocks to soil L1(Remembering) CO2 Distinguish geological formations L2(Understanding)</p> <p>CO3 Identify geological structures and processes for rock mass quality L3(Applying)</p> <p>CO4 Identify subsurface information and groundwater potential sites through geophysical investigations L5(Evaluating)</p> <p>CO5 Apply geological principles for mitigation of natural hazards and select sites for dams and tunnels L6(Creating)</p>
PCC-CVE205-T	Disaster Preparedness & Planning	<p>CO1 Ability to understand Categories of Disasters L2(Understanding)</p> <p>CO2 Realization of the responsibilities to society L3(Applying)</p> <p>CO3 Analyzing Relationship between Development and Disasters L4(Analyzing)</p> <p>CO4 The application of Disaster Concepts to Management L5(Creating)</p>
PCC-CVE201-P	Surveying-I Lab	<p>CO1 Calculate angles, distances and levels L1(Remembering)</p> <p>CO2 Identify data collection methods and prepare field notes L2(Understanding)</p> <p>CO3 Estimate measurement errors and apply corrections L5(Evaluating)</p> <p>CO4 Interpret survey data and plot topographical maps L6(Creating)</p>
PCC-CVE203-P	Engineering Geology Lab	<p>CO1 Describe different types of ores and minerals L2(Understanding)</p> <p>CO2 Distinguish geological formations L2(Understanding)</p> <p>CO3 Identify geological structures and processes for rock mass quality L3(Applying)</p> <p>CO4 Identify subsurface information and groundwater potential sites through geophysical investigations L5(Evaluating)</p>
MC 102-T	Environmental Science	

<b>Department of Civil Engineering</b>		
<b>B. Tech CE (4<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
HSMC-CVE202-T	Civil Engg-Societal & Global Impact	<p>CO1 Recall aspects of the built environment and factors impacting the quality of life L1(Remembering )</p> <p>CO2 Understand the impact that Civil Engineering projects have on the society at large and on the global arena; and use resources efficiently and effectively. L2 (Understanding)</p> <p>CO3 Apply professional and responsible judgement and take a leadership role L3(Applying) CO4 Examine the potential of Civil Engineering for employment creation and its contribution to the GDP L4(Analysis)</p> <p>CO5 Value the sustainability of the environment, including its aesthetics L5(Evaluating)</p> <p>CO6 Formulate energy requirement with the extent of infrastructure and analyze how they are met, comparing the past present and future. L6( Creating)</p>
PCC-CVE202-T	Introduction to Fluid Mechanics	<p>CO1 Outline principles of hydrostatics and explain the concept of buoyancy and state of equilibrium L1(Remembering)</p> <p>CO2 Understand the properties of fluids and their behaviour under static and dynamic conditions and measure fluid pressure in a manometer L2 (Understanding)</p> <p>CO3 Use fluid measuring devices like venture meter, orifice meter, notches and mouthpiece L3 (Applying)</p> <p>CO4 Distinguish various types of flows and solve the problem on continuity equation, stream function and velocity potential function L4(Analysing)</p> <p>CO5 Evaluate Bernoulli's equation and use it to solve the problems of fluids L5(Evaluating) CO6 Formulate one-, two- and three-dimensional continuity equations in Cartesian coordinates L6(Creating)</p>
PCC-CVE204-T	Structural Analysis-1	<p>CO1 Calculate deflection of statically determinate structures under various loading and support conditions L2 (Understanding)</p> <p>CO2 Apply basic concepts of structural mechanics for the analysis of beams and frames L3(Applying)</p>

		<p>CO3 Examine the basic concepts of structural mechanics for the analysis of truss, arches and cables, beams and columns L4(Analysing)</p> <p>CO4 Selection of beam columns and strut subjected to various types of loads L5(Evaluating)</p>
PCC-CVE206-T	Engineering Building and Drawing	<p>CO1 State the kind of material construction L1(Remembering)</p> <p>CO2 Recognize different problems regarding material in a building L2( Understanding)</p> <p>CO3 Supervise building constructions L4(Analyzing)</p> <p>CO4 Plan and draw constructional details of differing building components L6(Creating)</p>
PCC-CVE208-T	Environmental Engg.	<p>CO1 Identify and describe various elements of water supply, sewerage and air &amp; noise pollution L1 (Remembering)</p> <p>CO2 Differentiate between various types of pollutants with their sources, effects on environment and quantifications L2 (Understanding)</p> <p>CO3 Analyze the effects of different kinds of pollution and outline their respective measures for treatment L4(Analyzing)</p> <p>CO4 Design and compare sewerage systems and storm water drains L6(Creating)</p>
PCC-CVE202-P	Introduction to Fluid Mechanics Lab	<p>CO1 Basic properties of fluids and its application. L1 (Remembering)</p> <p>CO2 Understand Various conditions in respect to the flow of fluids and the concept of floating bodies. L2 (Understanding)</p> <p>CO3 Analyse Flow measuring techniques and equipments with theories of fluid flow. L4(Analyzing)</p> <p>CO4 Formation of hydraulic models and modules and dimension analysis of fluids. L6(Creating)</p>
PCC-CVE204-P	Structural Analysis-I Lab	<p>CO1 Basic application of mechanics involved commonly in the structures. L1 (Remembering)</p> <p>CO2 Apply the process of agitation on the structures.to get the desired values of the resultant action L3 (Applying)</p>

		<p>CO3 Various techniques to analyse the structures following the slope and deflection approach. L4(Analyzing)</p> <p>CO4 Formulate trusses or forces in each member of trusses using simplified approach. L6(Creating)</p>
PCC-CVE206-P	Engg. Building and Drawing Lab	<p>CO1 State the kind of material construction L1(Remembering)</p> <p>CO2 Recognize different problems regarding material in a building L2( Understanding)</p> <p>CO3 Supervise building constructions L4(Analyzing)</p> <p>CO4 Plan and draw constructional details of differing building components L6(Creating)</p>
PCC-CVE208-P	Environmental Engg. Lab	<p>CO1 Identify physical, chemical and biological characteristics of water and wastewater L2(Understanding)</p> <p>CO2 Solve optimum dosage of coagulant L3(Applying)</p> <p>CO3 Evaluate break - point chlorination L5(Evaluating)</p> <p>CO4 Formulate the quality of water and wastewater L6(creating)</p>

<b>Department of Civil Engineering</b>		
<b>B. Tech CE (5<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-CVE301-T	Advanced Fluid Mechanics	<p>CO1 Illustrate drag and lift coefficients L2(Understanding)</p> <p>CO2 Demonstrate flow profiles in channel transitions and analyze hydraulic transients L3(Applying)</p> <p>CO3 Analyze compressible flows of liquids and gases L4(Analyzing)</p> <p>CO4 Design the working proportions of hydraulic machines L5(Evaluating)</p> <p>CO5 Design channels L6(Creating)</p>
PCC-CVE303-T	Structural Analysis-II	CO1 Explain Statically Indeterminate Structures L2( Understanding)



		<p>CO2 Apply Slope deflection and moment Distribution Methods and Column Analogy Method in structural analysis L3(Applying)</p> <p>CO3 Analysis of Two hinged Arches L4(Analyzing)</p> <p>CO4 Evaluate bending stresses in beam subjected to Unsymmetrical Bending L5(Evaluating) CO5 Design Cable and suspension Bridges L6 (Creating)</p>
PCC-CVE305-T	Surveying –II	<p>CO1 Understand mathematical adjustment of accidental errors involved in surveying measurements L2(Understanding)</p> <p>CO2 Carry out a geodetic survey, taking accurate measurements using instruments and adjusting the traverse L3(Applying)</p> <p>CO3 Plan a survey for applications such as road alignment and height of the building L4(Analyzing)</p> <p>CO4 Interpret survey data and plot topographical maps L5 (Evaluation)</p> <p>CO5 Create height maps and contours using photogrammetric measurements L6 (Creating)</p>
PEC-CVE307-T	Design of Concrete Structures-I	<p>CO1 Recall various aspects of the Design of concrete structures L1 (Remembering)</p> <p>CO2 Explain the basic and application aspects of design of concrete structures L2 (Understanding)</p> <p>CO3 Choose appropriate design of different type of concrete structures for different type of civil work. L3 (Applying)</p> <p>CO4 Examine Limit State of Collapse for flexure- Shear-bond torsion and compression etc. L4 (Analyzing)</p> <p>CO5 Design different type of concrete structures for various types of civil work. L6 (Creating)</p>
PCC-CVE301-P	Advanced Fluid Mechanics Lab	<p>CO 1 Explain basic properties of fluids and its application. L2(Understanding)</p> <p>CO 2 Employ various conditions in respect to the flow of fluids and the concept of floating bodies. L3(Applying)</p> <p>CO 3 Examine properties and functioning of centrifugal pump. L4(Analyzing)</p> <p>CO 4 Determine the flow in various pipe fittings. L5(Evaluating)</p>

		CO 5 To develop the momentum characteristics of a given jet. L6(Creating)
PCC-CVE303-P	Structural Analysis-II Lab	<p>CO1 Basic application of mechanics involved commonly in the structures. L2(Understanding)</p> <p>CO2 Get the desired values of the resultant action in response to the agitation on the structures. L3(Applying)</p> <p>CO3 Various techniques to analyse the structures following the slope and deflection approach. L4(Analyzing)</p> <p>CO4 Evaluation of trusses or forces in each member of trusses using simplified approach. L5(Evaluating)</p> <p>CO5 Develop qualitative diagrams showing the displaced shape, bending moments L6(Creating)</p>
PCC-CVE305-P	Surveying-II Lab	<p>CO1 Understand Theodilite along with chain/tape, compass on the field L2(Understanding) CO2 Apply Geometric and trigonometric principles of basic surveying calculations L3(Applying)</p> <p>CO3 Plan survey , taking accurate measurements , filed booking, plotting and adjustment of errors L4(Analyzing)</p> <p>CO4 Evaluate various types of surveys ,a s part of surveying team L5(Evaluating)</p> <p>CO5 Create drawing techniques in the development of topographic map L6(Creating)</p>
PCC-CVE307-P	Design of Concrete Structures-I Lab	<p>CO1. Understand the structural drawings of various building components L2(Understanding)</p> <p>CO2. Apply the coding provisions of Indian Standards for detailing L3(Applying)</p> <p>CO3. Use the Auto Cad software tool for drawing concrete structures L4(Analyzing)</p> <p>CO4 Evaluate drawings of concrete structures L5 (Evaluating)</p> <p>CO5 Design concrete structures using Auto Cad software L6 (Creating)</p>
OEC-1	Open elective -1	
HSMC 301-T	Economics for Engineers	
INT-CVE-301-P	Survey Camp	

MC 104-T	Essence of Indian Traditional Knowledge	
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<b>Department of Civil Engineering</b>		
<b>B. Tech CE (6<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-CVE302-T	Transportation Engg.-I	<p>CO1 Quantify the specifications of various road construction materials required L2( Understanding)</p> <p>CO2 Perform geometric design of highways and expressways L3(Applying)</p> <p>CO3 Perform analysis and design of flexible and rigid pavements L4(Analyzing)</p> <p>CO4 Evaluate highway maintenance, drainage and economic issues L5(Evaluating)</p> <p>CO5 Perform the traffic studies necessary before making changes to or designing new road L6(Creating)</p>
PCC-CVE304-T	Sewerage & Sewage Treatment	<p>CO1 Understand the concepts of sewage and sewage treatment L2 (Understanding)</p> <p>CO2 Apply environmental treatment technologies for sewage treatment L3 (Applying)</p> <p>CO3 Characterization of sewage using various parameters and methods L4 (Analyzing)</p> <p>CO4 Assess appropriate methods for sewage treatment L5 (Evaluating)</p> <p>CO5 Plan, design and operations of sewerage system and sewage treatment plant L6 (Creating)</p>
PCC-CVE306-T	Soil Mechanics	<p>CO1 Describe and discuss basic concepts of soil properties and soil mechanics L2 (Understanding)</p> <p>CO2 Classify and determine the index and engineering properties of soil L3 (Applying)</p> <p>CO3 Apply the basic concepts of soil mechanics in civil engineering works L3 (Applying)</p> <p>CO4 Examine the permeability and compressibility characteristics of soils in engineering practices L4 (Analyzing)</p>

		CO5 Evaluate earth pressures and apply to check external stability of retaining structures L5 (Evaluating)
PEC-CVE308-T	Design of Steel Structures-I	CO1 Understand various aspects of the designs of steel structures L2 (Understanding) CO2 Apply the IS codes of practice for the design of steel structural elements. L3 (Applying) CO3 Analyze and design the behavior of various connections for both axial and eccentric forces. L4 (Analyzing) CO4 Examine and differentiate between gantry and plate girders L4 (Analyzing) CO5 Design of compression and flexural members using simple and built-up sections. L6(Creating)
PCC-CVE302-P	Transportation Engg.-I Lab	CO1 Estimate earth work from longitudinal and cross-section details L2 (Understanding) CO2 Demonstrate quality control tests on pavements and pavement materials L3 (Applying) CO3 Conduct traffic studies for estimating traffic flow characteristics L4 (Analyzing) CO4 Evaluate the pavement materials L5( Evaluating) CO5 Design grade intersections L6 (Creating)
PCC-CVE304-P	Sewerage and Sewage Treatment Lab	CO1 Identify physical, chemical and biological characteristics of sewage L2(Understanding) CO2 Solve optimum dosage of coagulant of sewage L3(Applying) CO3 Analyze a sewage treatment plant L4(Analyzing) CO4 Evaluate break - point chlorination L5(Evaluating) CO5 Formulate the quality of Sewage L6(creating)
PCC-CVE306-P	Soil Mechanics Lab	CO1 Cite the soil conditions for design of structures L1(Remembering) CO2 Classify soils L2(Understanding) CO3 Interpret the soil after exploration from underground samples L3(Applying) CO4 Determine index properties of soils L4(Analyzing) CO5 Determine engineering properties of soils L5(Evaluating)
PEC-I	Program Elective-I	

OEC-II	Open elective –II	
HSMC-302-T	Fundamentals of management for Engineers	

<b>Department of Civil Engineering</b>		
<b>B. Tech CE (7<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-CVE401-T	Estimation, Costing and Valuation	<p>CO1 Explain the basics of preparing estimates, costs and valuation for civil engineering works L2 (Understanding)</p> <p>CO2 Prepare specifications for different items of civil works L3 (Applying)</p> <p>CO3 Analyze rates for various items of works L4 (Analyzing)</p> <p>CO4 Estimate quantities of different items of civil engineering works L5 (Evaluating)</p> <p>CO5 Prepare tender documents for civil work and perform valuation of different civil engineering structures. L6 (Creating)</p>
PCC-CVE403-T	Transportation Engg.-II	<p>CO1 Understand the runway orientation and the runway length as per FAA &amp; ICAO guidelines L2 (Understanding)</p> <p>CO2 Employ Railway Track specifications and perform geometric design of the railway track. L3( Applying)</p> <p>CO3 Analyze pavement and learn the concept of pavement maintenance management system L4( Analysing)</p> <p>CO4 Design turnout and crossings as per the Indian Railways L5 (Evaluating)</p> <p>CO5 Design the airport pavements including air-side marking &amp; lighting as per ICAO &amp; FAA guidelines L6(Creating)</p>
PCC-CVE405-T	Foundation Engineering	CO1 Describe and discuss the concepts of foundation engineering L2 (Understanding)

		<p>CO2 Employ various methods of soil exploration for foundation engineering L3 (Applying) CO3 Analyze and determine earth pressure behind a retaining structure- for various soil and loading conditions. L4 (Analyzing)</p> <p>CO4 Evaluate the use of soil stabilization and geotextiles in foundation engineering L5 (Evaluating)</p> <p>CO5 Develop and design various types of foundations for civil engineering works L6 (Creating)</p>
PEC-II	Program Elective –II	
PEC-III	Program Elective –III	
OEC-III	Open Elective –III	
PROJ-CVE401-P	PROJECT –I	
INT-CVE-401-P	Industrial Training-II	

<b>Department of Civil Engineering</b>		
<b>B. Tech CE (8<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-CVE402-T	Construction Engineering & Management	<p>CO1 Do basic planning for a construction project. L2 (Understanding)</p> <p>CO2 Draw networks and solve using CPM and PERT L3 (Applying)</p> <p>CO3 Analyze resource allocation for a project. L4 (Analyzing)</p> <p>CO4 Evaluate project monitoring and control. L5 (Evaluating)</p> <p>CO5 Perform quality assurance and control. L6 (Creating)</p>
PCC-CVE404-T	Hydrology And Water Resources	<p>CO1 State and outline the concepts of Irrigation Engineering L1 (Remembering)</p> <p>CO2 Understand the basics of groundwater and hydraulics of subsurface flows. L2 (Understanding)</p> <p>CO3 Illustrate abstractions from precipitation L3 (Applying)</p>

		<p>CO4 1. Analyze the water requirement of crops, capacities of Distributaries and Canal. L4 (Analyzing)</p> <p>CO5 Plan and design Irrigation System (Canal network, irrigation structures, diversion head works, spillways and energy dissipations works etc.) L6 (Creating)</p>
PEC-IV	Program Elective –IV	
PEC-V	Program Elective –V	
PROJ-CVE402-P	PROJECT-II	
PROJ-CVE404-P	SEMINAR	

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**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY**

**HISAR-125001, HARYANA**



## 1.1. Vision and Mission of the Department of Computer Science and Engineering

### *1.1.1 Vision*

The vision of the Department is to become a centre of excellence for education in Computer Science and Engineering, Information Technology and Computer Applications. We visualize ourselves as an agency to nurture young minds to be the future leaders in the field of higher education, research and development, and information technology industry. Our aim is to bring out creators and innovators who will work towards the overall well-being of the society.

### *1.1.2. Mission*

- Imparting state-of-the-art knowledge in Computer Science and Engineering, Information Technology and Computer Applications.
- Ensuring that our students graduate with a sound theoretical basis and wide-ranging practical experience.
- Fostering linkages between the Department and, public and private sectors, traversing research establishments as well as Information Technology industry.
- Promoting ethical research of high quality.
- Adopting the best pedagogical methods in order to maximize knowledge transfer.
- Inculcating a culture of free and open discussions in the Department.
- Engaging students in evolving original ideas and applying them to solve complex engineering problems.
- Inspiring a zest into students for lifelong learning.
- Infusing scientific temper, enthusiasm, professionalism, team spirit and leadership qualities in students.
- Sensitizing students to look for environmentally sustainable engineering solutions.
- Upholding democratic values and an environment of equal opportunity for everyone.

## 1.2 B. Tech. (CSE): Programme Educational Objectives (PEOs)

The Programme Educational Objectives of the B. Tech. (CSE) Programme are:

- PEO1. To prepare responsible and ethical professionals to be successfully employed in Computer Science and Information Technology industry, who will be able to apply the principles of science, engineering and project management to develop and deploy solutions for real world problems after assessing their environmental, cultural and societal implications.
- PEO2. To train students for analysing, evaluating and designing complex engineering solutions individually or in teams by doing a systematic and in-depth research in the related problem domains, by using modern tools and by communicating effectively among the various stake holders.
- PEO3. To groom the professionals and entrepreneurs of tomorrow with leadership qualities and deep societal concerns who can move up in their professional career or start their own ventures.
- PEO4. To guide the graduates to develop a positive attitude towards learning and motivate them to take up higher studies and research.

### 1.3 B. Tech. (CSE): Programme Outcomes (POs)

- PO1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO2. **Problem analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

#### Program Specific Outcomes (PSOs)

- PSO1 **Developing Computational Systems:** Use principles of electronics and Micro-Processors, various programming languages, data structures, database management systems, computer algorithms, theory of computation and software engineering for designing and implementing computational systems.
- PSO2 **Devising Networking Solutions:** Apply the knowledge of systems in the areas related to network technologies, mobile ad hoc and sensor networks, cloud computing, IoT and, information and web security for devising networking solutions.
- PSO3 **Doing Data Analytics and Designing Intelligent Systems:** Utilize the approaches and tools of artificial intelligence and soft computing, data analytics and machine learning for designing and working with intelligent systems that can extract valuable information from large amount of data and learn from their environment.

<b>Department of CSE</b>		
<b>B. Tech CSE (3<sup>rd</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
BSC201-T	Mathematics-III	<p>CO1. Define concepts and terminology of Fourier Series and Fourier transforms, Functions of complex variables and Power Series etc. (LOTS: Level 1: Remember)</p> <p>CO2. Solve problems using Fourier transforms in domains like digital electronics and image processing. (LOTS: Level 3: Apply)</p> <p>CO3. Apply principles of functions of complex variables to solve computational problems. (LOTS: Level 3: Apply)</p> <p>CO4. Compare various concepts related to Fourier transforms and functions of complex variables. (HOTS: Level 4: Analyse)</p> <p>CO5. Select suitable method for given computational engineering problems and related domain. (HOTS: Level 4: Evaluate)</p> <p>CO6. Integrate the knowledge of Fourier Series and Fourier transforms, Functions of complex variables, and Power Series for solving real world problems. (HOTS: Level 6: Create)</p>
PCC-CSE201-T/PCC-IT201-T	Data Structures and Algorithms	<p>CO1. Describe various types of data structures and operations that can be implemented on these data structures. (LOTS: Level 1: Remember)</p> <p>CO2. Demonstrate the use of various data structures and their related operations. (LOTS: Level 2: Understand)</p> <p>CO3. Apply data structure to solve computational problems. (LOTS: Level 3: Apply)</p> <p>CO4. Compare the suitability of alternative data structures and prescribed operations for various problem situations. (HOTS: Level 4: Analyse).</p>

		<p>CO5. Defend solutions with respect to effective storage of data and efficiency of the required operations for solving real world problems. (HOTS: Level 5: Evaluate)</p>
PCC-CSE202-T/PCC-IT202-T	Object Oriented Programming using C++	<p>CO1. List the concepts related to object oriented paradigms. (LOTS: Level 1: Remember)</p> <p>CO2. Distinguish between structured and object oriented approaches to programming. (LOTS: Level 2: Understand)</p> <p>CO3. Apply object oriented constructs for problem solving. (LOTS: Level 3: Apply)</p> <p>CO4. Detect logical and run time errors and suggest appropriate modifications. (HOTS: Level 4: Analyse) CO5. Justify the design of a program for a given problem. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design solutions to programming problems using multiple object oriented programming constructs together. (HOTS: Level 6: Create)</p>
PCC-CSE203-T/PCC-IT203-T	Discrete Mathematics	<p>CO1. Outline various discrete structures and the related operations. (LOTS: Level 1: Remember)</p> <p>CO2. Illustrate different discrete structures with the help of examples. (LOTS: Level 2: Understand)</p> <p>CO3. Apply appropriate techniques to solve problems related to discrete structures.(LOTS: Level 3: Apply) .</p> <p>CO4. Justify the solutions with the help of proofs. (HOTS: Level 5: Evaluate)</p>

		CO5. Combine techniques related to discrete structures for solving real world problems. (HOTS: Level 6: Create)
PCC-CSE204-T/PCC-IT204-T	Computer Organisation and Architecture	<p>CO1. Outline the general concepts of digital electronics and computer organisation and architecture. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss the basic components and their interfacing.(LOTS: Level 2: Understand)</p> <p>CO3. Apply instructions for performing different operations. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the effect of addressing modes on the execution time of a program.(HOTS: Level 4: Analyse) .</p> <p>CO5. Contrast different types of memory, their architecture and access methods. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design of simple computer with different instruction sets. (HOTS: Level 6: Create)</p>
MC 102-T	Environmental Science	<p>CO1. State the environment related issues and challenges in sustainable development</p> <p>CO2. Demonstrate the understanding of various environment hazards and means of protection against these hazards. (LOTS: Level 2: Understand)</p> <p>CO3. Apply irreplaceable tool to provide first-hand knowledge on various environmental aspects in the entire learning process. (LOTS: Level 3: Apply)</p> <p>CO4. Analyze impacts of human business and developmental activities on the environment. (HOTS: Level 4: analyze)</p> <p>CO5. Design and evaluate strategies for sustainable management of environmental eco-systems.(HOTS: Level 6: design)</p>
PCC-CSE201-P/PCC-IT201-P	Data Structures and Algorithms using C/C++ Lab	CO1. Implement various data structures and the related operations. (LOTS: Levels 3: Apply)

		<p>CO2. Analyse space and time complexity of algorithms. (HOTS: Level 4: Analyse)</p> <p>CO3. Compare solutions on the basis of the appropriateness of data structure used and the efficiency of the operations implemented. (HOTS: Level 5: Evaluate)</p> <p>CO4. Integrate knowledge of data structures to solve real world problems related to data structure and algorithms. (HOTS: Level 6: Create)</p> <p>CO5. Create written records for the given assignments with problem definition, design of solution and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices while solving problems individually or in groups (LOTS: Level 3: Apply).</p>
<p>PCC-CSE202- P/PCC-IT202-P</p>	<p>Object Oriented Programming using C++ Lab</p>	<p>CO1. Implement problems with object oriented framework. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse the structure of programs for modular design. (HOTS: Level 4: Analyse)</p> <p>CO3. Evaluate robustness of a program by testing it on test/use cases. (HOTS: Level 5: Evaluate)</p> <p>CO4. Design class hierarchies for implementing inheritance/polymorphism. (HOTS: Level 6: Create)</p> <p>CO5. Create a lab record of assignments including problem definitions, design of solutions and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices and solve problems individually or in a group. (LOTS: Level 3: Apply)</p>

**B. Tech CSE (4<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
PCC-CSE205-T/PCC-IT205-T	Microprocessor and Interfacing	<p>CO1. Outline the architecture of 8085 and 8086 Microprocessor. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss the basic principles of addressing modes, pin diagrams. (LOTS: Level 2: Understand)</p> <p>CO3. Describe the functionality of various peripheral chip (LOTS: Level 2: Understand)</p> <p>CO4. Apply the concepts of interfacing of Memory, Input/output with Microprocessor. (LOTS: Level 3: Apply)</p> <p>CO5. Compare and contrast the working of 8085 and 8086 microprocessors. (HOTS: Level 5: Evaluate) CO6. Develop Assembly Language programs for 8085 and 8086 microprocessor.(HOTS: Level 6: Create)</p>
PCC-CSE206-T/PCC-IT301-T	Computer Networks	<p>CO1. Outline various models, topologies and devices of Computer Networks. (LOTS: Level 1: Remember) CO2. Explain the functions of various layers in Network Reference Model. (LOTS: Level 2: Understand) CO3. Apply different network concepts in various network communication protocols. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse performance of various protocols in different scenarios. (HOTS: Level 4: Analyse)</p> <p>CO5. Design network for an organisation. (HOTS: Level 6: Create )</p>
PCC-CSE207-T/PCC-IT207-T	Database Management System	<p>CO1. Describe fundamental elements of Database Management System. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss principles of relational Database modelling. (LOTS: Level 2: Understanding)</p>



		<p>CO3. Apply SQL for designing queries for Relational Databases. (LOTS: Level 3: Apply)</p> <p>CO4. Contrast various concurrency control and recovery techniques with concurrent transactions in DBMS. (HOTS: Level 5: Evaluate)</p> <p>CO5. Design models of databases using ER modelling and normalization for real life applications.(HOTS: Level 6: Create)</p>
PCC-CSE208-T/PCC-IT208-T	Analysis and Design of Algorithms	<p>CO1. State terminology and concepts algorithmic techniques. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss various algorithmic techniques. (LOTS: Level 2: Understand)</p> <p>CO3. Apply appropriate algorithmic techniques to solve computational problems. (LOTS: Level 3: Apply) CO4. Analysing algorithms for their efficiency by determining their complexity. (HOTS: Level 4: Analyse)</p> <p>CO5. Compare the pros and cons of applying the different algorithmic techniques to solve problems. (HOTS: Level 5: Evaluate)</p> <p>CO6. Formulate efficient and effective algorithmic solutions for different real- world problems. (HOTS: Level: 6 Create)</p>
PCC-CSE209-T/PCC-IT209-T	Software Engineering	<p>CO1. Define the various concepts related to software engineering. (LOTS: Level 1: Remember)</p> <p>CO2. Demonstrate the use of stages of various Software Life Cycle Models. (LOTS: Level 2: Understanding)</p> <p>CO3. Apply the Software Requirement Analysis and Software Design Process. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the size, cost, complexity, reliability, quality and maintenance of a software system. (HOTS: Level 4: Analyse)</p> <p>CO5. Construct software model according to the requirements of a customer. (HOTS: Level 6: Create)</p>

PCC-CSE210-T/PCC-IT210-T	Java Programming	<p>CO1. List object oriented characteristics peculiar to JAVA programming. (LOTS: Level 1: Remember)</p> <p>CO2. Describe object-oriented principles and paradigms implemented by Java programming language. (LOTS: Level 2: Understand)</p> <p>CO3. Apply object-oriented principles for solving problems using JAVA. (LOTS: Level 3: Apply)</p> <p>CO4. Identify classes, interfaces methods, hierarchy in the classes for a given programming problem in JAVA. (HOTS: Level 4: Analyse)</p> <p>CO5. Design Graphical User Interface applications and Web based applications in Java by importing applet, AWT and SWING packages. (HOTS: Level 6: Create)</p>
PCC-CSE205-P/PCC-IT205-P	Microprocessor and Interfacing Lab	<p>CO1. Describe the working of microprocessor kit/ TASM .(LOTS: Level 3: Apply)</p> <p>CO2. Apply interfacing of supporting chips with microprocessor. (LOTS: Level 3: Apply)</p> <p>CO3. Design assembly language programs for the 8085 and 8086 microprocessors. (HOTS: Level 6: Create)</p> <p>CO4. Analyse the output of assembly language programs. (HOTS: Level 4: Analyse)</p> <p>CO5. Create lab records for the solutions of assignments. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, independent enquiry and team spirit. (LOTS: Level 3: Apply)</p>
PCC-CSE206-P/PCC-IT301-P	Computer Networks Lab	<p>CO1. Demonstrate various network topologies and networking devices.(LOTS: Level: 3: Apply)</p> <p>CO2. Justify a particular routing protocol for any implemented data communication networks.(HOTS: Level: 5: Evaluate)</p>

		<p>CO3. Construct a network and implement various network protocols.(HOTS: Level: 6: Create)</p> <p>CO4. Devise solutions for various routing and switching problems in Computer Networks. (HOTS: Level: 6: Create)</p> <p>CO5. Dreate lab records for the solutions of the assignments. (HOTS: Level: 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team spirit. (LOTS: Level: 3: Apply)</p>
PCC-CSE207- P/PCC-IT207-P	Database Management System Lab	<p>CO1. Implement database problems using Oracle DML/DDDL commands. (LOTS: Level 3: Apply)</p> <p>CO2. Enforce integrity constraints on a database using a state-of-the-art RDBMS. (LOTS: Level 3: Apply) CO3. Analyse the design of a relational database. (HOTS: Level 4: Analyse)</p> <p>CO4. Design a relational database for a given schema. (HOTS: Level 6: Create)</p> <p>CO5. Create lab assignment record that includes problem definitions, solutions, results and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team spirit.</p>
PCC-CSE210- P/PCC-IT210-P	Java Programming Lab	<p>CO1. Implement Java programs using object oriented concepts for problem solving. (LOTS: Level 3: Apply)</p> <p>CO2. Detect syntax and logical errors in java programs (HOTS: Level 4: Analyse)</p> <p>CO3. Apply exception handling for making robust JAVA code. (HOTS: Level 3: Apply)</p> <p>CO4. Design java applications using File I/O and GUI. (HOTS: Level 6: Create)</p>

		<p>CO5. Create lab record of the solutions of assignments that includes problem definitions, solutions and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
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### B. Tech CSE (5<sup>th</sup> Semester)

Course Code	Title of the Paper	Course Outcome
PCC-CSE301-T/PEC-IT402-T	Computer Graphics	<p>CO1. State basic concepts related to graphics. (LOTS: Level 1: Remember)</p> <p>CO2. Describe the principles of creating graphical objects and graphical user interface applications. (LOTS: Level 2: Understand)</p> <p>CO3. Apply 2-D and 3-D transformations (rotation, scaling, translation, shearing) on geometric objects. (LOTS: Level 3: Apply)</p> <p>CO4. Use different techniques for clipping and filling geometric objects. (LOTS: Level 3: Apply)</p> <p>CO5. Compare different graphics algorithms for different geometric objects. (HOTS: Level 4: Analyse)</p> <p>CO6. Create user-friendly interfaces for computer applications. (HOTS: Level 6: Create)</p>
PCC-CSE302-T/PEC-IT308-T	Python Programming	<p>CO1. Outline various basic programming constructs including operators, character sets, basic data types and control statements. (LOTS: level 1: Understand)</p> <p>CO2. Explain Python packages and their functionalities for data analysis. (LOTS: level 2: Understand)</p>

		<p>CO3. Solve problems using python programming. (LOTS: level 3: Apply)</p> <p>CO4. Analyse the results of data analysis or machine learning programs (HOTS: level 4: Analyse)</p> <p>CO5. Evaluate solutions according to the problem definition. (HOTS: level 5: Evaluate)</p> <p>CO6. Develop database applications in Python. (HOTS: level 6: Create)</p>
PCC-CSE303-T/PEC-IT305-T	High Speed Network Technologies	<p>CO1. Define different high speed network technologies. (LOTS: Level 1: Remember)</p> <p>CO2. Explain working of different wired / wireless technologies suitable for LAN and WAN communication. (LOTS: Level 2: Understand)</p> <p>CO3. Illustrate the mapping of OSI reference model to different high speed technologies and Internet Suite of Protocols. (LOTS: Level 3: Apply)</p> <p>CO4. Analyze the performance of different high speed technologies in different scenarios / situations. (HOTS: Level 4: Analyse)</p> <p>CO5. Design a network for any organization using high speed technologies along with Internet connectivity. (HOTS: Level 6: Create)</p>
PCC-CSE304-T	Cryptography and Network Security	<p>CO1. Recognize need of cryptography and cryptographic Algorithms.(LOTS: Level 1: Remember)</p> <p>CO2. Represent security in terms of various techniques and algorithms. (LOTS: Level2: Understand)</p> <p>CO3. Apply mathematical techniques to cryptography for solving problems related to security issue. (LOTS: Level 3: Apply)</p>

		<p>CO4. Identify various types of attacks for their mitigation/proactive and reactive treatment. (HOTS: Level 4: Analyze)</p> <p>CO5. Judge the security of an organization/institute by means of Network security devices/models/controls. (HOTS: Level 5: Evaluate)</p> <p>CO6. Integrate different types of securities under one environment and evaluate its performance.(HOTS: Level 6: Create)</p>
OEC-T	Open Elective Course be opted by students	
HSMC301-T	Economics for Engineers	<p>CO1. Outline the principles of economics in general and economics in Indian context. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss concepts related to economics in general and particularly relevant to Indian scenario. (LOTS: Level 2: Understand)</p> <p>CO3. Apply the principles of economics for solving problems related to Engineering sector. (LOTS: Level 3: Apply)</p> <p>CO4. Carry out cost/benefit/, life cycle and breakeven analyses on one or more economic alternatives. (HOTS: Level 4: Analyse)</p> <p>CO5. Judge the issues and challenges of sustainable development. (HOTS: Level 5: Evaluate)</p>
MC104-T	Essence of Indian Traditional Knowledge	<p>CO1. Recognise the forms and sources of Indian traditional knowledge. (LOTS: Level 1: Remember)</p> <p>CO2. Identify the contribution of the great ancient Indian scientists and spiritual leaders to the world of knowledge. (LOTS: Level 2: Understand)</p>

		<p>CO3. Apply the reasoning based on objectivity and contextual knowledge to address the social and cultural issues prevalent in Indian society. (LOTS: Level 3: Apply)</p> <p>CO4. Differentiate the myths, superstitions from reality in context of traditional knowledge to protect the physical and social environment. (LOTS: Level 4: Evaluate)</p> <p>CO5. Suggest means of creating a just and fair social environment that is free from any prejudices and intolerance for different opinions and cultures. (LOTS: Level 6: Create)</p>
PCC-CSE301-P	Computer Graphics Lab	<p>CO1. Implement various graphics algorithms for drawing and filling of geometric objects. (LOTS: Level 3: Apply)</p> <p>CO2. Demonstrate transformation of geometric objects. (LOTS: Level 3: Apply)</p> <p>CO3. Compare strengths and weakness of various graphics algorithms. (LOTS: Level 4: Analyse)</p> <p>CO4. Design algorithms for creating scenes like flying a kite and solar eclipse. (HOTS: Level 6: Create) CO5. Create lab assignment record that includes problem definitions, solutions and conclusions. (HOTS: Level: 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
PCC-CSE302-P/PCC-IT308P	Python Programming Lab	<p>CO1. Implement solutions to the given assignments in Python. (LOTS: Level 3: Apply)</p> <p>CO2. Use various Python packages for solving different programming problems. (LOTS: Level 3: Apply) CO3. Devise solutions for complex problems of data analysis and machine learning. (HOTS: Level 6: Create)</p> <p>CO4. Evaluate the output of data analysis and machine learning models. (HOTS: Level 5: Evaluate)</p>

		<p>CO5. Create lab records of the solutions for the given assignments. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit.. (LOTS: Level 3: Apply)</p>
INT-CSE301	Industrial Training	<p>CO1. Review the existing systems for their strengths and weaknesses. (HOTS: Level 4: Analyse)</p> <p>CO2. Address novel problems in an original and innovative manner (HOTS: Level 6: Create)</p> <p>CO3. Select and apply modern engineering tools. (LOTS: Level 3: Apply)</p> <p>CO4. Evaluate the system developed critically with respect to the requirement analysis and other similar systems. (HOTS: Level 5: Evaluate)</p> <p>CO5. Prepare training report by organising ideas in an effective manner.</p> <p>CO6. Follow ethical practices while doing the training and writing report. (LOTS: Level 3: Apply)</p>

<b>B. Tech CSE (6<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-CSE305-T/PCC-IT206-T	Operating Systems	<p>CO1. List various functions and design characteristics of operating systems (LOTS: Level 1: Remember) CO2. Explain fundamental concepts of operating systems. (LOTS: Level 2: Understand)</p> <p>CO3. Apply operating system design concepts for solving problems regarding scheduling, memory management, disk management and deadlocks etc. (LOTS: Level 3: Apply)</p> <p>CO4. Analyze the issues related to various operating systems. (HOTS: Level 4: Analyse)</p>



		CO5. Design solutions for the memory and process management problems. (HOTS: Level 6: Create)
PCC-CSE306-T/PCC-IT303-T	Formal Language and Automata Theory	CO1. Define terminology related to theory of computation. (LOTS: Level 1: Remember)  CO2. Explain the basic concepts and applications of Theory of Computation. (LOTS: Level 2: Understand) CO3. Apply the principles of Theory of Computation to solve computational problems.(LOTS: Level 3: Apply)  CO4. Compare and contrast the hierarchy of grammars (HOTS: Level 5: Evaluate).  CO5. Design various types of automata for given problems. (HOTS: Level 6: Create)
PCC-CSE307-T/PEC-IT407-T	Data Analytics using R	CO1. Outline concepts related to R programming and data analysis. (LOTS: Level 1: Remember)  CO2. Explain the basic concepts and tools that are used to solve problems in data analytics. (LOTS: Level 2: Understand)  CO3. Interpreting results of descriptive and inferential statistics. (LOTS: Level 2: Understand)  CO4. Apply R programming for reading, cleaning, visualizing and analysing data. (LOTS: Level 3: Apply) CO5. Analyse the trends in data through exploratory data analysis. (HOTS: Level 4: Analyse)  CO6. Devise solutions for descriptive and predictive modelling. (HOTS: Level 6: Create)
PCC-CSE308-T/PCC-IT302-T	.NET using C#	CO1. Define the concepts related to .NET Framework. (LOTS: Level 1: Remember)  CO2. Explain various C# constructs. (LOTS: Level 1: Understand)  CO3. Apply .NET framework using C# for solving moderate/complex problems. (LOTS: Level 3: Apply)

		<p>CO4. Use advanced features of C# like Reflector, and Assembly. (LOTS: Level 3: Apply)</p> <p>CO5. Identify logical errors in given .Net using C# programs. (LOTS: Level 3: Analyse)</p> <p>CO6. Design stand-alone applications in the .NET framework using C#. (HOTS: Level 6: Create)</p>
PCC-CSE301-T to PEC-CSE304-T	Professional Elective Course to be opted by students	
PEC-CSE301-T/ PEC-IT301-T	Embedded System Design	<p>CO1. State the concepts related to embedded system design. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss the principles of embedded systems and their applications. (LOTS: Level 2: Understand)</p> <p>CO3. Apply the principles of embedded design for problem solving. (LOTS: Level 3: Apply)</p> <p>CO4. Analyze architectural design patterns and engineering tradeoffs. (HOTS: Level 4: Analyse)</p> <p>CO5. Design architectural patterns for connected and distributed devices in the IoT. (HOTS: Level 6: Create)</p>
PEC-CSE302-T/ PCC-IT401-T	Wireless and Mobile Communication	<p>CO1. Recall different mobile and wireless communication concepts. (LOTS: Level 1: Remember)</p> <p>CO2. Explain working of different Mobile Communication Technologies used now a days. (LOTS: Level 2: Understand)</p> <p>CO3. Demonstrate application of different mobile protocols for different Mobile and Wireless Communication Technologies. (LOTS: Level 2: Understand)</p> <p>CO4. Analyze the performance of different Mobile Communication technologies in different scenarios / situations. (HOTS: Level 4: Analyse)</p>

		CO5. Design a mobile network for any city/state/country using combination of different Mobile Technologies. (HOTS: Level 6: Create)
PEC-CSE303-T/ PEC-IT303-T	Graph Theory	CO1. Recognize different kinds of Graphs. (LOTS: Level 1:Remember)  CO2. Demonstrate various types of graphical structures with the operations implemented on these structures. (LOTS: Level 2: Understand)  CO3. Apply graph theory constructs for solving problems. (LOTS: Level 3: Apply)  CO4. Justify various facts and results associated with graphical structures with the help of proofs. (HOTS: Level 5: Evaluate)  CO5. Sketch the graph to solve any problem in pictorial and easy representation. (HOTS: Level 6: Create)
PEC-CSE304-T/ PEC-IT304-T	Bio-informatics	CO1. List the applications of bioinformatics and biological databases. (LOTS: Level 1: Remember)  CO2. Explain storage and retrieval of biological data from various biological databases. (LOTS: Level 2: Understand)  CO3. Apply the knowledge of bio-informatic concepts. (LOTS: Level 3: Apply)  CO4. Identify challenges in bioinformatics and computational biology. (HOTS: Level 4: Analyse)  CO5. Compare and contrast various algorithms for sequence alignment and scoring algorithms. (HOTS: Level 5: Evaluate)  CO6. Devise schemes for addressing bio-informatic problems. (LOTS: Level 6: Create)
HSMC302-T	Fundamentals of Management for Engineers	CO1. Define fundamental concepts of management (LOTS: Level 1: Remember)

		<p>CO2. Explain the basic principles of management related to planning and decision making, HRM and motivation, and leadership. (LOTS: Level 2: Understand)</p> <p>CO3. Apply the managerial skills to solve real world management problems. (LOTS: Level 3: Apply)</p> <p>CO4. Identify leadership roles in various scenarios. (HOTS: Level 4: Analyse)</p> <p>CO5. Evaluate a business model based on principles of management. (HOTS: Level 5: Evaluate)</p> <p>CO6. Prepare a plan for a start up in IT sector. (HOTS: Level 6: Create)</p>
PCC-CSE305-P/ PCC-IT206-P	Operating Systems Lab. (UNIX/LINUX)	<p>CO1. Apply commands related to vi and Emacs editors, general utilities and file systems. (LOTS: Level 3: Apply)</p> <p>CO2. Write basic shell scripts and use sed commands as well as awk programming. (LOTS: Level 3: Apply)</p> <p>CO3. Analyse the results of memory management and disk management commands. (HOTS: Level 4: Analyse)</p> <p>CO4. Evaluate solutions for different operating system problems such as scheduling, memory management and file management. (HOTS: Level 5: Evaluate)</p> <p>CO5. Create lab record for assignments that includes problem definitions, design of solutions and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
PCC-CSE307-P/ PEC-IT407-P	Data Analytics using R Lab.	<p>CO1. Implement R programming concepts for data analysis. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse the trends in data through exploratory data analysis. (HOTS: Level 4: Analyse)</p>

		<p>CO3. Evaluate the results of descriptive and inferential statistics. (HOTS: Level 5: Evaluate)</p> <p>CO4. Devise solutions for descriptive and predictive modelling. (HOTS: Level 6: Create)</p> <p>CO5. Create lab. Record of assignment solutions that include problem definition, solutions and interpretation of results. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, independent enquiry and self-learning, and team spirit to solve unseen problems. (LOTS: Level 3: Apply)</p>
<p>PCC-CSE308-P PCC-IT302-P</p>	<p>.NET using C# Lab.</p>	<p>CO1. Implement C# programs in .NET framework. (LOTS: Level 3: Apply)</p> <p>CO2. Apply ADO.NET for developing database applications. (LOTS: Level 3: Apply)</p> <p>CO3. Analyse given programs for their correctness and efficiency for given inputs and expected outputs. (HOTS: Level 4: Analysis)</p> <p>CO4. Integrate HTML code with ASP.NET and HTML code for designing a web pages. (HOTS: Level 6: Create)</p> <p>CO5. Create written records for the given assignments with problem definition, design of solution and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices while solving problems individually or in groups (LOTS: Level 3: Apply).</p>

**B. Tech CSE (7<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
PCC-CSE401-T/ PCC-IT306-T	Compiler Design	<p>CO1. State principles of compiler design. (LOTS: Level 1: Remember)</p> <p>CO2. Illustrate the essential phases for automatically converting source code into object code. (LOTS: Level 2: Understand)</p> <p>CO3. Apply lexical analysis, syntax analysis and code optimization techniques for solving problems. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse a parse tree and a given BNF grammar. (LOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast syntax-oriented translation schemes (HOTS: Level 5: Evaluate)</p> <p>CO6. Design a lexical analyser from the specification of a language's lexical rules. (HOTS: Level 6: Create)</p>
PCC-CSE402-T/ PCC-IT304-T	Artificial Intelligence	<p>CO1. Outline various Artificial Intelligence techniques. (LOTS: Level 1: Remember)</p> <p>CO2. Illustrate reasoning under uncertainty. (LOTS: Level 2: Understand)</p> <p>CO3. Apply search and knowledge representation techniques to solve AI problems.(LOTS: Level 3: Apply)</p> <p>CO4. Compare strengths and weaknesses of AI algorithms (HOTS: Level 4: Analyse).</p> <p>CO5. Combine various AI techniques to solve intelligent systems' problems. (HOTS: Level 6: Create)</p>
PEC-CSE401-T to PEC-CSE404-T	Professional Elective Course to be opted by students	

<p>PEC-CSE401-T/ PEC-IT401-T</p>	<p>Software Project Management</p>	<p>CO1. Outline basic concepts related to stepwise project planning. (LOTS: Level 1: Remember)</p> <p>CO2. Demonstrate the knowledge about Quality Control, Standard and Risk Management. (LOTS: Level 2: Understand)</p> <p>CO3. Illustrate the Activity Planning, and Resource Allocation Process. (LOTS: Level 2: Understand)</p> <p>CO4. Apply the concept of team structure and organization structure. (LOTS: Level 3: Apply)</p> <p>CO5. Compare various Project Evaluation and Estimation Techniques. (HOTS: Level 4: Analyse)</p> <p>CO6. Plan activities necessary for completing the software projects successfully. (HOTS: Level 6: Create)</p>
<p>PEC-CSE402-T/ PEC-IT302-T</p>	<p>Soft Computing</p>	<p>CO1. Define the terminology and concepts related to soft computing techniques. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss soft computing techniques including genetic algorithms, fuzzy systems and neural networks. (LOTS: Level 2: Understand)</p> <p>CO3. Solve problems related to Genetic algorithms, Fuzzy logic and Neural Networks. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the design of Genetic Algorithms, Neural Networks and Fuzzy Systems. (HOTS: Level 4: Analyse)</p> <p>CO5. Justify the design of a soft computing algorithm for a given problem. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design Genetic Algorithms and Neural Networks to solve optimization and pattern recognition problems. (HOTS: Level 6: Create)</p>
<p>PEC-CSE-403-T/ PEC-IT403-T</p>	<p>Distributed Operating System</p>	<p>CO1. State the basic concepts of distributed systems and their advantages over simple client server based computer networks. (LOTS: Level 1: Remember)</p>

		<p>CO2. Explain strategies for synchronization, scheduling policies and deadlock avoidance in distributed environment. (LOTS: Level 2: Understand)</p> <p>CO3. Apply distributed operating system's concepts to solve the problems inherent in distributed systems. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse trends in distributed file systems. (HOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast strategies for synchronization, scheduling policies and deadlock avoidance and distributed file systems. (HOTS: Level 5: Evaluate)</p>
PEC-CSE404-T/ PEC-IT-404-T	Cloud Computing	<p>CO1. Define concepts related to cloud computing. (LOTS: Level 1: Remember)</p> <p>CO2. Express deployment models for clouds. (LOTS: Level 2: Understand)</p> <p>CO3. Apply cloud computing techniques for various applications. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse cloud computing services used at various levels. (HOTS: Level 4: Analyse)</p> <p>CO5. Assess real time cloud services. (HOTS: Level 5: Evaluate)</p>
PEC-CSE405-T to PEC-CSE408-T	Open Elective Course to be opted by students	
PEC-CSE405-T/ PEC-IT405-T	Advanced Microprocessor	<p>CO1. Describe the features and use of the real and protected modes of microprocessors. (LOTS: Level 1: Remember)</p> <p>CO2. Explain the internal architecture of the 16, 32, and 64-bit microprocessors and compare and contrast the features of different Intel microprocessors. (LOTS: Level 2: Understand)</p> <p>CO3. Analyse memory, input/output and interrupt interfaces to the microprocessors. (HOTS: Level 4: Analyse)</p>



		CO4. Compare the state-of-the-art technologies in the field of microprocessors.(HOTS: Level 5: Evaluate) CO5. Design the microprocessor based control systems and develop the software to control them. (HOTS: Level 6: Create)
PEC-CSE406-T/ PCC-IT403-T	Mobile Application Development	CO1. State basic of Android , its Evolution and its Architecture. (LOTS: Level 1: Remember) CO2. Demonstrate the Lifecycle of Software for Android Mobile Applications. (LOTS: Level 2: Understand) CO3. Prepare Mobile Applications on the Android Platform. (LOTS: Level 3: Apply) CO4. Compare working with Buttons and other Widgets for Visual Environment. (HOTS: Level 4: Analyse) CO5. Develop Mobile Applications using data storage in SQLite Database and evaluate its Performance. (HOTS: Level 6: Create)
PEC-CSE407-T / PEC-IT411-T	Multimedia Technologies	CO1. Outline the basic concepts of multimedia technology. (LOTS: Level 1: Remember) CO2. Discuss the concepts of animation, digitized sound, video control, and scanned images. (LOTS: Level 2: Understand) CO3. Use basic instructional design principles in the development of Multimedia. (LOTS: Level 3: Apply) CO4. Compare various audio and video file formats. (HOTS: Level 4: Analyse) CO5. Devise solutions for multimedia problems. (HOTS: Level 6: Create)
PEC-CSE408-T/ PEC-IT408-T	Digital Image Processing	CO1. State concepts related to image acquisition and processing. (LOTS: Level 1: Remember) CO2. Illustrate the principles and methods in image processing. (LOTS: Level 2: Understand) CO3. Apply mathematical functions for digital manipulation of images such as image acquisition, preprocessing, segmentation, compression and representation. (LOTS: Level 3: Apply)

		<p>CO4. Compare various image processing techniques. (HOTS: Level 4: Analyse)</p> <p>CO5. Assess the various image processing techniques for a given problem. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design and implement algorithms for digital image processing operations such as histogram equalization, filtering, enhancement, restoration and denoising, segmentation, compression. (HOTS: Level 6: Create)</p>
OEC-T	Open Elective Course by opted by students	
PEC-CSE (405-P, 406-P, 407-P, 408-P)	Professional Elective Course Lab.	
PEC-CSE405-P/ PEC-IT405-P	Advanced Microprocessor Lab	<p>CO1. Describe the internal architecture of an X86 processor showing the general purpose registers, the segment registers, the ALU, the flags register, the instruction pointer (IP) register, and the instruction register. (LOTS: Level 2: Understand)</p> <p>CO2. Implement the assembly language programs for interfacing of peripherals/devices with processors. (HOTS: Level 6: Create)</p> <p>CO3. Analyse microprocessor controlled systems. (HOTS: Level 4: Analyse)</p> <p>CO4. Evaluate microprocessor controlled systems. (HOTS: Level 4: Analyse)</p> <p>CO5. Create Lab record for the assignments including aim, hardware and software requirements and solutions to given problems. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate independent enquiry, self-learning and ethical practices to solve unseen problems. (LOTS: Level 3: Apply).</p>

<p>PEC-CSE406-P/ PCC-IT403-P</p>	<p>Mobile Application Development Lab.</p>	<p>CO1. Apply Android programming concepts for calling, display, creation and validation. (LOTS: Level 3: Apply)</p> <p>CO2. Generate solutions for content providers and permissive models. (HOTS: Level 6: Create) CO3. compare the visual effects generated by Android and visual studio frameworks. (HOTS: Level 4: Analyse) CO4. Design applications for Android Programming by using Android Studio framework. (HOTS: Level 6: Create)</p> <p>CO5. Create lab record of the solutions for assignment. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, independent enquiry and self-learning to solve unseen problems. (LOTS: Level 3: Apply)</p>
<p>PEC-CSE407-P/ PEC-IT411-P</p>	<p>Multimedia Technologies Lab.</p>	<p>CO1. Apply the fundamental principles of different elements of multimedia. (LOTS: Level 3: Apply)</p> <p>CO2. Use modern tools for applying state-of-the art multimedia technologies. (LOTS: Level 3: Apply)</p> <p>CO3. Analyse various tools for an application. (HOTS: Level 4: Analyse)</p> <p>CO4. Create elegant posters, sceneries, animated stories and movie clips. (HOTS: Level 6: Create)</p> <p>CO5. Creating record of lab experiments. ((HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team work. (LOTS: Level 3: Apply)</p>
<p>PEC-CSE408-P/ PEC-IT408-P</p>	<p>Digital Image Processing Lab.</p>	<p>CO1. Implement digital image processing concepts for image compression, restoration and reconstruction in SCILAB/MATLAB.(LOTS: Level 3: Apply)</p> <p>CO2. Verify the results of applying image processing problems to images (compression, expansion, multiresolution processing etc.) (HOTS: Level 4: Analyze)</p>

		<p>CO3. Measure the quality of image after the digital image processing techniques are implemented to an image. (HOTS: Level 5: Evaluate)</p> <p>CO4. Devise solutions for Image Processing tasks problems. (HOTS: Level 6: Create)</p> <p>CO5. Design Lab record for the assignments including aim, hardware and software requirements and solutions to the given problems. (HOTS: Level 6: Create)</p> <p>CO6. Use ethical practices, independent enquiry, self-learning and team spirit. (LOTS: Level 3: Apply).</p>
PROJ-CSE401	Major Project Part 1	<p>CO1. Evaluate critically the existing solutions and methodologies through reviewing literature. (HOTS: Level 5: Evaluate)</p> <p>CO2. Formulate suitable problems to be addressed. (HOTS: Level 6: Create)</p> <p>CO3. Identify tentative modern tools to solve the problem. (HOTS: Level 4: Analyse)</p> <p>CO4. Organise and communicate (written and oral) ideas effectively. (HOTS: Level 6: Create)</p> <p>CO5. Develop methodologies that meet ethical, societal and legal considerations. (HOTS: Level 6: Create)</p>
PROJ-CSE402	Mini Project using Open Source Tools	<p>CO1. Identify a suitable problem from the environment around. (HOTS: Level 4: Analyse)</p> <p>CO2. Survey the design of similar problems (HOTS: Level 5: Evaluate)</p> <p>CO3. Select suitable engineering specialisation and modern IT tools. (LOTS: Level 3: Apply)</p> <p>CO4. Address the problem in an original and innovative manner. (HOTS: Level 6: Create)</p>

		<p>CO5. Communicate orally as well as in written (mini project report) about the application developed. (HOTS: Level 6: Create)</p> <p>CO6. Engage in ethical practices, individual and team work, and lifelong learning. (LOTS: Level 3: Apply)</p>
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### B. Tech CSE (8<sup>th</sup> Semester)

Course Code	Title of the Paper	Course Outcome
PCC-CSE403-T/ PCC-IT402-T	Data Mining Techniques	<p>CO1. Outline various types of data mining and data warehouse concepts and techniques. (LOTS: Level 1: Remember)</p> <p>CO2. Explain characteristics, architecture of a data warehouse, OLAP operations and data mining tasks. (LOTS: Level 2: Understand)</p> <p>CO3. Apply various pre-processing and data mining techniques for extracting valuable information from data. (LOTS: Level 3: Apply)</p> <p>CO4. Evaluate the descriptive and predictive data mining models. (HOTS: Level 5: Evaluate)</p> <p>CO5. Plan a data mining process for discovering knowledge from real-world databases. (HOTS: Level 6: Create)</p>
PEC-CSE409-T to PEC-CSE412-T	Professional Elective Course to be opted by students	
PEC-CSE409-T/ PEC-CSE409-T	Internet of Things	<p>CO1. State the basic concepts and key technologies of IoT. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss the pros and cons of various protocols for IoT. (LOTS: Level 2: Understand)</p> <p>CO3. Apply the IOT models for business applications. (LOTS: Level 3: Apply )</p>

		<p>CO4. Analyse applications of IoT in real time scenario. (HOTS: Level 4: Analyse)</p> <p>CO5. Design business model scenarios (HOTS: Level 6: Create)</p>
PEC-CSE410-T/ PEC-IT410-T	Software Defined Networks	<p>CO1. Outline Software Defined Networks and its various components. (LOTS: Level 1: Remember)</p> <p>CO2. Explain techniques to make the Network Programmable for better flexibility. (LOTS: Level 2: Understand)</p> <p>CO3. Use of modern tools to implement SDN Controllers in a Network scenario. (LOTS: Level 3: Apply) CO4. Breakdown Virtual Networks into its components for controlling of networks. (HOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast the working of SDN through various protocols. (HOTS: Level 5: Evaluate)</p> <p>CO6. Generate SDN using Application Programming Interface and compute its performance for a given scenario. (HOTS: Level 6: Create)</p>
PEC-CSE411-T/ PCC-IT305-T	Network Administration and Management	<p>CO1. Define Network Administration and its various components. (LOTS: Level 1: Remember)</p> <p>CO2. Distinguish Network Administration and its Management on various platforms. (LOTS: Level 2: Understand)</p> <p>CO3. Classify the output for different responses to events by interpreting Network Monitoring statistics. (LOTS: Level 3: Apply)</p> <p>CO4. Separate portions of Network for troubleshooting using various tools. (HOTS: Level 4: Analyse)</p> <p>CO5. Combine Network Administration, Network Management and Network Monitoring into a one scenario and compute the performance of the integrated environment. (HOTS: Level 6: Create)</p>

<p>PEC-CSE412-T/ PEC-IT412-T</p>	<p>Software Testing and Quality Assurance</p>	<p>CO1. Recall the process of software testing life cycle and quality assurance. (LOTS: Level 1: Remember) CO2. Demonstrate reusability testing on software applications. (LOTS: Level 2: Understand))</p> <p>CO3. Apply software testing tools for predicting the behavior of software applications. (LOTS: Level 3: Apply)</p> <p>CO4. Identify the test cases for software applications. (HOTS: Level 4: Analyse)</p> <p>CO5. Plan test cases and quality management activities. (HOTS: Level 6: Create)</p> <p>CO6. Predict software quality based on quality parameters and quality models. (HOTS: Level 6: Create)</p>
<p>PEC-CSE413-T to PEC-CSE417-T</p>	<p>Professional Elective Course to be opted by students</p>	
<p>PEC-CSE413-T/ PEC-IT413-T</p>	<p>Machine Learning</p>	<p>CO1. Outline the concepts and working of different machine learning algorithms. (LOTS: Level 1: Remember)</p> <p>CO2. Interpret the results of machine learning algorithms. (LOTS: Level 2: Understand)</p> <p>CO3. Apply machine learning concepts and algorithms to given problems. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the performance of machine learning algorithms. ((HOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast different machine learning algorithms. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design machine learning algorithms for optimization, pattern recognition and search problems. (HOTS: Level 6: Create)</p>

<p>PEC-CSE414-T/ PEC-IT414-T</p>	<p>Big Data Analytics</p>	<p>CO1. Recall the concepts of big data analysis. (LOTS: Level 1: Remember)</p> <p>CO2. Interpret the outcomes of big data analysis. (LOTS: Level 2: Understand)</p> <p>CO3. Apply technical skills and modern tools for descriptive and predicative modelling. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse a framework for visualization of big data analytics for business user. (HOTS: Level 4: Analyse)</p> <p>CO5. Examine critically the results of mining to support business decision-making. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design schemes for big data analytics for solving big data problems in efficient manner. (HOTS: Level 6: Create)</p>
<p>PEC-CSE415-T/ PEC-IT415-T</p>	<p>Web Development</p>	<p>CO 1. Enlist principles of Information Architecture for Web design. (LOTS: Level 1: Remember)</p> <p>CO 2. Explain navigational systems, labeling systems, and taxonomies for websites. (LOTS: Level 2: Understand)</p> <p>CO 3. Apply basic web designing tools (HTML, XML, ASP/JSP, JQuery, Java Script). (LOTS: Level 3: Apply)</p> <p>CO 4. Evaluate critically design of webpages based on various technologies. (HOTS: Level 5: Evaluate)</p> <p>CO 5. Create a report describing or making recommendations for a website design. (HOTS: Level 6: Create)</p>
<p>PEC-CSE416-T/ PEC-IT416-T</p>	<p>Statistical Computing</p>	<p>CO1. Define basic tools of data analysis. (LOTS: Level 1: Remember)</p> <p>CO2. Explain the concepts given in descriptive and inferential statistics (LOTS: Level 2: Understand)</p> <p>CO3. Apply statistical concepts to solve real world statistical computing problems. (LOTS: Level 3: Apply)</p>



		<p>CO4. Analyse the trends in data using descriptive statistics. (HOTS: Level 4: Analyse)</p> <p>CO5. Interpret and evaluate statistical models. (HOTS: Level 5: Evaluate)</p> <p>CO6. Conclude the findings of statistical analysis. (HOTS: Level 6: Create)</p>
PEC-CSE417-T/ PEC-IT406-T	Digital Forensics	<p>CO1. Determine the hardware and operating system requirements for digital forensics.(LOTS: Level 1: Remember)</p> <p>CO2. Represent digital forensics by organization of data and metadata in computer systems.(LOTS: Level 2: Understand)</p> <p>CO3. Analyze file recovery and hidden file extraction techniques. (HOTS: Level 4: Analyse)</p> <p>CO4. Identify various types of forensics in the arena of information technology. (HOTS: Level 4:Analyse) CO5. Critic the computer crimes by studying the security Laws and legal Landscape around the world.(HOTS: Level 5: Evaluate)</p> <p>CO6. Integrate security of computer systems with digital forensics and evaluate its performance. (HOTS: Level 6: create)</p>
PEC-CSE (409-P, 410-P, 411-P, 412-P)	Professional Elective Course Lab.	
PEC-CSE409-P/ PEC-IT409-P	Internet of Things Lab.	<p>CO1. Solve the existing problems of traditional sensor networks and wireless communication using the concepts of Internet of Things. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse the working of controllers and sensors. (HOTS: Level 4: Analyse)</p> <p>CO3. Compare and contrast the existing solutions related to IOT. (HOTS: Level 5: Evaluate)</p> <p>CO4. Design solutions for practical assignments by using Internet of Things technologies. (HOTS: Level 6: Create)</p>

		<p>CO5. Create lab reports by presenting the ideas regarding solutions in an effective manner. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate independent enquiry, team spirit and ethical practices while solving problems. (LOTS: Level 3: Apply)</p>
PEC-CSE410-P/ PEC-IT410-P	Software Defined Networks Lab.	<p>CO1. Implement SDN controllers using API/mininet. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse results of SDN statistics for a given scenario. (HOTS: Level 4: Analyse)</p> <p>CO3. Assess performance of protocols for a given Network. . (HOTS: Level 5: Evaluate)</p> <p>CO4. Hypothesize solutions for SDN controller issues by using Network statistics. (HOTS: Level 6: Create)</p> <p>CO5. Create lab records for the assignment solutions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
PEC-CSE411-P/ PCC-IT305-P	Network Administration and Management Lab.	<p>CO1. Configure a server to work as a DNS/DHCP/FTP/Web/Mail/Print server (LOTS: Level 3: Apply)</p> <p>CO2. Detect the trends in attacks through in depth attack analysis. (HOTS: Level 4: Analyse)</p> <p>CO3. Formulate solutions for Monitoring assignments by using principles of Network statistics. (HOTS: Level 6: Create)</p> <p>CO4. Plan solutions for overall security of Computer/Network systems. (HOTS: Level 6: Create)</p> <p>CO5. Create file records of solutions of assignments. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>

<p>PEC-CSE412-P/ PEC-IT412-P</p>	<p>Software Testing and Quality Assurance Lab.</p>	<p>CO1. Implement software testing using testing tools. (LOTS: Level 3: Apply)</p> <p>CO2. Apply software testing techniques for the classification of test cases. (LOTS: Level 3: Apply)</p> <p>CO3. Interpret the results of various software testing techniques. (HOTS: Level 4: Analyse)</p> <p>CO4. Plan test case activities. (HOTS: Level 6: Create)</p> <p>CO5. Prepare lab reports for software quality testing assignments. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
<p>PEC-CSE (413-P, 414-P, 415-P, 416-P, 417-P)</p>	<p>Professional Elective Course Lab.</p>	
<p>PEC-CSE-413-P/ PEC-IT413-P</p>	<p>Machine Learning Lab.</p>	<p>CO1. Implement machine learning algorithms using modern machine learning tools. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse the trends in datasets using descriptive statistics. (HOTS: Level 4: Analyse)</p> <p>CO3. Apply descriptive and predictive modelling. (LOTS: Level 3: Apply)</p> <p>CO4. Compare and contrast machine learning algorithms for a given problem. (describe datasets using descriptive statistics. (HOTS: Level 5: Evaluate)</p> <p>CO5. Create lab records of assignment by incorporating problem definitions, design of solutions, results and interpretations. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>

<p>PEC-CSE414-P/ PEC-IT414-P</p>	<p>Big Data Analytics Lab.</p>	<p>CO1. Implement solutions for big data problem. (LOTS: Level 3: Apply)</p> <p>CO2. Apply Hadoop ecosystem components. (LOTS: Level 3: Apply)</p> <p>CO3. Analyse the results of big data algorithms. (HOTS: Level 4: Analyse)</p> <p>CO4. Build and maintain reliable, scalable, distributed systems. (HOTS: Level 6: Create)</p> <p>CO5. Create lab record of the lab assignments that contains problem definitions, their solutions in big data perspective and the interpretation of the results. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
<p>PEC-CSE415-P/ PEC-IT415-P</p>	<p>Web Development Lab.</p>	<p>CO1. Implement object models for website design using modern tools like HTML, XML and JAVA scripting etc. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse the design of websites. (HOTS: Level 4: Analyse)</p> <p>CO3. Test the design of websites. (HOTS: Level 5: Evaluate)</p> <p>CO4. Design websites that consider socio-cultural values. (HOTS: Level 6: Create)</p> <p>CO5. Create a written report for website designed. (HOTS: Level 6: Create)</p> <p>CO6. Use ethical practices and socio-cultural values while designing websites. (LOTS: Level 3: Apply)</p>
<p>PEC-CSE416-P/ PEC-IT416-P</p>	<p>Statistical Computing Lab.</p>	<p>CO1. Implement statistical tools for drawing inference from data. (LOTS: Level 3: Apply)</p> <p>CO2. Explore the trends in datasets using descriptive statistics. (HOTS: Level 4: Analyse)</p>

		<p>CO3. Apply probability, hypothesis testing and regression for solving research questions. (LOTS: Level 3: Apply)</p> <p>CO4. Judge different problem situations for applying appropriate statistical tests (HOTS: Level 5: Evaluate)</p> <p>CO5. Create lab records of assignment by incorporating problem definitions, design of solutions, results and interpretations. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
PEC-CSE417-P/ PEC-IT406-P	Digital Forensics Lab.	<p>CO1. Employ the digital forensics tools for file system analysis. (LOTS: level 3: Apply)</p> <p>CO2. Test ethical practices while solving the problems at hand. (HOTS: level 4: Analyze)</p> <p>CO3. Select open source tools for imaging various types of media by wiping a target drive. (HOTS: level 5: evaluate)</p> <p>CO4. Develop solutions for disk imaging and like problems in different hardware conditions and for various operating systems. (HOTS: level 6: create)</p> <p>CO5. Design Lab record for the assignments including aim, hardware and software requirements and solutions to given problems. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate independent enquiry, use of ethical practices and self-learning to solve unseen problems. (LOTS: level 2: understand)</p>
PROJ-CSE403	Major Project II	<p>CO1. Review information critically for solving complex engineering problems. (HOTS: Level 4: Analyse) CO2. Plan the project according to principles of project management. (HOTS: Level 6: Create)</p> <p>CO3. Devise original solutions to complex engineering problems using modern engineering tools. (HOTS: Level 6: Create)</p>

		<p>CO4. Justify the outcomes of the project work. (HOTS: Level 5: Evaluate)</p> <p>CO5. Organise and communicate (written and oral) ideas effectively. (HOTS: Level 6: Create)</p> <p>CO6. Develop solutions that meet ethical, societal and legal considerations. (HOTS: Level 6: Create)</p>
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**BACHELOR OF TECHNOLOGY**

**in**

**Electronics and Communication Engineering**

**4 YEARS PROGRAMME**

**Choice Based Credit System**

**w. e. f. July 2019**

**(70:30)**



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION  
ENGINEERING**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY**

**HISAR-125001, HARYANA**

## Program Outcomes as defined by NBA (PO)

### Engineering Graduates will be able to:

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.



## **Program Specific Outcomes (PSO)**

**At the end of the program, the student**

**PSO 1:** should be able to understand the concepts of Electronics & Communication engineering and their applications in the field of semiconductor technology, consumer electronics, embedded system, communication/ networking and other relevant areas.

**PSO 2:** Should have an ability to apply technical knowledge and usage of modern hardware & software tools related to Electronics & Communication engineering for solving real world problems.

**PSO 3:** Should have the capability to analyze, comprehend, design & develop electronic subsystems/ systems for a variety of engineering applications and thus demonstrating professional ethics & concern for societal well being.

## **Program Educational Objectives (PEO):**

**PEO-1:** To produce graduates having a strong background of basic science, Mathematics & Engineering and ability to use these tools.

**PEO-2:** To produce graduates who can demonstrate technical competence in the field of electronics and communication engineering and develop solutions to the complex problems.

**PEO-3:** To produce graduates having professional competence through life-long learning such as advanced degrees, professional skills and other professional activities related globally to engineering & society.

**PEO- 4:** To produce graduates who function effectively in a multi-disciplinary environment and individually, within a societal and environmental context.

**PEO-5:** To produce graduates who would be able to take individual responsibility and work as a part of a team towards the fulfillment of both individual and organizational goals.



<b>Department of ECE</b>		
<b>B. Tech ECE (3<sup>rd</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
BSC201-T	MATHEMATICS-III	<p>CO1. Define concepts and terminology of Fourier series and Fourier transforms, Functions of complex variables, Power Series and, Probability distributions and hypothesis testing. (LOTS: Level 1: Remember)</p> <p>CO2. Solve problems using Fourier transforms in domains like digital electronics and image processing. (LOTS: Level 3: Apply)</p> <p>CO3. Apply mathematical principles to solve computational problems.(LOTS: Level 3: Apply)</p> <p>CO4. Compare various probability distributions (HOTS: Level 4: Analyse).</p> <p>CO5. Select suitable hypothesis testing methods for given problems and interpret the respective outcomes. (HOTS: Level 4: Evaluate)</p> <p>CO6. Integrate the knowledge of Fourier series and Fourier transforms, Functions of complex variables, Power Series and, Probability distributions and hypothesis testing for solving real world problems. (HOTS: Level 6: Create)</p>
PCC-ECE201-T	SIGNALS & SYSTEM	<p>CO 1 To describe various signals and their behaviour involved in processing. L1</p> <p>CO 2 To classify different systems used for signal processing and operation. L2</p> <p>CO 3 To demonstrate the conversion of signals in analog domain to digital domain. L3</p> <p>CO 4 To formulate any required system according to different types of applications. H3</p>
PCC-ECE203-T	DIGITAL ELECTRONICS	<p>CO 1 Define the fundamental concepts and techniques used in digital electronics. L1</p> <p>CO 2 Understand the minimization techniques to simplify the hardware requirements of digital circuits, implement it, design and apply for real time digital systems. L2</p>

		<p>CO 3 Demonstrate the working mechanism and design guidelines of different combinational, sequential circuits &amp; logic families and their role in the digital system design. L3</p> <p>CO 4 Develop the nomenclature and technology in the area of memory devices and apply the memory devices in different types of digital circuits for real world application. H3</p>
PCC-ECE205-T	ANALOG ELECTRONICS-I	<p>CO 1 To describe the characteristics of intrinsic and extrinsic semiconductors. L1</p> <p>CO 2 To explain the construction and operation of semiconductor devices. L2</p> <p>CO 3 To illustrate the use of semiconductor devices in electronic circuits. L3</p> <p>CO 4 To examine the analog circuit parameters and defend the usage of various semiconductor devices in it. H1</p>
ESC-ECE207-T	NETWORK ANALYSIS & SYNTHESIS	<p>CO 1 To relate time domain linear network with equivalent network in frequency domain using transformation technique. L1</p> <p>CO 2 To explain graph theory concepts for solving electrical networks. L2</p> <p>CO 3 To examine behaviour of electrical network on the basis of its transfer function. H1</p> <p>CO 4 To design two port networks for given transfer function. H3</p>
ESC-ME202-T	ELEMENTS OF MECHANICAL ENGINEERING	<p>CO1 To define and tell about basic mechanical engineering devices/machines. L1</p> <p>CO2 To classify and explain elements of mechanical engineering. L2</p> <p>CO3 To demonstrate the working operations of various basic mechanical engineering devices/machines. L3</p> <p>CO4 To examine the performance of various basic mechanical engineering devices/machines. H1</p>
PCC-ECE203-P	DIGITAL ELECTRONICS LAB	<p>CO 1 Describe the various digital IC's and understand their operation. L1</p>

		<p>CO 2 Understand Boolean Laws to simplify the digital circuits. L2</p> <p>CO 3 Demonstrate basic combinational circuits and verify their functionalities. L3</p> <p>CO 4 Develop the design procedures to design basic sequential circuits. H3</p>
PCC-ECE205-P	ANALOG ELECTRONICS-I LAB	<p>CO 1 To trace the characteristics of semiconductor devices. L1</p> <p>CO 2 To identify the various electronic components and differentiate them based upon their characteristics. L2</p> <p>CO 3 To demonstrate simple applications of semiconductor devices. L3</p> <p>CO 4 To test the electronic component and circuits, and to carry experimentation with them. H1</p>
ESC-ECE207-P	NETWORK ANALYSIS & SYNTHESIS LAB	<p>CO 1 To relate theoretical concepts with practical experiments. L1</p> <p>CO 2 To apply theoretical concepts related to two-port network parameters on hardware. L3</p> <p>CO 3 To examine theoretical concepts related to transient response on hardware. H1</p> <p>CO 4 To evaluate and judge performance of various active filters. H2</p>
MC 103-T	Indian Constitution	

<b>Department of ECE</b>		
<b>B. Tech ECE (4<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-ECE202-T	ELECTRONIC MEASUREMENTS & INSTRUMENTATION	<p>CO 1 Define the fundamental concepts and techniques used in electronic measurements and instrumentation. L1</p> <p>CO 2 Understand and explain construction and working of various measuring instruments. L2 CO</p>

		<p>3 Execute the knowledge of waveform generators, waveform analyzers, transducers. L3</p> <p>CO 4 Compare and categorize waveform generators, waveform analyzers, transducers. H1</p>
PCC-ECE204-T	ANALOG & DIGITAL COMMUNICATION	<p>CO 1 To describe the basic principles of communication system. L1</p> <p>CO 2 To explain the generation &amp; detection of modulated signals. L2</p> <p>CO 3 To evaluate the performance of signal under effects of noise. H1</p> <p>CO 4 To examine information signals against various impairments &amp; limitations. H2</p>
PCC-ECE206-T	ANALOG ELECTRONICS II	<p>CO 1 To describe various amplifiers and oscillator circuits. L1</p> <p>CO 2 To explain the construction and operation of semiconductor devices and to demonstrate their use in electronics circuits. L2</p> <p>CO 3 To operate the different circuits for amplifiers, power amplifiers and oscillator categories. L3</p> <p>CO 4 To design the various analog circuits based upon their performance. H1</p>
PCC-ECE208-T	ELECTROMAGNETIC THEORY	<p>CO 1 To define and recognize different coordinate systems and vector calculus to describe the spatial variations of the physical quantities dealt in electromagnetic field theory as they are functions of space and time. L1</p> <p>CO 2 To explain fundamental laws governing electromagnetic fields and evaluate the physical quantities of electromagnetic fields (Field intensity, Flux density etc.) in different media using the fundamental laws. L2</p> <p>CO 3 To apply Maxwell's equations to find solution of EM Wave for Homogeneous, Isotropic Dielectric and Conducting medium. L3</p> <p>CO 4 To evaluate various transmission line parameters using Smith Chart. H2</p>

PCC-ECE202-P	ELECTRONIC MEASUREMENTS & INSTRUMENTATION LAB	<p>CO 1 Describe measuring instruments. L1</p> <p>CO 2 Understand and explain working of waveform generators, waveform analyzers, and transducers. L2</p> <p>CO 3 To operate various measuring instruments. L3</p> <p>CO 4 To analyze performance of waveform generators, waveform analyzers, transducers. H1</p>
PCC-ECE204-P	ANALOG AND DIGITAL COMMUNICATION LAB	<p>CO 1 To describe the modulation and demodulation process in analog and digital communication system. L1</p> <p>CO 2 To illustrate simple analog communication systems L2</p> <p>CO 3 To compare digital modulation signals for ASK, BPSK, QPSK and FSK and perform their detection H1</p> <p>CO 4 To design a simple project on the digital communication system H2</p>
PCC-ECE206-P	ANALOG ELECTRONICS - II LAB	<p>CO 1 To trace the characteristics of semiconductor devices. L1</p> <p>CO 2 To identify the various electronic components and differentiate among them based upon their characteristics. L2</p> <p>CO 3 To demonstrate the applications of semiconductor devices. L3</p> <p>CO 4 To design various analog circuits and evaluate their parameters. H2</p>
MC 104-T	Essence of Indian Traditional Knowledge	

**Department of ECE**

**B. Tech ECE (5<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
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HSMC 302-T	Fundamentals of Management for Engineers	
PCC-ECE301-T	MICROWAVE ENGINEERING	<p>CO 1 To define the basic concepts of waveguide &amp; wave propagation L 1</p> <p>CO 2 To Illustrate the operations and principals of various microwave components and devices L 2</p> <p>CO 3 To describe the microwave component layouts. L 3</p> <p>CO 4 To examine the performance of different microwave devices. H 1</p> <p>CO 5 To design different microwave component structures for various applications. H 2</p> <p>CO 6 To Evaluate the performance of active microwave devices. H 3</p>
PCC-ECE303-T	EMBEDDED SYSTEM DESIGN	<p>CO 1 Describe the evolution of processor architectures. L1</p> <p>CO 2 Describe the instruction set of Microcontroller. L2</p> <p>CO 3 Apply instruction set in writing assembly language programs. L3</p> <p>CO 4 Evaluate the performance of timers and counters in real-time response. H1</p> <p>CO 5 Design an Embedded System for various applications. H2</p>
ESC-ECE307-T	DATA STRUCTURES AND APPLICATIONS	<p>CO 1 Describe various types of data structures and operations that can be implemented on these data structures. L1</p> <p>CO 2 Demonstrate the use of various data structures and their related operations. L2</p> <p>CO 3 Apply data structure to solve computational problems. L3</p> <p>CO 4 Compare the suitability of alternative data structures and prescribed operations for various problem situations. H2</p>

		CO 5 Defend solutions with respect to effective storage of data and efficiency of the required operations for solving real world problems. H3
ESC-ECE309-T	CONTROL SYSTEM ENGINEERING	CO 1 To define various types of control systems and feedback control mechanism. L1  CO 2 To describe various time domain and frequency domain tools used for the analysis and design of linear control systems. L2  CO 3 To illustrate and interpret time domain analysis of 2nd order system. L3  CO 4 To test the stability of the system using techniques based on transfer function of system. H1  CO 5 To evaluate and design compensation networks and controllers. H2
Open Elective Course – I		
PCC-ECE301-P	MICROWAVE ENGINEERING LAB	CO 1 To state the practical concepts of generation of microwave signal L1  CO 2 To describe the various parameters related to microwave components. L2  CO 3 To classify various microwave components L3  CO 4 To Examine the microwave frequency signals and how it is measured. H1  CO 5 To evaluate microwave systems for different practical application. H2  CO 6 To create a model for microwave frequency generation. H3
PCC-ECE303-P	EMBEDDED SYSTEM DESIGN LAB	CO 1 Describe the procedure to write a program on MP Lab software. L1  CO 2 Recognize the various modules available with the development board of PIC Microcontroller. L2  CO 3 Apply instructions set to write assembly language programs. L3  CO 4 Analyze real-time response of embedded systems. H1

		CO 5 Design and develop an embedded system using PIC Microcontroller. H2
PCC-ECE305-P	SKILLS & INNOVATION LAB	CO 1 Describe Circuit schematic design, PCB layout design and fabrication process. L1 CO 2 To understand and explain PCB design and fabrication process. L2 CO 3 To apply, implement, execute the knowledge of Electronic circuit design, layout design and fabrication process. L3 CO 4 To investigate Circuit schematic design, PCB design and fabrication process. H2 CO 5 To design and construct PCB for electronic circuits. H3
INT-ECE311-P	Practical Training-I	CO 1 outline technical documents and give oral presentations related to the work completed L1 CO 2 recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the industry L2 CO 3 acquire and apply fundamental principles of engineering and an ability to work in actual working environment. L3 CO 4 analyze practical application of the subjects taught during the course H1 CO 5 develop social, cultural , global and environmental responsibilities as an engineer H2 CO 6 identify, formulate and model problems and find engg. Solution based on a system approach H3

**Department of ECE**

**B. Tech ECE (6<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
HSMC 301-T	Economics for Engineers	
PCC-ECE302-T	COMPUTER NETWORKS and IOT	CO 1 To understand networking of devices & describe the concepts of IOT. L1

		<p>CO 2 Identify the different technologies used for information transfer. L2</p> <p>CO 3 Apply IOT to different applications. L3</p> <p>CO 4 Analysis and evaluate protocols used in IOT. H1</p> <p>CO 5 To analyze the data transfer on networks and troubleshooting of various possible errors. H2</p> <p>CO 6 Design and develop smart city in IOT. H3</p>
PCC-ECE304-T	VLSI DESIGN	<p>CO 1 Describe the MOS technology and its applications for VLSI design. L1</p> <p>CO 2 Illustrate the design equations and their analysis for VLSI circuit system. L2</p> <p>CO 3 Demonstrate the importance of CMOS design in VLSI system design. L3</p> <p>CO 4 Compare the various circuit topologies for digital VLSI design H1</p> <p>CO 5 Define and evaluate the layout of VLSI circuits. H2</p> <p>CO 6 Develop or create CMOS system for VLSI design. H3</p>
PCC-ECE306-T	LINEAR INTEGRATED CIRCUITS & APPLICATIONS	<p>CO 1 To describe linear integrated circuits and their application circuits. L1</p> <p>CO 2 To understand and explain operational amplifier circuits and their application circuits. L2</p> <p>CO 3 To apply the knowledge of linear integrated circuits. L3</p> <p>CO 4 To compare and analyze operational amplifier circuits and their application circuits. H1</p> <p>CO 5 To design operational amplifier based comparators and converters. H3</p>
Program Elective Course – I		
Open Elective Course – II		
PCC-ECE302-P	COMPUTER NETWORKS & IOT LAB	<p>CO 1 To understand the concept of internetworking of devices. L1</p> <p>CO 2 To describe application of IOT. L2</p>

		<p>CO 3 To make use of Devices, Gateways and Data Management in IOT. L3</p> <p>CO 4 To design the computer links among different networks to transfer the information. H1</p> <p>CO 5 To evaluate the Market perspective of IOT. H2</p> <p>CO 6 To design state of the art architecture in IOT. H3</p>
PCC-ECE304-P	VLSI DESIGN LAB	<p>CO 1 Describe the CMOS technology and its applications for VLSI design. L1</p> <p>CO 2 Illustrate the VLSI circuit design techniques practically. L2</p> <p>CO 3 Demonstrate the importance of CAD tools in VLSI system design. L3</p> <p>CO 4 Compare the various circuit topologies for digital VLSI design. H1</p> <p>CO 5 Design and evaluate the layout of VLSI circuits. H2</p> <p>CO 6 Develop or create CMOS system using VLSI CAD tools. H3</p>
PCC-ECE306-P	LINEAR INTEGRATED CIRCUITS & APPLICATIONS LAB	<p>CO 1 To describe linear integrated circuits and their application circuits. L1</p> <p>CO 2 To understand and explain operational amplifier circuits and their application circuits. L2</p> <p>CO 3 To operate various operational amplifier based circuits L3</p> <p>CO 4 To compare and analyze operational amplifier circuits and their application circuits. H1</p> <p>CO 5 To design operational amplifier based oscillators, filters, comparators and converters. H3</p>

<b>Department of ECE</b>		
<b>B. Tech ECE (7<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome

PCC-ECE401-T	Digital Signal Processing	<p>CO 1 To understand the concept and advantages of digital signal processing. L1</p> <p>CO 2 To summarize differences between time domain and frequency domain analysis tools. L2</p> <p>CO 3 To apply DFT and FFT tools to determine the spectral components of a discrete time signal. L3</p> <p>CO 4 To examine the realization of digital filters using different realization structures. H1</p> <p>CO 5 To design and implement Finite Impulse Response (FIR) and Infinite Impulse Response (IIR) digital filters for processing of discrete time signals. H3</p>
PCC-ECE403-T	WIRELESS COMMUNICATION	<p>CO 1 To describe the evolution &amp; advancements in wireless networks. L1</p> <p>CO 2 To explain the operation of cellular networks. L2</p> <p>CO 3 To define the channel behaviour and associated losses. L3</p> <p>CO 4 To evaluate the performance of cellular networks. H1</p> <p>CO 5 To formulate efficient cellular radio resource planning. H2</p>
PCC-ECE405-T	DIGITAL SYSTEM DESIGN	<p>CO 1 Describe digital system design process. L1</p> <p>CO 2 Explain various design methodologies for digital system design. L2</p> <p>CO 3 Apply the knowledge of digital design techniques for system design. L3</p> <p>CO 4 Demonstrate the use of HDL in Digital systems design. H1</p> <p>CO 5 Evaluate and compare different design techniques available for digital logics H2</p> <p>CO 6 Design the specifications for the system to be created/implemented using HDL H3</p>
Open Elective Course – III		
Program Elective Course – II		

PCC-ECE401-P	DIGITAL SIGNAL PROCESSING LAB	<p>CO 1 To understand the basic operations of signal processing &amp; plot basic discrete/digital signals using MATLAB. L2</p> <p>CO 2 To demonstrate interpolation and decimation operations using MATLAB. L3</p> <p>CO 3 To analyze and examine the sampling theorem. H1</p> <p>CO 4 To evaluate magnitude and phase spectrum of a discrete time signal using DFT to determine the spectral components of the signal. H2</p> <p>CO 5 To develop and design IIR and FIR band pass, band stop, low pass and high pass filters using MATLAB. H3</p>
PCC-ECE405-P	DIGITAL SYSTEM DESIGN LAB	<p>CO 1 Describe the use of HDLs for VLSI digital system design. L1</p> <p>CO 2 Illustrate the various CAD tools available for Digital system design. L2</p> <p>CO 3 Demonstrate the importance of HDL and CAD tools in VLSI digital system design. L3</p> <p>CO 4 Compare the various design techniques for digital system design. H1</p> <p>CO 5 Design and evaluate the performance of digital systems. H2</p> <p>CO 6 Develop or create digital system using HDLs and FPGAs. H3</p>
Program Elective Course – II Lab		
PROJ-ECE413-P	MINOR PROJECT	<p>CO 1 Relate practical knowledge within the chosen area of technology for project development L1</p> <p>CO 2 Understand methodologies and professional way of documentation and communication. L2</p> <p>CO 3 Illustrate the key stages in development of the project. L3</p> <p>CO 4 Identify, analyze, formulate and handle projects with a comprehensive and systematic approach H1</p>

		<p>CO 5 Contribute as an individual or in a team in development of technical projects H2</p> <p>CO6 Develop effective communication skills for presentation of project related activities H3</p>
INT-ECE415-P	Practical Training-II	<p>CO 1 Outline technical documents and give oral presentations related to the work completed L1 CO 2 Recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the industry L2</p> <p>CO 3 Acquire and apply fundamental principles of engineering and an ability to work in actual working environment. L3</p> <p>CO 4 Analyze practical application of the subjects taught during the course H1</p> <p>CO 5 Develop social, cultural , global and environmental responsibilities as an engineer H2</p> <p>CO 6 Identify, formulate and model problems and find engg. Solution based on a system approach H3</p>
MC-ECE417-P	General Proficiency	

<b>Department of ECE</b>		
<b>B. Tech ECE (8<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
Program Elective Course – III		
Program Elective Course – IV		
Program Elective Course – V		
Program Elective Course – IV Lab		
PROJ-ECE428-P	MAJOR PROJECT	<p>CO 1 Extend or use the idea in mini project for major project. L1</p> <p>CO 2 Describe a thorough and systematic understanding of project contents L2</p>



		<p>CO 3 Use effectively oral, written and visual communication L3</p> <p>CO 4 Identify, analyze, and solve problems creatively through sustained critical investigation. H1 CO 5 Demonstrate an awareness and application of appropriate personal, societal, and professional ethical standards. H2</p> <p>CO6 Know the key stages in development of the project. H3</p>
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**BACHELOR OF TECHNOLOGY**  
**in**  
**ELECTRICAL ENGINEERING**

**4 YEARS PROGRAMME**

**Choice Based Credit System**

**w. e. f. July 2019**

**(70:30)**



**DEPARTMENT OF ELECTRICAL ENGINEERING**  
**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE &**  
**TECHNOLOGY**  
**HISAR-125001, HARYANA**

## **Vision**

To develop versatile Electrical Engineers with emphasis on values and skills based state of the art technical knowledge, innovative and entrepreneurial skills for the sustainable development and welfare of society.

## **Mission**

1. To develop state of art facilities and create conducive environment for learning.
2. To impart technical knowledge and skills through collaboration with industry and academia..
3. To bridge the gap between industry and academia by framing curricula and syllabi based on industrial and societal needs.
4. To inculcate moral and ethical values among the faculty and students.

## **Programme Educational Objectives (PEO)**

### **Graduates of the program shall be**

PEO1: Able to utilize the acquired knowledge for analyzing and resolving practical Electrical Engineering problems.

PEO2: Imbued with the aptitude for solving industry problems with the help of modern tools and design.

PEO3: Equipped to involve in research, higher studies and to become entrepreneur that caters to the need of industry and society.

PEO4: Acquire social and environmental ethics to work in an organisation.

### **Objective**

To impart state of art training for empowering students to tackle the technological and socio-economic challenges and create facilities for the holistic development of students.

### Program Specific Outcomes (PSOs)

Electrical Engineering graduates will have the:

**PSO1:** Comprehensive knowledge of electrical systems, components and processes to address technical and engineering challenges in real life.

**PSO2:** Aptitude to provide technical solutions to complex electrical engineering problem with the application of modern and appropriate tools for sustainable development.

**PSO3:** Wisdom of social and environmental awareness along with ethical responsibility to have a successful career with passion and zeal for real-world applications using optimal resources as an entrepreneur.

### Program Outcomes (POs)

**PO1 Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

**PO2 Problem Analysis:** Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

**PO3 Design/Development of Solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

**PO4 Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

**PO5 Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

**PO6 The Engineer and Society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

**PO7 Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.

**PO8 Ethics:** Apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice.

**PO9 Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

**PO10 Communication:** Communicate effectively on complex engineering activities with the engineering community and with society. Some of them are, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

**PO11 Project Management and Finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

**PO12 Lifelong Learning:** Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

<b>Department of EE</b>		
<b>B. Tech EE(3<sup>rd</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-EE201-T	ELECTRICAL CIRCUITS and NETWORKS	<p>CO1. Recall the fundamental of network theorems L1(Remembering)</p> <p>CO2. Understand and derive the response of electrical circuits and characteristics and parameters of two port networks L2(Understanding)</p> <p>CO3. Apply the knowledge of network analysis in technical problem solving L3(Applying)</p> <p>CO4. Perform analysis and synthesis of two port networks applicable in various engineering problems L4(Analyzing)</p>
PCC-EE203-T	ELECTRONIC DEVICES AND CIRCUITS	<p>CO1. Outline semiconductors, diodes, transistors, operational amplifiers and digital circuits L1 (Remembering)</p> <p>CO2. Explain about different power amplifier circuits, their design and use in electronics and communication circuits L2 (Understanding)</p> <p>CO3. Demonstrate and interpret the working of analog and digital electronic devices and circuits L3 (Applying)</p> <p>CO4. Distinguish between various logic families and their characteristics L4 ( Analyzing)</p> <p>CO5. Design and implement analog, combinational and sequential logic circuits applicable in various engineering problems L6 (Creating)</p>

PCC-EE205-T	ELECTRIC MACHINES-I	<p>CO1. Recall the basics of electric machines L1(Remembering)</p> <p>CO2. Describe the performance of different types of electric machines. L2(Understanding)</p> <p>CO3. Solve the problems related with electric machines. L3(Apply)</p> <p>CO4. Compare the performance characteristics of electric machines. H1(Analysis)</p> <p>CO5. Judge and use the machines on the basis of their utilization and performance. H2 (Evaluating)</p>
PCC-EE207-T	GENERATION OF ELECTRIC POWER	<p>CO1. Describe and analyze different types of sources and mathematical expressions related to thermodynamics and various terms and factors involved with power plant operation. L1(Remembering)</p> <p>CO2. Summarize the working and layout of steam power plants and discuss about its economic and safety impacts. L2(Understanding)</p> <p>CO3. Illustrate the working principle and basic components of the nuclear power plant, diesel engine and the economic and safety principles involved with it. L3(Apply)</p> <p>CO4. Examine the mathematical and working principles of different electrical equipment's involved in the generation of power. L4(Analysis)</p> <p>CO5. Evaluate the different power generating systems L5( Evaluating)</p> <p>CO6. Construct the model on the applications basis of power plant L6(Creating)</p>

BSC201-T	MATHEMATICS-III	<p>CO1. Define concepts and terminology of Fourier series and Fourier transforms, Functions of complex variables, Power Series and, Probability distributions and hypothesis testing. (LOTS: Level 1: Remember)</p> <p>CO2. Solve problems using Fourier transforms in domains like digital electronics and image processing. (LOTS: Level 3: Apply)</p> <p>CO3. Apply mathematical principles to solve computational problems. (LOTS: Level 3: Apply)</p> <p>CO4. Compare various probability distributions (HOTS: Level 4: Analyse).</p> <p>CO5. Select suitable hypothesis testing methods for given problems and interpret the respective outcomes. (HOTS: Level 4: Evaluate)</p> <p>CO6. Integrate the knowledge of Fourier series and Fourier transforms, Functions of complex variables, Power Series and, Probability distributions and hypothesis testing for solving real world problems. (HOTS: Level 6: Create)</p>
PCC-EE203-P	ELECTRONIC DEVICES AND CIRCUITS LABORATORY	<p>CO1. Memorize the characteristics of semiconductors, diodes, transistors, operational amplifiers and digital circuits L1 (Remembering)</p> <p>CO2. Perform and learn about different power amplifier circuits, their design and use in electronics and communication circuits L2 (Understanding)</p> <p>CO3. Demonstrate and interpret the working of analog and digital electronic devices and circuits L3 (Apply)</p> <p>CO4. Analyze various logic families and their characteristics, combinational and sequential logic circuits L4 ( Analyzing)</p>

		CO5. Design and implement analog, combinational and sequential logic circuits applicable in various engineering problems L6 (Creating)
PCC-EE205-P	ELECTRICAL MACHINES-I LABORATORY	<p>CO1. Memorize the basics of electric machines like: transformer, DC machine and electromechanical energy conversion principle L1(Remembering)</p> <p>CO2. Discuss about different characteristics and working design of electric machines. L2(Understanding)</p> <p>CO3. Demonstrate and interpret the working of electric machines at different operational conditions. L3(Apply)</p> <p>CO4. Examine and analyze various performance characteristics of electric machines. H1(Analysis)</p> <p>CO5. Select the electrical machines with ratings on the basis of their utilization and performance. H2 (Evaluating)</p> <p>CO6. Design machine models for various engineering problems L6 (Creating)</p>
PCC-EE209-P	ELECTRICAL WORKSHOP	<p>CO1. Memorize the knowledge about various tools, electrical material and symbols. L1 (Remembering)</p> <p>CO2. Discuss various types of wiring systems, wiring tools, lighting &amp; wiring accessories, wiring estimation &amp; costing, etc. L2 (Understanding)</p> <p>CO3. Use the electrical tools in real life. L3 (Apply)</p> <p>CO4. Examine and estimate the basic requirements for wirings. L4 ( Analyzing)</p> <p>CO5. Understand modern manufacturing operations, including their capabilities, limitations, and how to design a model economically L6(Creating)</p>



MC 103-T	Indian Constitution	
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<b>Department of EE</b>		
<b>B. Tech EE(4<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-EE202-T	POWER ELECTRONICS	<p>CO1. Recall the fundamental of electronics devices and circuit L1(Remembering)</p> <p>CO2. Describe various power semiconductor devices, passive components and switching circuits. L2(Understanding)</p> <p>CO3. Deploy power converter circuits design and learn to select suitable power electronic devices by assessing the requirements of application fields. L3(Apply)</p> <p>CO4. Compare, formulate and analyze a power electronic circuit design and assess the performance. L4(Analysis)</p> <p>CO5. Estimate the critical areas for improvement in an industries and derive typical alternative solution. L5(Evaluating)</p> <p>CO6. Design a suitable power converters to control Electrical Motors and other industry grade apparatus L6(Creating)</p>
PCC-EE204-T	ELECTRICAL MACHINES-II	<p>CO1. Recall the basics of electric machines L1(Remembering)</p> <p>CO2. Illustrate the performance of different types of rotating electric machines. L2(Understanding)</p> <p>CO3. Solve the problems related with rotating electric machines. L3(Apply)</p>

		<p>CO4. Compare the performance characteristics of rotating electric machines. H1(Analysis)</p> <p>CO5. Judge and use the rotating electric machines on the basis of their utilization and performance. H2 (Evaluating)</p>
PCC-EE206-T	POWER SYSTEMS - I	<p>CO1. Draw the single line diagram and model the power system components for power system analysis L1(Remembering)</p> <p>CO2. Understand the major components of Transmission and Distribution Systems, its modeling and important parameters L2(Understanding)</p> <p>CO3. Investigate the performance of transmission lines by calculating voltage regulation and efficiency L3(Applying)</p> <p>CO4. Analyze the mechanical and electrical design aspects of transmission system L4(Analyzing) CO5. Compare between different supply systems, Overhead transmission lines and underground cables and select the appropriate according to the need. L5(Evaluating)</p>
PCC-EE208-T	FIELDS AND WAVES	<p>CO1. Recall the basics of coordinates(2 D &amp; 3D) L1(Remembering)</p> <p>CO2. Describe the electromagnetic waves and theory. L2(Understanding)</p> <p>CO3. Solve the problems related with electromagnetic waves and theory. L3(Apply)</p> <p>CO4. Compare the performance of electromagnetic waves on the basis of different theories. H1(Analysis)</p> <p>CO5. Judge the characteristics of electromagnetic waves and utilize them as per their requirements. H2 (Evaluating)</p>

PCC-EE210-T	SIGNALS AND SYSTEMS	<p>CO 1 Describe various signals and their behaviour involved in processing. L1 (Remembering)</p> <p>CO 2 Classify different systems used for signal processing and operation and Conceptualize the effects of sampling a CT signal L2 (Understanding)</p> <p>CO 3 Demonstrate the Conversion of signals in analog domain to digital domain using various transforms L3 (Applying)</p> <p>CO 4 Analyze CT and DT systems using Laplace transforms and ZTransforms. L4( Analyzing)</p> <p>CO 5 Modeling different systems with detailed analysis of LTI systems according to different types of applications L6 (Creating)</p>
PCC-EE202-P	POWER ELECTRONICS LABORATORY	<p>CO1. Memorize the knowledge about various power converters and electric drives control methods. L1 (Remembering)</p> <p>CO2. Identify relevant information to supplement to the Power Electronics devices. L2 (Understanding)</p> <p>CO3. Apply a set up testing strategies and select proper instruments to evaluate performance characteristics of Power devices and power electronics circuits L3 (Apply)</p> <p>CO4. Examine the basic requirements for electric drive based design. L4 ( Analyzing)</p> <p>CO5. apply techniques to different power electronic devices and evaluate possible causes of discrepancy in practical experimental observations in comparison to theory L5(Evaluating)</p> <p>CO6. Design a model for controlling the system in an industries. L6 (Creating)</p>

PCC-EE204-P	ELECTRICAL MACHINES-II LABORATORY	<p>CO1. Memorize the basics of AC rotating electric machines. L1(Remembering)</p> <p>CO2. Discuss and learn about different characteristics and working design of AC rotating electric machines. L2(Understanding)</p> <p>CO3. Demonstrate and interpret the working of electric machines at different operational conditions. L3(Apply)</p> <p>CO4. Examine and analyze various performance characteristics of electric machines. H1(Analysis) CO5. Select the electrical machines with ratings on the basis of their utilization and performance. H2 (Evaluating)</p> <p>CO6. Design machine models for various engineering problems L6 (Creating)</p>
PCC-EE206-P	POWER SYSTEMS - I LABORATORY	<p>CO1. Draw the single line diagram of the power system and power angle characteristics of transmission line. L2 (Understanding)</p> <p>CO2. Calculate the parameters of transmission line from the given model and determine the voltage regulation and efficiency. L3 (Apply)</p> <p>CO3. Observe and analyze the Ferranti's effect in transmission line model. L4 ( Analyzing)</p> <p>CO4. Modeling of 3 winding transformer and synchronous machines by determining the sequence impedances L6 (Creating)</p>
MC 104-T	Essence of Indian Traditional Knowledge	

**Department of EE**

**B. Tech EE(5<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
PCC-EE301-T	ADVANCED POWER ELECTRONICS AND DRIVE	<p>CO1. Indicate the fundamental of electronics devices and circuit L1(Remembering)</p> <p>CO2. Derive the basic operation and compare performance of various power converters circuits L2(Understanding)</p> <p>CO3. Demonstrate the power converter circuits design and learn to select suitable power electronic devices by assessing the requirements of application fields. L3(Apply)</p> <p>CO4. Compare, formulate and analyze a power electronic circuit design and control drive performance. L4(Analysis)</p> <p>CO5. Evaluate the critical areas in application levels and derive typical alternative solutions, select suitable power converters to control Electrical Motors and other industry grade apparatus. L5(Evaluating)</p> <p>CO6. Create the model on the applications basis of the controller L6(Creating)</p>
PCC-EE303-T	CONTROL SYSTEMS-I	<p>CO1. Memorize the basics of electric circuits and signal flow. L1(Remembering)</p> <p>CO2. Describe the performance of different types of control systems and explain the stability by different methods on the basis of their transfer function. L2(Understanding)</p> <p>CO3. Solve the problems related with different control system design and can illustrate briefly. L3(Apply)</p>

		<p>CO4. Compare the performance characteristics of different control systems and examine the behavior of system. H1(Analysis)</p> <p>CO5. Judge the control strategy on the basis of their performance. H2 (Evaluating)</p> <p>CO6. Develop new controller and compensator on the basis of outcomes and requirement of system. H3 (Creating)</p>
PCC-EE305-T	MICROPROCESSORS and MICROCONTROLLERS	<p>CO 1 Describe the evolution of processor architectures. L1</p> <p>CO 2 Explain the concepts of 8085 and 8086 microprocessor with their programming. L2</p> <p>CO 3 Write simple programs in assembly language of 8085 and 8086 microprocessor L3</p> <p>CO 4 Appraise Microprocessors and Microcontrollers for different interfacing applications for various application L5</p> <p>CO 5 Develop the microprocessor and Microcontroller based Embedded System. L6</p>
ESC-EE307-T	ELECTRICAL ENGINEERING MATERIALS	<p>CO1. Recall the knowledge about the electrical materials. L1(Remembering)</p> <p>CO2. Compare different type of electrical materials. L2(Understanding)</p> <p>CO3. Use different type of conducting material's for power generation. L3(Apply)</p> <p>CO4. Compare the different type of electrical components and materials. L4(Analysis)</p> <p>CO5. Appraise the use of electrical materials in the field of power generation. L5( Evaluating)</p>

		CO6. Formulate a good materials to remove the limitation related to the power generation L6(Creating)
PCC-EE301-P	ADVANCED POWER ELECTRONICS AND DRIVES LABORATORY	CO1. Memorize the basics of AC & DC electric machines with electromechanical energy conversion principle. L1(Remembering)  CO2. Describe different combinational electronic and power electronic circuits with the design of electric machines & drive. L2(Understanding)  CO3. Demonstrate and interpret the working of electric machines at different combinational electronic and power electronic circuits. L3(Apply)  CO4. Examine the various performance characteristics of special electric machines and drives. H1(Analysis)  CO5. Select the electrical machines with ratings on the basis of their utilization and performance. H2 (Evaluating)  CO6. Design machine models with different combinational electronic and power electronic circuits for various engineering problems L6 (Creating)
PCC-EE303-P	CONTROL SYSTEMS-I LABORATORY	CO1. Memorize the basics of electric circuits and signal flow. L1(Remembering)  CO2. Discuss the operation of different control system models with their transfer function. L2(Understanding)  CO3. Demonstrate and interpret the working of control system models with their transfer function. L3(Apply)

		<p>CO4. Examine the behaviors and performance characteristics of control system model at different parameters physically as well as with the help of software. H1(Analysis)</p> <p>CO5. Select the control system model on the basis of their function, utilization and performance. H2 (Evaluating)</p> <p>CO6. Design models for various engineering problems to achieve the efficiency of system L6 (Creating)</p>
PCC-EE305-P	MICROPROCESSORS AND MICROCONTROLLERS LABORATORY	<p>CO 1 Explain the concepts of 8085 and 8086 microprocessor with their programming. L2</p> <p>CO 2 Write simple programs in assembly language of 8085 and 8086 microprocessor L3</p> <p>CO 3 Appraise Microprocessors and Microcontrollers for different interfacing applications for various application L5</p> <p>CO 4 Develop the microprocessor and Microcontroller based Embedded System. L6</p>
Open Elective Course – I		
HSMC 302-T	Fundamentals of Management for Engineers	
INT-EE309-P	PRACTICAL TRAINING-I	<p>CO 1 Outline technical documents and give oral presentations related to the work completed. L1 CO 2 Prepared to engage in independent and lifelong learning in the industry. L2</p> <p>CO 3 Acquire and apply fundamental principles of engineering for working in an actual working environment. L3</p>



		<p>CO 4 Analyze practical application of the subjects taught during the program. L4</p> <p>CO 5 Develop, social, cultural, global and environmental responsibilities as an engineer. L5</p> <p>CO6 Design and implement solution methodologies with technical &amp; managerial skills for solving engineering problems. L6</p>
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<b>Department of EE</b>		
<b>B. Tech EE(6<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-EE302-T	POWER SYSTEMS - II	<p>CO1. List and describe the construction, principle and working of different types of switchgear equipments along with protective schemes. L1(Remembering)</p> <p>CO2. Classify the circuit breakers, relays and protective schemes based on construction, principle of operation and requirement. L2(Understanding)</p> <p>CO3. Deploy an appropriate switchgear and protective scheme for various components of power systems to protect against different types of faults. L3(Applying)</p> <p>CO4. Analyze the causes and counter measures of over-voltages in power systems. L4(Analyzing) CO5. Appraise the power systems with neutral grounding and various grounding Schemes. L5(Evaluating)</p>
PCC-EE304-T	ELECTRICAL MEASUREMENTS AND INSTRUMENTATION	<p>CO1. Exhibit memory of previously learned material by recalling facts, terms, basic concepts and answers. L1(Remembering)</p>

		<p>CO2. Recognize the basic measuring instruments in the field of engineering L2(Understanding) CO3. Choose the proper type of meter and measuring instruments for different industrial. L3(Apply)</p> <p>CO4. Compare performance of MC, MI and Dynamometer types of measuring instruments, Energy meters and CRO L4(Analysis)</p> <p>CO5. student will be able to select techniques, skills, and modern engineering tools necessary for electrical engineering practice L5( Evaluating)</p> <p>CO6. Design an electrical and electronic project using new sensing and measuring schemes. L6(Creating)</p>
PCC-EE306-T	CONTROL SYSTEMS-II	<p>CO1. Describe the state of system and recall the z-transform along with stability theory. L1(Remembering)</p> <p>CO2. Illustrate the performance of different control system models and controllers on the basis of their transfer function model. L2(Understanding)</p> <p>CO3. Solve the problems related with linear and non linear systems and give some examples. L3(Apply)</p> <p>CO4. Compare the performance characteristics of different control systems and examine the behavior of system. H1(Analysis)</p> <p>CO5. Judge the control strategy on the basis of their performance and requirement. H2 (Evaluating)</p> <p>CO6. Design controller and compensator with optimum set of equations on the basis of outcomes and requirement of system. H3 (Creating)</p>

PCC-EE302-P	POWER SYSTEMS - II LABORATORY	<p>CO1. Explain the need and operation of various protective devices. L2 (Understanding)</p> <p>CO2. Identify the possible faults and select appropriate protective scheme for various components of power systems. L3 (Apply)</p> <p>CO3. Plot and analyze the operating characteristics of various types of relays. L4 ( Analyzing)</p> <p>CO4. Design the suitable protection scheme for different power system equipment. L6 (Creating)</p>
PCC-EE304-P	ELECTRICAL MEASUREMENTS AND INSTRUMENTATION LABORATORY	<p>CO1. Memorize the knowledge and skills to provide solutions to Electrical and Electronics Engineering problems in industry and governmental organizations or to enhance in educational institutions. L1 (Remembering)</p> <p>CO2. Students will be able to Discuss the different type of instruments use for measurements in real life. L2 (Understanding)</p> <p>CO3. Demonstrate the working of analog and digital meters. L3 (Apply)</p> <p>CO4. Perform an experimental set using different type of meter. L4 ( Analyzing)</p> <p>CO5. Select a proper type meter for absolute measurement. L5(Evaluating)</p> <p>CO6. Design a model using different type of measuring instruments in various engineering applications. L6 (Creating)</p>
PCC-EE306-P	CONTROL SYSTEMS-II LABORATORY	<p>CO1. Memorize the basics of electric circuits and their utilization in process control. L1(Remembering)</p>

		<p>CO2. Discuss the operation of different control system models with their transfer function in industrial process control. L2(Understanding)</p> <p>CO3. Demonstrate and interpret the working of embedded system and electronically adjustable control models. L3(Apply)</p> <p>CO4. Examine the behaviors and performance characteristics of industrial process control model at different parameters physically as well as with the help of software. H1(Analysis)</p> <p>CO5. Select the control system model on the basis of their function, utilization and performance. H2 (Evaluating)</p> <p>CO6. Design models for various engineering problems to achieve the efficiency of system L6 (Creating)</p>
Program Elective Course – I		
Open Elective Course – II		
HSMC 301-T	Economics for Engineers	

<b>Department of EE</b>		
<b>B. Tech EE(7<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PEC-EE417-T	POWER SYSTEM OPERATION AND CONTROL	<p>CO1. Explain the operation and control of all the major components of power systems L1(Remembering)</p> <p>CO2. Understand the unit commitment problems and methods to solve the problems L2(Understanding)</p>

		<p>CO3. Deploy frequency control, voltage control, active and reactive power control schemes on power system L3(Apply)</p> <p>CO4. Compare various reactive power compensation schemes L4(Analysis)</p> <p>CO5. Assess the best possible control for power system operation L5( Evaluating)</p> <p>CO6. Develop generation dispatching, power system monitoring and control schemes for optimal operation and control L6(Creating)</p>
Program Elective Course – II		
Program Elective Course – III		
Open Elective Course – III		
PROJ-EE419-P	MINOR PROJECT	<p>CO 1 Relate practical knowledge within the chosen area of technology for project development L1 CO 2 Understand methodologies and professional way of documentation and communication. L2 CO 3 Illustrate the key stages in development of the project. L3</p> <p>CO 4 Identify, analyze, formulate and handle projects with a comprehensive and systematic approach L4</p> <p>CO 5 Contribute as an individual or in a team in development of technical projects L5</p> <p>CO6 Develop effective communication skills for presentation of project related activities L6</p>
INT-EE421-P	PRACTICAL TRAINING-II	<p>CO 1 Outline technical documents and give oral presentations related to the work completed. L1 CO 2 Prepared to engage in independent and lifelong learning in the industry. L2</p>

		<p>CO 3 Acquire and apply fundamental principles of engineering for working in an actual working environment. L3</p> <p>CO 4 Analyze practical application of the subjects taught during the program. L4</p> <p>CO 5 Develop, social, cultural, global and environmental responsibilities as an engineer. L5</p> <p>CO6 Design and implement solution methodologies with technical &amp; managerial skills for solving engineering problems. L6</p>
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<b>Department of EE</b>		
<b>B. Tech EE(8<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-EE402-T	COMPUTER METHODS IN POWER SYSTEMS	<p>CO1. Memorize the formulation of various network matrices and model the power system components L1(Remembering)</p> <p>CO2. Understand the importance of computer applications in electrical power system operation L2(Understanding)</p> <p>CO3. Investigate the state of power system of any size by applying various computer methods under steady state and fault condition L3(Applying)</p> <p>CO4. Perform load flow, short circuit and stability applicable in various power system problems L4(Analyzing)</p> <p>CO5. Compare and identify the most appropriate algorithm for load flow, short circuit and stability studies L5(Evaluating)</p>

		CO6. Develop appropriate mathematical models of power systems for performance analysis, planning and control L6(Creating)
Program Elective Course – IV		
Program Elective Course – V		
PCC-EE402-P	COMPUTER METHODS IN POWER SYSTEMS LABORATORY	<p>CO1. Learn the applications and working of software tools for electrical power system analysis L2 (Understanding)</p> <p>CO2. Calculate the state of power system of any size by applying various computer methods under steady state and fault condition L3 (Apply)</p> <p>CO3. Analyze the impact of changes in power system parameters on the state and stability of the system L4 (Analyzing)</p> <p>CO4. Acquire the skill of implementing the various methods and create Software tools for analysis of real time power systems L6 (Creating)</p>
PROJ-EE420-P	MAJOR PROJECT	<p>CO 1 Extend or use the idea in minor project for major project. L1</p> <p>CO 2 Describe a thorough and systematic understanding of project contents L2</p> <p>CO 3 Use effectively oral, written and visual communication L3</p> <p>CO 4 Identify, analyze, and solve problems creatively through sustained critical investigation. L4 CO 5 Demonstrate an awareness and application of appropriate personal, societal, and professional ethical standards. L5</p> <p>CO6 Know the key stages in development of the project. L6</p>

MC-EE422-P	General Proficiency	
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**BACHELOR OF TECHNOLOGY**  
**in**  
**INFORMATION TECHNOLOGY**

**4 YEARS PROGRAMME**

**Choice Based Credit System**

**w. e. f. July 2019**

**(70:30)**



**DEPARTMENT OF INFORMATION TECHNOLOGY**  
**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE &**  
**TECHNOLOGY**

**HISAR-125001, HARYANA**

## **1.1. Vision and Mission of the Department of Computer Science and Engineering**

### *1.1.1 Vision*

The vision of the Department is to become a centre of excellence for education in Computer Science and Engineering, Information Technology and Computer Applications. We visualize ourselves as an agency to nurture young minds to be the future leaders in the field of higher education, research and development, and information technology industry. Our aim is to bring out creators and innovators who will work towards the overall well-being of the society.

### *1.1.2. Mission*

- Imparting state-of-the-art knowledge in Computer Science and Engineering, Information Technology and Computer Applications.
- Ensuring that our students graduate with a sound theoretical basis and wide-ranging practical experience.
- Fostering linkages between the Department and, public and private sectors, traversing research establishments as well as Information Technology industry.
- Promoting ethical research of high quality.
- Adopting the best pedagogical methods in order to maximize knowledge transfer.
- Inculcating a culture of free and open discussions in the Department.
- Engaging students in evolving original ideas and applying them to solve complex engineering problems.
- Inspiring a zest into students for lifelong learning.
- Infusing scientific temper, enthusiasm, professionalism, team spirit and leadership qualities in students.
- Sensitizing students to look for environmentally sustainable engineering solutions.
- Upholding democratic values and an environment of equal opportunity for everyone.

## **1.2 B. Tech. (IT): Programme Educational Objectives (PEOs)**

The Programme Educational Objectives of the B. Tech. (IT) Programme are:

- PEO1. To provide a sound theoretical and practical foundation for developing original and innovative solutions to complex engineering problems so that graduating students pursue a successful career in information technology industry.
- PEO2. To inculcate ethical values, a passion for lifelong learning, team spirit and leadership qualities so that the graduating students become responsible engineering professionals who provide economical and environment friendly solutions to the real-world information technology problems.
- PEO3. To equip graduating students with an inquisitive aptitude so that they join post-graduate studies and research in educational and research organization of national and international repute.
- PEO4. To endow graduating students with entrepreneurship skills so that they rise in their careers as IT professionals and become leaders and entrepreneurs themselves in Information Technology Sector.

### 1.3 B. Tech. (IT): Programme Outcomes (POs)

- PO13. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- PO14. **Problem analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- PO15. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- PO16. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- PO17. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- PO18. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- PO19. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- PO20. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- PO21. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- PO22. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- PO23. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- PO24. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

### Program Specific Outcomes (PSOs)

- PSO4 **Developing IT Systems/IT Sub-Components:** Use principles of electronics, micro-processors, various programming languages, data structures, database management systems, computer algorithms, theory of computation and software engineering for designing and implementing Information Technology systems.
- PSO5 **Devising Electronics and Networking Solutions:** Apply the knowledge of network technologies and network administration, mobile ad hoc and sensor networks, cloud computing, IoT and, information and web security for devising networking solutions.
- PSO6 **Envisaging artificially intelligent systems:** Employ the approaches and tools of artificial intelligence and soft computing, data analytics and machine learning for designing and working with intelligent systems that have capability to learn from and adapt to their environment.

**Department of IT**

**B. Tech IT(3<sup>rd</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
BSC201-T	Mathematics III	<p>CO1. Define concepts and terminology of Fourier Series and Fourier transforms, Functions of complex variables and Power Series etc. (LOTS: Level 1: Remember) CO2. Solve problems using Fourier transforms in domains like digital electronics and image processing. (LOTS: Level 3: Apply)</p> <p>CO3. Apply principles of functions of complex variables to solve computational problems. (LOTS: Level 3: Apply)</p> <p>CO4. Compare various concepts related to Fourier transforms and functions of complex variables. (HOTS: Level 4: Analyse)</p> <p>CO5. Select suitable method for given computational engineering problems and related domain. (HOTS: Level 4: Evaluate)</p> <p>CO6. Integrate the knowledge of Fourier Series and Fourier transforms, Functions of complex variables, and Power Series for solving real world problems. (HOTS: Level 6: Create)</p>
PCC-IT201-T/ PCC-CSE201-T	Data Structures and Algorithms	<p>CO1. Describe various types of data structures and operations that can be implemented on these data structures. (LOTS: Level 1: Remember)</p> <p>CO2. Demonstrate the use of various data structures and their related operations. (LOTS: Level 2: Understand)</p>

		<p>CO3. Apply data structure to solve computational problems. (LOTS: Level 3: Apply) CO4. Compare the suitability of alternative data structures and prescribed operations for various problem situations. (HOTS: Level 4: Analyse).</p> <p>CO5. Defend solutions with respect to effective storage of data and efficiency of the required operations for solving real world problems. (HOTS: Level 5: Evaluate)</p>
PCC-IT202-T / PCC-CSE202-T	Object Oriented Programming using C++	<p>CO1. List the concepts related to object oriented paradigms. (LOTS: Level 1: Remember)</p> <p>CO2. Distinguish between structured and object oriented approaches to programming. (LOTS: Level 2: Understand)</p> <p>CO3. Apply object oriented constructs for problem solving. (LOTS: Level 3: Apply) CO4. Detect logical and run time errors and suggest appropriate modifications. (HOTS: Level 4: Analyse)</p> <p>CO5. Justify the design of a program for a given problem. (HOTS: Level 5: Evaluate) CO6. Design solutions to programming problems using multiple object oriented programming constructs together. (HOTS: Level 6: Create)</p>
PCC-IT203-T/ PCC-CSE203-T	Discrete Mathematics	<p>CO1. Outline various discrete structures and the related operations. (LOTS: Level 1: Remember)</p> <p>CO2. Illustrate different discrete structures with the help of examples. (LOTS: Level 2: Understand)</p> <p>CO3. Apply appropriate techniques to solve problems related to discrete structures.(LOTS: Level 3: Apply)</p> <p>CO4. Justify the solutions with the help of proofs. (HOTS: Level 5: Evaluate)</p>

		CO5. Combine techniques related to discrete structures for solving real world problems. (HOTS: Level 6: Create)
PCC-IT204-T PCC-CSE204-T	Computer Organization and Architecture	CO1. Outline the general concepts of digital electronics and computer organisation and architecture. (LOTS: Level 1: Remember)  CO2. Discuss the basic components and their interfacing.(LOTS: Level 2: Understand) CO3. Apply instructions for performing different operations. (LOTS: Level 3: Apply) CO4. Analyse the effect of addressing modes on the execution time of a program.(HOTS: Level 4: Analyse)  CO5. Contrast different types of memory, their architecture and access methods. (HOTS: Level 5: Evaluate)  CO6. Design of simple computer with different instruction sets. (HOTS: Level 6: Create)
MC102-T	Environmental Science	
PCC-IT201-P/ PCC-CSE201-P	Data Structures and Algorithms using C/C++Lab.	CO1. Implement various data structures and the related operations. (LOTS: Levels 3: Apply)  CO2. Analyse space and time complexity of algorithms. (HOTS: Level 4: Analyse) CO3. Compare solutions on the basis of the appropriateness of data structure used and the efficiency of the operations implemented. (HOTS: Level 5: Evaluate)  CO4. Integrate knowledge of data structures to solve real world problems related to data structure and algorithms. (HOTS: Level 6: Create)  CO5. Create written records for the given assignments with problem definition, design of solution and conclusions. (HOTS: Level 6: Create)

		CO6. Demonstrate ethical practices while solving problems individually or in groups (LOTS: Level 3: Apply).
PCC-IT202-P/ PCC-CSE202-P	Object Oriented Programming using C++ Lab.	CO1. Implement problems with object oriented framework. (LOTS: Level 3: Apply) CO2. Analyse the structure of programs for modular design. (HOTS: Level 4: Analyse) CO3. Evaluate robustness of a program by testing it on test/use cases. (HOTS: Level 5: Evaluate)  CO4. Design class hierarchies for implementing inheritance/polymorphism. (HOTS: Level 6: Create)  CO5. Create a lab record of assignments including problem definitions, design of solutions and conclusions. (HOTS: Level 6: Create)  CO6. Demonstrate ethical practices and solve problems individually or in a group. (LOTS: Level 3: Apply)

**Department of IT**

**B. Tech IT(4<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
PCC-IT205-T/ PCC-CSE205-T	Microprocessors and Interfacing	CO1. Outline the architecture of 8085 and 8086 Microprocessor. (LOTS: Level 1: Remember)  CO2. Discuss the basic principles of addressing modes, pin diagrams. (LOTS: Level 2: Understand)  CO3. Describe the functionality of various peripheral chip (LOTS: Level 2: Understand)  CO4. Apply the concepts of interfacing of Memory, Input/output with Microprocessor. (LOTS: Level 3: Apply)  CO5. Compare and contrast the working of 8085 and 8086 microprocessors. (HOTS: Level 5: Evaluate)



		CO6. Develop Assembly Language programs for 8085 and 8086 microprocessor.(HOTS: Level 6: Create)
PCC-IT206-T/ PCC-CSE305-T	Operating Systems	CO1. List various functions and design characteristics of operating systems (LOTS: Level 1: Remember)  CO2. Explain fundamental concepts of operating systems. (LOTS: Level 2: Understand)  CO3. Apply operating system design concepts for solving problems regarding scheduling, memory management, disk management and deadlocks etc.(LOTS: Level 3: Apply)  CO4. Analyze the issues related to various operating systems. (HOTS: Level 4: Analyse)  CO5. Design solutions for the memory and process management problems. (HOTS: Level 6: Create)
PCC- IT207-T/ PCC-CSE207-T	Database Management System	CO1. Describe fundamental elements of Database Management System. (LOTS: Level 1: Remember)  CO2. Discuss principles of relational Database modelling. (LOTS: Level 2: Understanding)  CO3. Apply SQL for designing queries for Relational Databases. (LOTS: Level 3: Apply) CO4. Contrast various concurrency control and recovery techniques with concurrent transactions in DBMS. (HOTS: Level 5: Evaluate)  CO5. Design models of databases using ER modelling and normalization for real life applications.(HOTS: Level 6: Create)
PCC-IT208-T/ PCC-CSE208-T	Analysis and Design of Algorithms	CO1. State terminology and concepts algorithmic techniques. (LOTS: Level 1: Remember)  CO2. Discuss various algorithmic techniques. (LOTS: Level 2: Understand)

		<p>CO3. Apply appropriate algorithmic techniques to solve computational problems. (LOTS: Level 3: Apply)</p> <p>CO4. Analysing algorithms for their efficiency by determining their complexity. (HOTS: Level 4: Analyse)</p> <p>CO5. Compare the pros and cons of applying the different algorithmic techniques to solve problems. (HOTS: Level 5: Evaluate)</p> <p>CO6. Formulate efficient and effective algorithmic solutions for different real- world problems. (HOTS: Level: 6 Create)</p>
PCC-IT209-T/ PCC-CSE209-T	Software Engineering	<p>CO1. Define the various concepts related to software engineering. (LOTS: Level 1: Remember)</p> <p>CO2. Demonstrate the use of stages of various Software Life Cycle Models. (LOTS: Level 2: Understanding)</p> <p>CO3. Apply the Software Requirement Analysis and Software Design Process. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the size, cost, complexity, reliability, quality and maintenance of a software system. (HOTS: Level 4: Analyse)</p> <p>CO5. Construct software model according to the requirements of a customer. (HOTS: Level 6: Create)</p>
PCC-IT210-T/ PCC-CSE210-T	Java Programming	<p>CO1. List object oriented characteristics peculiar to JAVA programming. (LOTS: Level 1: Remember)</p> <p>CO2. Describe object-oriented principles and paradigms implemented by Java programming language. (LOTS: Level 2: Understand)</p> <p>CO3. Apply object-oriented principles for solving problems using JAVA. (LOTS: Level 3: Apply)</p> <p>CO4. Identify classes, interfaces methods, hierarchy in the classes for a given programming problem in JAVA. (HOTS: Level 4: Analyse)</p>

		CO5. Design Graphical User Interface applications and Web based applications in Java by importing applet, AWT and SWING packages. (HOTS: Level 6: Create)
PCC-IT204-P PCC-CSE204-P	Microprocessors and Interfacing Lab.	CO1. Describe the working of microprocessor kit/ TASM .(LOTS: Level 3: Apply)  CO2. Apply interfacing of supporting chips with microprocessor. (LOTS: Level 3: Apply)  CO3. Design assembly language programs for the 8085 and 8086 microprocessors. (HOTS: Level 6: Create)  CO4. Analyse the output of assembly language programs. (HOTS: Level 4: Analyse) CO5. Create lab records for the solutions of assignments. (HOTS: Level 6: Create) CO6. Demonstrate use of ethical practices, independent enquiry and team spirit. (LOTS: Level 3: Apply)
PCC-IT206-P/ PCC-CSE305-P	Operating Systems Lab.	CO1. Apply commands related to vi and Emacs editors, general utilities and file systems. (LOTS: Level 3: Apply)  CO2. Write basic shell scripts and use sed commands as well as awk programming. (LOTS: Level 3: Apply)  CO3. Analyse the results of memory management and disk management commands. (HOTS: Level 4: Analyse)  CO4. Evaluate solutions for different operating system problems such as scheduling, memory management and file management. (HOTS: Level 5: Evaluate)  CO5. Create lab record for assignments that includes problem definitions, design of solutions and conclusions. (HOTS: Level 6: Create)  CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)
PCC-IT-207-P/ PCC-CSE207-P	Database Management System Lab.	CO1. Implement database problems using Oracle DML/DDDL commands. (LOTS: Level 3: Apply)

		<p>CO2. Enforce integrity constraints on a database using a state-of-the-art RDBMS. (LOTS: Level 3: Apply)</p> <p>CO3. Analyse the design of a relational database. (HOTS: Level 4: Analyse)</p> <p>CO4. Design a relational database for a given schema. (HOTS: Level 6: Create)</p> <p>CO5. Create lab assignment record that includes problem definitions, solutions, results and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team spirit.</p>
PCC-IT210-P/ PCC-CSE210-P	Java Programming Lab.	<p>CO1. Implement Java programs using object oriented concepts for problem solving. (LOTS: Level 3: Apply)</p> <p>CO2. Detect syntax and logical errors in java programs (HOTS: Level 4: Analyse)</p> <p>CO3. Apply exception handling for making robust JAVA code. (HOTS: Level 3: Apply) CO4. Design java applications using File I/O and GUI. (HOTS: Level 6: Create)</p> <p>CO5. Create lab record of the solutions of assignments that includes problem definitions, solutions and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>

**Department of IT**

**B. Tech IT(5<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
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<p>PCC-IT301-T/ PCC-CSE206-T</p>	<p>Computer Networks</p>	<p>CO1. Outline various models, topologies and devices of Computer Networks. (LOTS: Level 1: Remember)</p> <p>CO2. Explain the functions of various layers in Network Reference Model. (LOTS: Level 2: Understand)</p> <p>CO3. Apply different network concepts in various network communication protocols. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse performance of various protocols in different scenarios. (HOTS: Level 4: Analyse)</p> <p>CO5. Design network for an organisation. (HOTS: Level 6: Create )</p>
<p>PCC-IT302-T/ PCC-CSE308-T</p>	<p>.NET Using C#</p>	<p>CO1. Define the concepts related to .NET Framework. (LOTS: Level 1: Remember)</p> <p>CO2. Explain various C# constructs. (LOTS: Level 1: Understand)</p> <p>CO3. Apply .NET framework using C# for solving moderate/complex problems. (LOTS: Level 3: Apply)</p> <p>CO4. Use advanced features of C# like Reflector, and Assembly. (LOTS: Level 3: Apply)</p> <p>CO5. Identify logical errors in given .Net using C# programs. (LOTS: Level 3: Analyse)</p> <p>CO6. Design stand-alone applications in the .NET framework using C#. (HOTS: Level 6: Create)</p>
<p>PCC-IT303-T/ PCC-CSE306-T</p>	<p>Formal Language and Automata Theory</p>	<p>CO1. Define terminology related to theory of computation. (LOTS: Level 1: Remember) CO2. Explain the basic concepts and applications of Theory of Computation. (LOTS: Level 2: Understand)</p> <p>CO3. Apply the principles of Theory of Computation to solve computational problems.(LOTS: Level 3: Apply)</p>

		<p>CO4. Compare and contrast the hierarchy of grammars (HOTS: Level 5: Evaluate).</p> <p>CO5. Design various types of automata for given problems. (HOTS: Level 6: Create)</p>
PCC-IT304-T/ PCC-CSE402-T	Artificial Intelligence	<p>CO1. Outline various Artificial Intelligence techniques. (LOTS: Level 1: Remember)</p> <p>CO2. Illustrate reasoning under uncertainty. (LOTS: Level 2: Understand)</p> <p>CO3. Apply search and knowledge representation techniques to solve AI problems.(LOTS: Level 3: Apply)</p> <p>CO4. Compare strengths and weaknesses of AI algorithms (HOTS: Level 4: Analyse).</p> <p>CO5. Combine various AI techniques to solve intelligent systems' problems. (HOTS: Level 6: Create)</p>
OEC-I	Open Elective Course offered by other Departments	
HSMC301-T	Economics for Engineers	
MC104-T	Essence of Indian Traditional Knowledge	
PCC- IT301-P/ PCC-CSE206-P	Computer Networks Lab	<p>CO1. Demonstrate various network topologies and networking devices.(LOTS: Level: 3: Apply)</p> <p>CO2. Justify a particular routing protocol for any implemented data communication networks.(HOTS: Level: 5: Evaluate)</p> <p>CO3. Construct a network and implement various network protocols.(HOTS: Level: 6: Create)</p> <p>CO4. Devise solutions for various routing and switching problems in Computer Networks. (HOTS: Level: 6: Create)</p>

		<p>CO5. Create lab records for the solutions of the assignments. (HOTS: Level: 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team spirit. (LOTS: Level: 3: Apply)</p>
PCC-IT302-P PCC-CSE308-P	.NET using C# Lab.	<p>CO1. Implement C# programs in .NET framework. (LOTS: Level 3: Apply)</p> <p>CO2. Apply ADO.NET for developing database applications. (LOTS: Level 3: Apply)</p> <p>CO3. Analyse given programs for their correctness and efficiency for given inputs and expected outputs. (HOTS: Level 4: Analysis)</p> <p>CO4. Integrate HTML code with ASP.NET and HTML code for designing a web pages. (HOTS: Level 6: Create)</p> <p>CO5. Create written records for the given assignments with problem definition, design of solution and conclusions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices while solving problems individually or in groups (LOTS: Level 3: Apply).</p>
INT-IT301	Industrial Training/Internship	<p>CO1. Review the existing systems for their strengths and weaknesses. (HOTS: Level 4: Analyse)</p> <p>CO2. Address novel problems in an original and innovative manner (HOTS: Level 6: Create) CO3. Select and apply modern engineering tools. (LOTS: Level 3: Apply)</p> <p>CO4. Evaluate the system developed critically with respect to the requirement analysis and other similar systems. (HOTS: Level 5: Evaluate)</p> <p>CO5. Prepare training report by organising ideas in an effective manner.</p> <p>CO6. Follow ethical practices while doing the training and writing report. (LOTS: Level 3: Apply)</p>

<b>Department of IT</b>		
<b>B. Tech IT(6<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-IT305-T/ PEC-CSE411-T	Network Administration and Management	<p>CO1. Define Network Administration and its various components. (LOTS: Level 1: Remember)</p> <p>CO2. Distinguish Network Administration and its Management on various platforms. (LOTS: Level 2: Understand)</p> <p>CO3. Classify the output for different responses to events by interpreting Network Monitoring statistics. (LOTS: Level 3: Apply)</p> <p>CO4. Separate portions of Network for troubleshooting using various tools. (HOTS: Level 4: Analyse)</p> <p>CO5. Combine Network Administration, Network Management and Network Monitoring into a one scenario and compute the performance of the integrated environment. (HOTS: Level 6: Create)</p>
PCC-IT306-T/ PCC-CSE401-T	Compiler Design	<p>CO1. State principles of compiler design. (LOTS: Level 1: Remember)</p> <p>CO2. Illustrate the essential phases for automatically converting source code into object code. (LOTS: Level 2: Understand)</p> <p>CO3. Apply lexical analysis, syntax analysis and code optimization techniques for solving problems. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse a parse tree and a given BNF grammar. (LOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast syntax-oriented translation schemes (HOTS: Level 5: Evaluate) CO6. Design a lexical</p>



		<p>analyser from the specification of a language's lexical rules. (HOTS: Level 6: Create)</p>
PCC-IT307-T	Information and Cyber Security	<p>CO1. Recognize security principles and needs for an organization/institute. (LOTS: Level 1: Remember)</p> <p>CO2. Represent information security by means of cryptographic algorithms and digital signatures. (LOTS: Level 2: Understand)</p> <p>CO3. Compute private keys by key exchange algorithms. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse various types of attacks for their mitigation, proactive and reactive treatment. (HOTS: Level 4: Analyse)</p> <p>CO5. Evaluate cybercrime situations and recommend appropriate cybersecurity laws. (HOTS: Level 5: Evaluate)</p> <p>CO6. Integrate different types of securities under one environment and evaluate their performance. (HOTS: Level 6: Create)</p>
PCC-IT308-T/ PCC-CSE302-T	Python Programming	<p>CO1. Outline various basic programming constructs including operators, character sets, basic data types and control statements. (LOTS: level 1: Understand)</p> <p>CO2. Explain Python packages and their functionalities for data analysis. (LOTS: level 2: Understand)</p> <p>CO3. Solve problems using python programming. (LOTS: level 3: Apply)</p> <p>CO4. Analyse the results of data analysis or machine learning programs (HOTS: level 4: Analyse)</p> <p>CO5. Evaluate solutions according to the problem definition. (HOTS: level 5: Evaluate)</p> <p>CO6. Develop database applications in Python. (HOTS: level 6: Create)</p>

PEC-IT301-T to PEC-IT305-T	Professional Elective Course to be opted by students	
PEC-IT301-T/ PEC-CSE301-T	Embedded System Design	<p>CO1. State the concepts related to embedded system design. (LOTS: Level 1: Remember) CO2. Discuss the principles of embedded systems and their applications. (LOTS: Level 2: Understand)</p> <p>CO3. Apply the principles of embedded design for problem solving. (LOTS: Level 3: Apply) CO4. Analyze architectural design patterns and engineering tradeoffs. (HOTS: Level 4: Analyse)</p> <p>CO5. Design architectural patterns for connected and distributed devices in the IoT. (HOTS: Level 6: Create)</p>
PEC-IT302-T/ PEC-CSE302-T	Soft Computing	<p>CO1. Define the terminology and concepts related to soft computing techniques. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss soft computing techniques including genetic algorithms, fuzzy systems and neural networks. (LOTS: Level 2: Understand)</p> <p>CO3. Solve problems related to Genetic algorithms, Fuzzy logic and Neural Networks. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the design of Genetic Algorithms, Neural Networks and Fuzzy Systems. (HOTS: Level 4: Analyse)</p> <p>CO5. Justify the design of a soft computing algorithm for a given problem. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design Genetic Algorithms and Neural Networks to solve optimization and pattern recognition problems. (HOTS: Level 6: Create)</p>
PEC-IT303-T/ PEC-CSE303-T	Graph Theory	CO1. Recognize different kinds of Graphs. (LOTS: Level 1:Remember)

		<p>CO2. Demonstrate various types of graphical structures with the operations implemented on these structures. (LOTS: Level 2: Understand)</p> <p>CO3. Apply graph theory constructs for solving problems. (LOTS: Level 3: Apply)</p> <p>CO4. Justify various facts and results associated with graphical structures with the help of proofs. (HOTS: Level 5: Evaluate)</p> <p>CO5. Sketch the graph to solve any problem in pictorial and easy representation. (HOTS: Level 6: Create)</p>
PEC-IT304-T/ PEC-CSE304-T	Bio-informatics	<p>CO1. List the applications of bioinformatics and biological databases. (LOTS: Level 1: Remember)</p> <p>CO2. Explain storage and retrieval of biological data from various biological databases. (LOTS: Level 2: Understand)</p> <p>CO3. Apply the knowledge of bio-informatic concepts. (LOTS: Level 3: Apply)</p> <p>CO4. Identify challenges in bioinformatics and computational biology. (HOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast various algorithms for sequence alignment and scoring algorithms. (HOTS: Level 5: Evaluate)</p> <p>CO6. Devise schemes for addressing bio-informatic problems. (LOTS: Level 6: Create)</p>
PEC-IT305-T/ PCC-CSE303-T	High Speed Network Technologies	<p>CO1. Define different high speed network technologies. (LOTS: Level 1: Remember)</p> <p>CO2. Explain working of different wired / wireless technologies suitable for LAN and WAN communication. (LOTS: Level 2: Understand)</p> <p>CO3. Illustrate the mapping of OSI reference model to different high speed technologies and Internet Suite of Protocols. (LOTS: Level 3: Apply)</p>

		<p>CO4. Analyze the performance of different high speed technologies in different scenarios / situations. (HOTS: Level 4: Analyse)</p> <p>CO5. Design a network for any organization using high speed technologies along with Internet connectivity. (HOTS: Level 6: Create)</p>
HSMC302-T	Fundamentals of Management for Engineers	
OEC-II	Open Elective Course offered by other Departments	
PCC-IT305-P/ PEC-CSE411-P	Network Administration and Management Lab.	<p>CO1. Configure a server to work as a DNS/DHCP/FTP/Web/Mail/Print server (LOTS: Level 3: Apply)</p> <p>CO2. Detect the trends in attacks through in depth attack analysis. (HOTS: Level 4: Analyse) CO3. Formulate solutions for Monitoring assignments by using principles of Network statistics. (HOTS: Level 6: Create)</p> <p>CO4. Plan solutions for overall security of Computer/Network systems. (HOTS: Level 6: Create)</p> <p>CO5. Create file records of solutions of assignments. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
PCC-IT308-P/ PCC-CSE302-P	Python Programming Lab.	<p>CO1. Implement solutions to the given assignments in Python. (LOTS: Level 3: Apply)</p> <p>CO2. Use various Python packages for solving different programming problems. (LOTS: Level 3: Apply)</p>

		<p>CO3. Devise solutions for complex problems of data analysis and machine learning. (HOTS: Level 6: Create)</p> <p>CO4. Evaluate the output of data analysis and machine learning models. (HOTS: Level 5: Evaluate)</p> <p>CO5. Create lab records of the solutions for the given assignments. (HOTS: Level 6: Create) CO6. Demonstrate use of ethical practices, self-learning and team spirit.. (LOTS: Level 3: Apply)</p>
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<b>Department of IT</b>		
<b>B. Tech IT(7<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-IT401-T/ PEC-CSE302-T	Wireless and Mobile Communication	<p>CO1. Recall different mobile and wireless communication concepts. (LOTS: Level 1: Remember)</p> <p>CO2. Explain working of different Mobile Communication Technologies used now a days. (LOTS: Level 2: Understand)</p> <p>CO3. Demonstrate application of different mobile protocols for different Mobile and Wireless Communication Technologies. (LOTS: Level 2: Understand)</p> <p>CO4. Analyze the performance of different Mobile Communication technologies in different scenarios / situations. (HOTS: Level 4: Analyse)</p> <p>CO5. Design a mobile network for any city/state/country using combination of different Mobile Technologies. (HOTS: Level 6: Create)</p>
PCC-IT402-T/ PCC-CSE403-T	Data Mining Techniques	<p>CO1. Outline various types of data mining and data warehouse concepts and techniques. (LOTS: Level 1: Remember)</p>

		<p>CO2. Explain characteristics, architecture of a data warehouse, OLAP operations and data mining tasks. (LOTS: Level 2: Understand)</p> <p>CO3. Apply various pre-processing and data mining techniques for extracting valuable information from data. (LOTS: Level 3: Apply)</p> <p>CO4. Evaluate the descriptive and predictive data mining models. (HOTS: Level 5: Evaluate) CO5. Plan a data mining process for discovering knowledge from real-world databases. (HOTS: Level 6: Create)</p>
PEC-IT401-T to PEC-IT404-T	Professional Elective Course to be opted by students	
PEC-IT401-T/ PEC-CSE401-T	Software Project Management	<p>CO1. Outline basic concepts related to stepwise project planning. (LOTS: Level 1: Remember)</p> <p>CO2. Demonstrate the knowledge about Quality Control, Standard and Risk Management. (LOTS: Level 2: Understand) .</p> <p>CO3. Illustrate the Activity Planning, and Resource Allocation Process. (LOTS: Level 2: Understand)</p> <p>CO4. Apply the concept of team structure and organization structure. (LOTS: Level 3: Apply) CO5. Compare various Project Evaluation and Estimation Techniques. (HOTS: Level 4: Analyse)</p> <p>CO6. Plan activities necessary for completing the software projects successfully. (HOTS: Level 6: Create)</p>
PEC-IT402-T/ PCC-CSE304/T	Cryptography and Network Security	<p>CO1. Recognize need of cryptography and cryptographic Algorithms.(LOTS: Level 1: Remember)</p> <p>CO2. Represent security in terms of various techniques and algorithms. (LOTS: Level2: Understand)</p>

		<p>CO3. Apply mathematical techniques to cryptography for solving problems related to security issue. (LOTS: Level 3: Apply)</p> <p>CO4. Identify various types of attacks for their mitigation/proactive and reactive treatment. (HOTS: Level 4: Analyze)</p> <p>CO5. Judge the security of an organization/institute by means of Network security devices/models/controls. (HOTS: Level 5: Evaluate)</p> <p>CO6. Integrate different types of securities under one environment and evaluate its performance.(HOTS: Level 6: Create)</p>
<p>PEC-IT-403-T/ PEC-CSE403-T</p>	<p>Distributed Operating System</p>	<p>CO1. State the basic concepts of distributed systems and their advantages over simple client server based computer networks. (LOTS: Level 1: Remember)</p> <p>CO2. Explain strategies for synchronization, scheduling policies and deadlock avoidance in distributed environment. (LOTS: Level 2: Understand)</p> <p>CO3. Apply distributed operating system's concepts to solve the problems inherent in distributed systems. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse trends in distributed file systems. (HOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast strategies for synchronization, scheduling policies and deadlock avoidance and distributed file systems. (HOTS: Level 5: Evaluate)</p>
<p>PEC-IT404-T/ PEC-CSE-404-T</p>	<p>Cloud Computing</p>	<p>CO1. Define concepts related to cloud computing. (LOTS: Level 1: Remember)</p> <p>CO2. Express deployment models for clouds. (LOTS: Level 2: Understand)</p>

		<p>CO3. Apply cloud computing techniques for various applications. (LOTS: Level 3: Apply) CO4. Analyse cloud computing services used at various levels. (HOTS: Level 4: Analyse)</p> <p>CO5. Assess real time cloud services. (HOTS: Level 5: Evaluate)</p>
PEC-IT405-T to PEC-IT409-T	Professional Elective Course to be opted by students	
PEC-IT405-T/ PEC-CSE405-T	Advanced Microprocessor	<p>CO1. Describe the features and use of the real and protected modes of microprocessors. (LOTS: Level 1: Remember)</p> <p>CO2. Explain the internal architecture of the 16, 32, and 64-bit microprocessors and compare and contrast the features of different Intel microprocessors. (LOTS: Level 2: Understand)</p> <p>CO3. Analyse memory, input/output and interrupt interfaces to the microprocessors. (HOTS: Level 4: Analyze)</p> <p>CO4. Compare the state-of-the-art technologies in the field of microprocessors.(HOTS: Level 5: Evaluate)</p> <p>CO5. Design the microprocessor based control systems and develop the software to control them. (HOTS: Level 6: Create)</p>
PEC-IT406-T/ PEC-CSE417-T	Digital Forensics	<p>CO1. Determine the hardware and operating system requirements for digital forensics.(LOTS: Level 1: Remember)</p> <p>CO2. Represent digital forensics by organization of data and metadata in computer systems.(LOTS: Level 2: Understand)</p> <p>CO3. Analyze file recovery and hidden file extraction techniques. (HOTS: Level 4: Analyze)</p> <p>CO4. Identify various types of forensics in the arena of information technology. (HOTS: Level 4: Analyze)</p>



		<p>CO5. Critic the computer crimes by studying the security Laws and legal Landscape around the world.(HOTS: Level 5: Evaluate)</p> <p>CO6. Integrate security of computer systems with digital forensics and evaluate its performance. (HOTS: Level 6: create)</p>
<p>PEC-IT407-T/ PCC-CSE307-T</p>	<p>Data Analytics using R</p>	<p>CO1. Outline concepts related to R programming and data analysis. (LOTS: Level 1: Remember)</p> <p>CO2. Explain the basic concepts and tools that are used to solve problems in data analytics. (LOTS: Level 2: Understand)</p> <p>CO3. Interpreting results of descriptive and inferential statistics. (LOTS: Level 2: Understand)</p> <p>CO4. Apply R programming for reading, cleaning, visualizing and analysing data. (LOTS: Level 3: Apply)</p> <p>CO5. Analyse the trends in data through exploratory data analysis. (HOTS: Level 4: Analyse) CO6. Devise solutions for descriptive and predictive modelling. (HOTS: Level 6: Create)</p>
<p>PEC-IT408-T/ PEC-CSE408-T</p>	<p>Digital Image Processing</p>	<p>CO1. State concepts related to image acquisition and processing. (LOTS: Level 1: Remember)</p> <p>CO2. Illustrate the principles and methods in image processing. (LOTS: Level 2: Understand) CO3. Apply mathematical functions for digital manipulation of images such as image acquisition, preprocessing, segmentation, compression and representation. (LOTS: Level 3: Apply)</p> <p>CO4. Compare various image processing techniques. (HOTS: Level 4: Analyse)</p> <p>CO5. Assess the various image processing techniques for a given problem. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design and implement algorithms for digital image processing operations such as histogram equalization,</p>

		filtering, enhancement, restoration and denoising, segmentation, compression. (HOTS: Level 6: Create)
PEC-IT409-T/ PCC-CSE301-T	Computer Graphics	<p>CO1. State basic concepts related to graphics. (LOTS: Level 1: Remember)</p> <p>CO2. Describe the principles of creating graphical objects and graphical user interface applications. (LOTS: Level 2: Understand)</p> <p>CO3. Apply 2-D and 3-D transformations (rotation, scaling, translation, shearing) on geometric objects. (LOTS: Level 3: Apply)</p> <p>CO4. Use different techniques for clipping and filling geometric objects. (LOTS: Level 3: Apply)</p> <p>CO5. Compare different graphics algorithms for different geometric objects. (HOTS: Level 4: Analyse)</p> <p>CO6. Create user-friendly interfaces for computer applications. (HOTS: Level 6: Create)</p>
OEC-III	Open Elective Course offered by other Departments	
PEC-IT405-P to PEC-IT409-P	Professional Elective Course Lab.	
PEC-IT405-P/ PEC-CSE405-P	Advanced Microprocessors Lab.	<p>CO1. Describe the internal architecture of an X86 processor showing the general purpose registers, the segment registers, the ALU, the flags register, the instruction pointer (IP) register, and the instruction register. (LOTS: Level 2: Understand)</p> <p>CO2. Implement the assembly language programs for interfacing of peripherals/devices with processors. (HOTS: Level 6: Create)</p>

		<p>CO3. Analyse microprocessor controlled systems. (HOTS: Level 4: Analyse)</p> <p>CO4. Evaluate microprocessor controlled systems. (HOTS: Level 4: Analyse)</p> <p>CO5. Create Lab record for the assignments including aim, hardware and software requirements and solutions to given problems. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate independent enquiry, self-learning and ethical practices to solve unseen problems. (LOTS: Level 3: Apply).</p>
<p>PEC-IT406-P/ PEC-CSE417-P</p>	<p>Digital Forensics Lab.</p>	<p>CO1. Employ the digital forensics tools for file system analysis. (LOTS: level 3: Apply)</p> <p>CO2. Test ethical practices while solving the problems at hand. (HOTS: level 4: Analyze) CO3. Select open source tools for imaging various types of media by wiping a target drive. (HOTS: level 5: evaluate)</p> <p>CO4. Develop solutions for disk imaging and like problems in different hardware conditions and for various operating systems. (HOTS: level 6: create)</p> <p>CO5. Design Lab record for the assignments including aim, hardware and software requirements and solutions to given problems. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate independent enquiry, use of ethical practices and self-learning to solve unseen problems. (LOTS: level 2: understand)</p>
<p>PEC-IT407-P/ PCC-CSE307-P</p>	<p>Data Analytics using R Lab.</p>	<p>CO1. Implement R programming concepts for data analysis. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse the trends in data through exploratory data analysis. (HOTS: Level 4: Analyse) CO3. Evaluate the results of descriptive and inferential statistics. (HOTS: Level 5:</p>

		<p>Evaluate) CO4. Devise solutions for descriptive and predictive modelling. (HOTS: Level 6: Create)</p> <p>CO5. Create lab. Record of assignment solutions that include problem definition, solutions and interpretation of results. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, independent enquiry and self-learning, and team spirit to solve unseen problems. (LOTS: Level 3: Apply)</p>
<p>PEC-IT408-P/ PEC-CSE408-P</p>	<p>Digital Image Processing Lab.</p>	<p>CO1. Implement digital image processing concepts for image compression, restoration and reconstruction in SCILAB/MATLAB.(LOTS: Level 3: Apply) .</p> <p>CO2. Verify the results of applying image processing problems to images (compression, expansion, multiresolution processing etc.) (HOTS: Level 4: Analyze)</p> <p>CO3. Measure the quality of image after the digital image processing techniques are implemented to an image. (HOTS: Level 5: Evaluate)</p> <p>CO4. Devise solutions for Image Processing tasks problems. (HOTS: Level 6: Create)</p> <p>CO5. Design Lab record for the assignments including aim, hardware and software requirements and solutions to the given problems. (HOTS: Level 6: Create)</p> <p>CO6. Use ethical practices, independent enquiry, self-learning and team spirit. (LOTS: Level 3: Apply).</p>
<p>PEC-IT409-P/ PCC-CSE301-P</p>	<p>Computer Graphics Lab.</p>	<p>CO1. Implement various graphics algorithms for drawing and filling of geometric objects. (LOTS: Level 3: Apply)</p> <p>CO2. Demonstrate transformation of geometric objects. (LOTS: Level 3: Apply)</p> <p>CO3. Compare strengths and weakness of various graphics algorithms. (LOTS: Level 4: Analyse)</p>

		<p>CO4. Design algorithms for creating scenes like flying a kite and solar eclipse. (HOTS: Level 6: Create)</p> <p>CO5. Create lab assignment record that includes problem definitions, solutions and conclusions. (HOTS: Level: 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
PROJ-IT401	Major Project I	<p>CO1. Evaluate critically the existing solutions and methodologies through reviewing literature. (HOTS: Level 5: Evaluate)</p> <p>CO2. Formulate suitable problems to be addressed. (HOTS: Level 6: Create)</p> <p>CO3. Identify tentative modern tools to solve the problem. (HOTS: Level 4: Analyse)</p> <p>CO4. Organise and communicate (written and oral) ideas effectively. (HOTS: Level 6: Create)</p> <p>CO5. Develop methodologies that meet ethical, societal and legal considerations. (HOTS: Level 6: Create)</p>
PROJ-IT402	Mini Project using Open Source Tools/.NET	<p>CO1. Identify a suitable problem from the environment around. (HOTS: Level 4: Analyse) CO2. Survey the design of similar problems (HOTS: Level 5: Evaluate)</p> <p>CO3. Select suitable engineering specialisation and modern IT tools. (LOTS: Level 3: Apply) CO4. Address the problem in an original and innovative manner. (HOTS: Level 6: Create)</p> <p>CO5. Communicate orally as well as in written (mini project report) about the application developed. (HOTS: Level 6: Create)</p> <p>CO6. Engage in ethical practices, individual and team work, and lifelong learning. (LOTS: Level 3: Apply)</p>

<b>Department of IT</b>		
<b>B. Tech IT(8<sup>th</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
PCC-IT403-T/ PEC-CSE406-T	Mobile Application Development	CO1. State basic of Android , its Evolution and its Architecture. (LOTS: Level 1: Remember) CO2. Demonstrate the Lifecycle of Software for Android Mobile Applications. (LOTS: Level 2: Understand)  CO3. Prepare Mobile Applications on the Android Platform. (LOTS: Level 3: Apply)  CO4. Compare working with Buttons and other Widgets for Visual Environment. (HOTS: Level 4: Analyse)  CO5. Develop Mobile Applications using data storage in SQLite Database and evaluate its Performance. (HOTS: Level 6: Create)
PEC-IT409-T to PEC-IT412-T	Professional Elective Course to be opted by students	
PEC-IT409-T/ PEC-CSE409-T	Internet of Things	CO1. State the basic concepts and key technologies of IoT. (LOTS: Level 1: Remember)  CO2. Discuss the pros and cons of various protocols for IoT. (LOTS: Level 2: Understand) CO3. Apply the IOT models for business applications. (LOTS: Level 3: Apply )  CO4. Analyse applications of IoT in real time scenario. (HOTS: Level 4: Analyse)  CO5. Design business model scenarios (HOTS: Level 6: Create)
PEC-IT410-T/ PEC-CSE410-T	Software Defined Networks	CO1. Outline Software Defined Networks and its various components. (LOTS: Level 1: Remember)

		<p>CO2. Explain techniques to make the Network Programmable for better flexibility. (LOTS: Level 2: Understand)</p> <p>CO3. Use of modern tools to implement SDN Controllers in a Network scenario. (LOTS: Level 3: Apply)</p> <p>CO4. Breakdown Virtual Networks into its components for controlling of networks. (HOTS: Level 4: Analyse)</p> <p>CO5. Compare and contrast the working of SDN through various protocols. (HOTS: Level 5: Evaluate)</p> <p>CO6. Generate SDN using Application Programming Interface and compute its performance for a given scenario. (HOTS: Level 6: Create)</p>
PEC-IT411-T / PEC-CSE407-T	Multimedia Technologies	<p>CO1. Outline the basic concepts of multimedia technology. (LOTS: Level 1: Remember)</p> <p>CO2. Discuss the concepts of animation, digitized sound, video control, and scanned images. (LOTS: Level 2: Understand)</p> <p>CO3. Use basic instructional design principles in the development of Multimedia. (LOTS: Level 3: Apply)</p> <p>CO4. Compare various audio and video file formats. (HOTS: Level 4: Analyse)</p> <p>CO5. Devise solutions for multimedia problems. (HOTS: Level 6: Create)</p>
PEC-IT412-T/ PEC-CSE412-T	Software Testing and Quality Assurance	<p>CO1. Recall the process of software testing life cycle and quality assurance. (LOTS: Level 1: Remember)</p> <p>CO2. Demonstrate reusability testing on software applications. (LOTS: Level 2: Understand))</p> <p>CO3. Apply software testing tools for predicting the behavior of software applications. (LOTS: Level 3: Apply)</p>

		<p>CO4. Identify the test cases for software applications. (HOTS: Level 4: Analyse)</p> <p>CO5. Plan test cases and quality management activities. (HOTS: Level 6: Create) CO6. predict software quality based on quality parameters and quality models. (HOTS: Level 6: Create)</p>
<p>PEC-IT413-T to PEC-IT416-T</p>	<p>Professional Elective Course to be opted by students</p>	
<p>PEC-IT413-T/ PEC-CSE413-T</p>	<p>Machine Learning</p>	<p>CO1. Outline the concepts and working of different machine learning algorithms. (LOTS: Level 1: Remember)</p> <p>CO2. Interpret the results of machine learning algorithms. (LOTS: Level 2: Understand)</p> <p>CO3. Apply machine learning concepts and algorithms to given problems. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the performance of machine learning algorithms. ((HOTS: Level 4: Analyse) CO5. Compare and contrast different machine learning algorithms. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design machine learning algorithms for optimization, pattern recognition and search problems. (HOTS: Level 6: Create)</p>
<p>PEC-IT414-T/ PEC-CSE414-T</p>	<p>Big Data Analytics</p>	<p>CO1. Recall the concepts of big data analysis. (LOTS: Level 1: Remember)</p> <p>CO2. Interpret the outcomes of big data analysis. (LOTS: Level 2: Understand)</p> <p>CO3. Apply technical skills and modern tools for descriptive and predicative modelling. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse a framework for visualization of big data analytics for business user. (HOTS: Level 4: Analyse)</p>



		<p>CO5. Examine critically the results of mining to support business decision-making. (HOTS: Level 5: Evaluate)</p> <p>CO6. Design schemes for big data analytics for solving big data problems in efficient manner. (HOTS: Level 6: Create)</p>
<p>PEC-IT415-T/ PEC-CSE415-T</p>	<p>Web Development</p>	<p>CO 1. Enlist principles of Information Architecture for Web design. (LOTS: Level 1: Remember)</p> <p>CO 2. Explain navigational systems, labeling systems, and taxonomies for websites. (LOTS: Level 2: Understand)</p> <p>CO 3. Apply basic web designing tools (HTML, XML, ASP/JSP, JQuery, Java Script). (LOTS: Level 3: Apply)</p> <p>CO 4. Evaluate critically design of webpages based on various technologies. (HOTS: Level 5: Evaluate)</p> <p>CO 5. Create a report describing or making recommendations for a website design. (HOTS: Level 6: Create)</p>
<p>PEC-IT416-T/ PEC-CSE416-T</p>	<p>Statistical Computing</p>	<p>CO1. Define basic tools of data analysis. (LOTS: Level 1: Remember)</p> <p>CO2. Explain the concepts given in descriptive and inferential statistics (LOTS: Level 2: Understand)</p> <p>CO3. Apply statistical concepts to solve real world statistical computing problems. (LOTS: Level 3: Apply)</p> <p>CO4. Analyse the trends in data using descriptive statistics. (HOTS: Level 4: Analyse)</p> <p>CO5. Interpret and evaluate statistical models. (HOTS: Level 5: Evaluate)</p> <p>CO6. Conclude the findings of statistical analysis. (HOTS: Level 6: Create)</p>
<p>PCC-IT403-P/ PEC-CSE406-P</p>	<p>Mobile Application Development Lab.</p>	<p>CO1. Apply Android programming concepts for calling, display, creation and validation. (LOTS: Level 3: Apply)</p>

		<p>CO2. Generate solutions for content providers and permissive models. (HOTS: Level 6: Create)</p> <p>CO3. Compare the visual effects generated by Android and visual studio frameworks. (HOTS: Level 4: Analyse)</p> <p>CO4. Design applications for Android Programming by using Android Studio framework. (HOTS: Level 6: Create)</p> <p>CO5. Create lab record of the solutions for assignment. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, independent enquiry and self-learning to solve unseen problems. (LOTS: Level 3: Apply)</p>
PEC-IT409-P to PEC-IT412-P	Professional Elective Course Lab.	
PEC-IT409-P/ PEC-CSE409-P	Internet of Things Lab.	<p>CO1. Solve the existing problems of traditional sensor networks and wireless communication using the concepts of Internet of Things. (LOTS: Level 3: Apply)</p> <p>CO2. Analyse the working of controllers and sensors. (HOTS: Level 4: Analyse)</p> <p>CO3. Compare and contrast the existing solutions related to IOT. (HOTS: Level 5: Evaluate) CO4. Design solutions for practical assignments by using Internet of Things technologies. (HOTS: Level 6: Create)</p> <p>CO5. Create lab reports by presenting the ideas regarding solutions in an effective manner. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate independent enquiry, team spirit and ethical practices while solving problems. (LOTS: Level 3: Apply)</p>
PEC-IT410-P/ PEC-CSE410-P	Software Defined Networks Lab.	CO1. Implement SDN controllers using API/mininet. (LOTS: Level 3: Apply)

		<p>CO2. Analyse results of SDN statistics for a given scenario. (HOTS: Level 4: Analyse)</p> <p>CO3. Assess performance of protocols for a given Network. . (HOTS: Level 5: Evaluate)</p> <p>CO4. Hypothesize solutions for SDN controller issues by using Network statistics. (HOTS: Level 6: Create)</p> <p>CO5. Create lab records for the assignment solutions. (HOTS: Level 6: Create)</p> <p>CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)</p>
<p>PEC-IT411-P/ PEC-CSE407-P</p>	<p>Multimedia Technologies Lab.</p>	<p>CO1. Apply the fundamental principles of different elements of multimedia. (LOTS: Level 3: Apply)</p> <p>CO2. Use modern tools for applying state-of-the art multimedia technologies. (LOTS: Level 3: Apply)</p> <p>CO3. Analyse various tools for an application. (HOTS: Level 4: Analyse)</p> <p>CO4. Create elegant posters, sceneries, animated stories and movie clips. (HOTS: Level 6: Create)</p> <p>CO5. Creating record of lab experiments. ((HOTS: Level 6: Create)</p> <p>CO6. Demonstrate ethical practices, self-learning and team work. (LOTS: Level 3: Apply)</p>
<p>PEC-IT412-P/ PEC-CSE412-P</p>	<p>Software Testing and Quality Assurance Lab.</p>	<p>CO1. Implement software testing using testing tools. (LOTS: Level 3: Apply)</p> <p>CO2. Apply software testing techniques for the classification of test cases. (LOTS: Level 3: Apply)</p> <p>CO3. Interpret the results of various software testing techniques. (HOTS: Level 4: Analyse) CO4. Plan test case activities. (HOTS: Level 6: Create)</p>

		CO5. Prepare lab reports for software quality testing assignments. (HOTS: Level 6: Create) CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)
PEC-IT413-P to PEC-IT416-P	Professional Elective Course Lab.	
PEC-IT-413-P/ PEC-CSE413-P	Machine Learning Lab.	CO1. Implement machine learning algorithms using modern machine learning tools. (LOTS: Level 3: Apply)  CO2. Analyse the trends in datasets using descriptive statistics. (HOTS: Level 4: Analyse) CO3. Apply descriptive and predictive modelling. (LOTS: Level 3: Apply)  CO4. Compare and contrast machine learning algorithms for a given problem. (describe datasets using descriptive statistics. (HOTS: Level 5: Evaluate)  CO5. Create lab records of assignment by incorporating problem definitions, design of solutions, results and interpretations. (HOTS: Level 6: Create)  CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)
PEC-IT414-P/ PEC-CSE414-P	Big Data Analytics Lab.	CO1. Implement solutions for big data problem. (LOTS: Level 3: Apply)  CO2. Apply Hadoop ecosystem components. (LOTS: Level 3: Apply)  CO3. Analyse the results of big data algorithms. (HOTS: Level 4: Analyse)  CO4. Build and maintain reliable, scalable, distributed systems. (HOTS: Level 6: Create) CO5. Create lab record of the lab assignments that contains problem definitions, their solutions in big data perspective and the interpretation of the results. (HOTS: Level 6: Create)

		CO6. Demonstrate ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)
PEC-IT415-P/ PEC-CSE415-P	Web Development Lab.	CO1. Implement object models for website design using modern tools like HTML, XML and JAVA scripting etc. (LOTS: Level 3: Apply)  CO2. Analyse the design of websites. (HOTS: Level 4: Analyse)  CO3. Test the design of websites. (HOTS: Level 5: Evaluate)  CO4. Design websites that consider socio-cultural values. (HOTS: Level 6: Create)  CO5. Create a written report for website designed. (HOTS: Level 6: Create)  CO6. Use ethical practices and socio-cultural values while designing websites. (LOTS: Level 3: Apply)
PEC-IT416-P/ PEC-CSE416-P	Statistical Computing Lab.	CO1. Implement statistical tools for drawing inference from data. (LOTS: Level 3: Apply) CO2. Explore the trends in datasets using descriptive statistics. (HOTS: Level 4: Analyse) CO3. Apply probability, hypothesis testing and regression for solving research questions. (LOTS: Level 3: Apply)  CO4. Judge different problem situations for applying appropriate statistical tests (HOTS: Level 5: Evaluate)  CO5. Create lab records of assignment by incorporating problem definitions, design of solutions, results and interpretations. (HOTS: Level 6: Create)  CO6. Demonstrate use of ethical practices, self-learning and team spirit. (LOTS: Level 3: Apply)
PROJ-IT403	Major Project II	CO1. Review information critically for solving complex engineering problems. (HOTS: Level 4: Analyse)

		<p>CO2. Plan the project according to principles of project management. (HOTS: Level 6: Create)</p> <p>CO3. Devise original solutions to complex engineering problems using modern engineering tools. (HOTS: Level 6: Create)</p> <p>CO4. Justify the outcomes of the project work. (HOTS: Level 5: Evaluate)</p> <p>CO5. Organise and communicate (written and oral) ideas effectively. (HOTS: Level 6: Create)</p> <p>CO6. Develop solutions that meet ethical, societal and legal considerations. (HOTS: Level 6: Create)</p>
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**BACHELOR OF TECHNOLOGY**  
**in**  
**MECHANICAL ENGINEERING**

**4 YEARS PROGRAMME**

**Choice Based Credit System**

**w. e. f. July 2019**

**(70:30)**



**DEPARTMENT OF MECHANICAL ENGINEERING**  
**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY**

**HISAR-125001, HARYANA**

**Department of Mechanical Engineering**  
**Guru Jambheshwar University of Science and Technology**  
**Hisar**

**Program Educational Objectives (PEOs)**

<b>PEO1</b>	Apply technical skill and professional knowledge in engineering practices to face industrial challenges around the world.
<b>PEO2</b>	To prepare the students to lead a successful career in industries or to pursue higher studies or to support entrepreneurial endeavors.
<b>PEO3</b>	Inculcate effective team work, ethics, and leadership with ability to solve societal problems.



## Program Outcomes (POs)

<b>PO1</b>	<b>Engineering Knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
<b>PO2</b>	<b>Problem Analysis:</b> Identify, formulate, research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
<b>PO3</b>	<b>Design/Development of Solutions:</b> Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
<b>PO4</b>	<b>Conduct Investigations of Complex Problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
<b>PO5</b>	<b>Modern Tool Usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
<b>PO6</b>	<b>The Engineer and Society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
<b>PO7</b>	<b>Environment and Sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.
<b>PO8</b>	<b>Ethics:</b> Apply ethical principles and commit to professional ethics, responsibilities, and norms of the engineering practice.
<b>PO9</b>	<b>Individual and Team Work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
<b>P10</b>	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society. Some of them are, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
<b>PO11</b>	<b>Project Management and Finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
<b>PO12</b>	<b>Lifelong Learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

## **Programme Specific Outcomes (PSOs)**

**PSO1:** To prepare the students to understand mechanical systems, components and processes to address technical and engineering challenges.

**PSO2:** To empower the student to build up career in industry or pursue higher studies in mechanical/interdisciplinary program.

**PSO 3:** To enhance the skills of the students with the ability to implement the scientific concepts for betterment of the society considering ethical, environmental and social values.

**DEPARTMENT OF MECHANICAL**B.Tech ME(3<sup>rd</sup> Semester)

Course Code	Title of the Paper	Course Outcome
BSC201-T	MATHS-III	<p>CO1 Students will be able to define concepts and terminology of Fourier series and Fourier transforms, Functions of complex variables, Power Series and, Probability distributions and hypothesis testing.</p> <p>L1</p> <p>CO2 Students will be able to solve problems using Fourier transforms in domains like digital electronics and image processing</p> <p>L2</p> <p>CO3 Students will be able to apply mathematical principles to solve computational problems L3</p> <p>CO4 Students will be able to compare various probability distributions. L4</p> <p>CO5 Students will be able to select suitable hypothesis testing methods for given problems and interpret the respective outcomes</p> <p>L5</p> <p>CO6 Students will be able to integrate the knowledge of Fourier series and Fourier transforms, Functions of complex variables, Power Series and, Probability distributions and hypothesis testing for solving real world problems</p> <p>L6</p>
ESC-ECE201-T	BASICS OF ELECTRONICS ENGINEERING	<p>CO1 Students will be able to define the behavior of semiconductor devices. L1</p> <p>CO2 Students will be able to describe the current flow of a bipolar transistor in CB, CE and CC configurations.</p> <p>L2</p>

		<p>CO3 Students will be able to illustrate the biasing of transistors and FETs for amplifier applications.</p> <p>L3</p> <p>CO4 Students will be able to examine simple amplifier and oscillator circuits. L4</p>
ESC-ME201-T	ENGINEERING MECHANICS	<p>CO1 Students will be able to describe scalar and vector techniques for analyzing forces in statically determinate structures.</p> <p>L1</p> <p>CO2 Students will be able to locate centroid, centre of gravity of different types of symmetrical and unsymmetrical sections.</p> <p>L2</p> <p>CO3 Students will be able to apply Newton's laws of Motions to solve real-world problems. L3</p> <p>CO4 Students will be able to examine the physical significance of moment of inertia e.g in railway, flyovers, Bridges, automobiles etc.</p> <p>L4</p>
PCC-ME201-T	MECHANICS OF SOLIDS-I	<p>CO1 Students will be able to understand the concept of stress and strain at a point. L1</p> <p>CO2 Students will be able to illustrate 2D &amp; 3D stress systems and determine principal stresses &amp; planes and maximum shearing stresses &amp; planes using analytical and graphical methods.</p> <p>L2</p> <p>CO3 Students will be able to draw Shear and Bending Moment diagrams for various beams subjected to different types of transverse loads.</p> <p>L3</p>

		<p>CO4 Students will be able to employ stress-strain relationship for axially loaded members, circular torsion members and members subjected to bending loads.</p> <p>L4</p> <p>CO5 Students will be able to design machine components subjected to combined torsion, bending and axial loads.</p> <p>L5</p>
PCC-ME201-P	MECHANICS OF SOLIDS-I(LAB)	<p>CO1 Students will be able to perform tensile test, compression test, bending test, shear test, hardness test, impact test and torsion test to determine mechanical properties such as strength, hardness, impact strength and toughness of ductile and brittle materials.</p> <p>L1</p> <p>CO2 Students will be able to predict the behaviour of ductile and brittle materials under different types of loading.</p> <p>L2</p> <p>CO3 Students will be able to Interpret the experimental results for material selection in engineering applications.</p> <p>L3</p> <p>CO4 Students will be able to compare the materials and utilize the appropriate materials in design considering engineering properties, sustainability, cost and weight.</p> <p>L4</p>
PCC-ME-202-T	PRODUCTION TECHNOLOGY	<p>CO1 Students will be able to define the various tools including machine tools, cutting tools and measuring tools, forces involved and their effect in cutting, work holding devices and methods</p>

		<p>required to manufacture different components.</p> <p>L1</p> <p>CO2 Students will be able to describe different types of tools, work holding devices and manufacturing methods along with their principles.</p> <p>L2</p> <p>CO3 Students will be able to solve different kind of problems related to tools and manufacturing methods selection.</p> <p>L3</p> <p>CO4 Students will be able to analyse various tools on the basis of economics of machining. L4</p> <p>CO5 Students will be able to select and design appropriate tool and method required to manufacture a particular component economically.</p> <p>L5</p>
PCC-ME202-P	PRODUCTION TECHNOLOGY (LAB)	<p>CO1 Students will be able to define the various manufacturing processes like casting, machining and welding, and machine tools.</p> <p>L1</p> <p>CO2 Students will be able to describe different manufacturing processes and machine tools which can be used to manufacture a component.</p> <p>L2</p> <p>CO3 Students will be able to choose a particular type of method required to manufacture a particular component.</p> <p>L3</p> <p>CO4 Students will be able to experiment on various machine tools for components manufacturing.</p>

		<p>L4</p> <p>CO5 Students will be able to judge and design appropriate manufacturing processes and machine tool required to manufacture of a particular component.</p> <p>L5</p>
PCC-ME203-T	THERMODYNAMICS	<p>CO1 Students will be able to describe the conditions involving heat and work interactions. L1</p> <p>CO2 Students will be able to differentiate high and low grade energies. L2</p> <p>CO3 Students will be able to solve the problems involving change in thermodynamic properties of substances.</p> <p>L3</p> <p>CO4 Students will be able to examine and compare the performance of energy conversion devices. L4</p>
B.Tech ME(4 <sup>TH</sup> Semester)		
BSC-202-T	NUMERICAL METHODS	<p>CO1 Students will be able to memorize and describe various interpolation formulae L1</p> <p>CO2 Students will be able to make comparison between direct and iterative methods L2</p> <p>CO3 Students will be able to solve problems relating to numerical differentiation and integration L3</p> <p>CO4 Students will be able to differentiate between single step and multi-step methods of ordinary differential equations</p> <p>L4</p> <p>CO5 Students will be able to construct polynomial from the tabular data L5</p> <p>Co</p>
BSC-202-P	NUMERICAL METHODS (LAB)	<p>CO1 Students will be able to memorize and describe various data types and file handling functions L1</p>

		<p>CO2 Students will be able to translate given algorithm to a working and correct program in C language</p> <p>L2</p> <p>CO3 Students will be able to write, compile and debug programs in C language L3</p> <p>CO4 Students will be able to compare and contrast algorithms to solve mathematical problems L4</p> <p>CO5 Students will be able to evaluate the numerical solutions of mathematical problems using C programming language</p> <p>L5</p> <p>CO6 Students will be able to assemble object oriented features of C programming language in developing the programs to solve real world problems</p>
PCC-ME204-T	MATERIAL SCIENCE	<p>CO1 Students will be able to define crystals, its basic concepts, imperfection in crystals, equilibrium diagrams and their objectives.</p> <p>L1</p> <p>CO2 Students will be able to understand phase &amp; phase diagram, heat treatment, failure of materials &amp; their protection, applications of materials</p> <p>L2</p> <p>CO3 Students will be able to examine the mechanical behavior of materials in different operating conditions</p> <p>L3</p> <p>CO4 Students will be able to select the materials accordance to their structure and properties. L4</p>
PCC-ME204-P	MATERIAL SCIENCE (LAB)	<p>CO1 Students will be able to understand the basic concepts of crystalline materials, phase &amp; phase diagram, heat treatment process &amp; types</p>



		<p>L1</p> <p>CO2 Students will be able to select the materials accordance to their structure and properties. L2</p> <p>CO3 Students will be able to analyze the structure of materials at different levels L3</p> <p>CO4 Students will be able to examine crystals imperfections L4</p>
PCC-ME205-T	FLUID MECHANICS	<p>CO1 Students will be able to define the fluid, its properties and various laws governing fluid flow. L1</p> <p>CO2 Students will be able to identify and explain fluid flow under static, kinematics and dynamic conditions.</p> <p>L2</p> <p>CO3 Students will be able to apply engineering knowledge to solve the fluid flow problems under given conditions.</p> <p>L3</p> <p>CO4 Students will be able to examine flow through pipes and boundary layer phenomenon on a flat surface.</p> <p>L4</p> <p>CO5 Students will be able to evaluate various parameters related to laminar and turbulent flows. L5</p>
PCC-ME205-P	FLUID MECHANICS (LAB)	<p>CO1 Students will be able to describe the fundamentals involved in measuring various performance parameters.</p> <p>L1</p> <p>CO2 Students will be able to understand the working of various flow meters. L2</p> <p>CO3 Students will be able to operate flow discharge measuring device used in pipes channels. L3</p> <p>CO4 Students will be able to examine types of flow and major and minor losses during fluid flow. L4</p>

		CO5 Students will be able to Evaluate the error between theoretical and experimental results. L5
PCC-ME206-T	STEAM AND POWER GENERATION	<p>CO1 Students will be able to define combustion process of fuels and change in thermodynamic properties of steam in boilers, turbines, engines and condensers.</p> <p>L1</p> <p>CO2 Students will be able to discuss the construction and working of bomb calorimeter, steam generators, steam turbines, steam engines and steam condensers.</p> <p>L2</p> <p>CO3 Students will be able to examine the process of energy conversion in fuel combustion and steam power generating devices.</p> <p>L3</p> <p>CO4 Students will be able to formulate the performance parameters for the equipments used in fuel combustion and power generation through steam.</p> <p>L4</p>
PCC-ME207-T	MECHANICS OF SOLIDS-II	<p>CO1 Students will be able to determine stresses in pressure vessels, beam columns, rotating rims &amp; discs and springs.</p> <p>L1</p> <p>CO2 Students will be able to calculate slope and deflection in various beams subjected to different types of transverse loads using Energy, Double Integration, Macaulay's and Area Moment methods.</p> <p>L2</p> <p>CO3 Students will be able to carry out stress-strain analysis in solids subjected to bi-axial, tri-axial</p>

		<p>and combined torsion, bending &amp; axial loads.</p> <p>L3</p> <p>CO4 Students will be able to design mechanical components such as pressure vessels, springs, flywheels, shaft, etc. in accordance with realistic constraints of safety and economical constraints.</p> <p>L4</p>
PROJ-ME201-P	SKILLS AND INNOVATION (LAB)	<p>CO1 Students will be able to explore novel ideas/modified techniques on topics related to Mechanical Engineering.</p> <p>L1</p> <p>CO2 Students will be able to work in groups and collectively manage to present their ideas into a concept.</p> <p>L2</p> <p>CO3 Students will be able to identify and interpret practical problems/issues in existing mechanical systems.</p> <p>L3</p> <p>CO4 Students will be able to employ modern design and analysis tools for carrying out their project work.</p> <p>L4</p>
B.Tech ME(5th Semester)		
PCC-ME301-T	KINEMATICS OF MACHINES	<p>CO1 Students will be able to define the various terminologies of kinematics of machines like element, kinematic pair, kinematic chain, mechanism, machine, motion of elements and fundamental laws of kinematics.</p> <p>L1</p>

		<p>CO2 Students will be able to describe the concept of mechanisms, machines, their components and relative motion between them.</p> <p>L2</p> <p>CO3 Students will be able to solve different kind of problems related to machines and mechanisms while applying the principles of kinematics.</p> <p>L3</p> <p>CO4 Students will be able to analyse different mechanisms for displacement, velocity and acceleration graphically.</p> <p>L4</p> <p>CO5 Students will be able to select and design appropriate mechanism required for a specific type of relative motion and for a particular application.</p> <p>L5</p>
PCC-ME301-P	KINEMATICS OF MACHINES (LAB)	<p>CO1 Students will be able to name various terms related to kinematics of machines like link, kinematic pair, kinematic chain, mechanism and machine.</p> <p>L1</p> <p>CO2 Students will be able to describe link, kinematic pair, kinematic chain, mechanism and machine through models.</p> <p>L2</p> <p>CO3 Students will be able to solve different kind of problems related to links, mechanisms and machines experimentally.</p> <p>L3</p> <p>CO4 Students will be able to analyse different links, kinematic pairs, kinematic chains, mechanisms through models and experimentally.</p>

		<p>L4</p> <p>CO5 Students will be able to select and design appropriate element, pair, mechanism and machine required for a particular application.</p> <p>L5</p>
PCC-ME302-T	HYDRAULIC MACHINES	<p>CO1 Students will be able to define the fundamentals of hydraulic turbines, pumps, and systems. L1</p> <p>CO2 Students will be able to understand the constructional details and working principle of hydraulic machines.</p> <p>L2</p> <p>CO3 Students will be able to solve the problems related to designs of hydraulic machines. L3</p> <p>CO4 Students will be able to evaluate the performance of turbines, pumps and other hydraulic systems.</p> <p>L4</p>
PCC-ME302-P	HYDRAULIC MACHINES (LAB)	<p>CO1 Students will be able to learn the basics elements of hydraulic machines and their layout. L1</p> <p>CO2 Students will be able to classify hydraulic machines. L2</p> <p>CO3 Students will be able to operate hydraulic machines and evaluate their performance. L3</p> <p>CO4 Students will be able to compare the performance of hydraulic machines and able to create characteristic curves at given conditions.</p> <p>L4</p>
PCC-ME303-T	INTERNAL COMBUSTION ENGINES AND GAS TURBINES	<p>CO1 Students will be able to describe the basics of SI &amp; CI, air standard cycles, rotary compressors, and gas turbines.</p> <p>L1</p>

		<p>CO2 Students will be able to explain the combustion phenomenon, lubrication and cooling of IC engines.</p> <p>L2</p> <p>CO3 Students will be able to demonstrate knowledge of the operating characteristics of common internal combustion engines.</p> <p>L3</p> <p>CO4 Students will be able to examine the operating conditions of IC engine, rotary compressor, and gas turbines.</p> <p>L4</p> <p>CO5 Students will be able to evaluate the performance parameters of IC engine, rotary compressor, and gas turbines.</p> <p>L5</p>
PCC-ME303-P	INTERNAL COMBUSTION ENGINES AND GAS TURBINES (LAB)	<p>CO1 Students will be able to define the construction details of internal combustion engines. L1</p> <p>CO2 Students will be able to describe the working of commonly used petrol and diesel engines. L2</p> <p>CO3 Students will be able to apply performance and exhaust gas analysis tests on petrol and diesel engines.</p> <p>L3</p> <p>CO4 Students will be able to test the performance parameters of internal combustion engines. L4</p> <p>CO5 Students will be able to evaluate the efficiency and fuel consumption different internal combustion engines.</p> <p>L5</p>

PCC-ME304-T	DESIGN OF MACHINE ELEMENTS	<p>CO1 Students will be able to understand the principles involved in evaluating the shape and dimensions of a component.</p> <p>L1</p> <p>CO2 Students will be able to formulate the design and manufacturing problem for simple and complex mechanical components.</p> <p>L2</p> <p>CO3 Students will be able to use catalogues and standard machine components. L3</p> <p>CO4 Students will be able to apply the general mechanical engineering sciences in analyses specific to the design of mechanical components and systems</p> <p>L4</p>
PROJ-ME301-P	INDUSTRIAL TRAINING PRESENTATION-I	<p>CO1 Students will be able to get the exposure of 'real' working environment and get acquainted with the organization structure, business operations and administrative functions.</p> <p>L1</p> <p>CO2 Students will be able to demonstrate competency in relevant engineering fields through problem identification, formulation and solution.</p> <p>L2</p> <p>CO3 Students will be able to develop the ability to work as an individual and in group with the capacity to be a leader as well as an effective team member.</p> <p>L3</p> <p>CO4 Students will be able to generate a report based on the experiences with the ability to apply knowledge of Engineering fundamentals</p>

		<p>L4</p> <p>CO5 Students will be master in his profession and perform ethical responsibilities of an engineer L5</p>
MC-ME301-P	TECHNICAL PRESENTATION	<p>CO1 Students will be able to read and understand recent trends and technologies in the field of Mechanical Engineering</p> <p>L1</p> <p>CO2 Students will be able to prepare concise, comprehend and conclude selective topic in the field of Mechanical Engineering</p> <p>L2</p> <p>CO3 Students will be able to develop skills in presentation and discussion of research topics in a public forum</p> <p>L3</p> <p>CO4 Students will be able to formulate innovative ideas in the field of engineering L4</p>
B.Tech ME(6th Semester)		
PCC-ME305-T	DYNAMICS OF MACHINES	<p>CO1 Students will be able to define the various mechanical systems like flywheel, transmission drives, governor, gyroscope, brake, dynamometer and balancing, and state forces and their effect acting on them, and fundamental laws of dynamics.</p> <p>L1</p> <p>CO2 Students will be able to describe different mechanical systems and their dynamic behaviour. L2</p> <p>CO3 Students will be able to solve different kind of problems related to force analysis in different mechanical systems.</p> <p>L3</p> <p>CO4 Students will be able to analyse different mechanical systems dynamically. L4</p>



		<p>CO5 Students will be able to select and design appropriate mechanical system required for a particular application.</p> <p>L5</p>
PCC-ME305-P	DYNAMICS OF MACHINE (LAB)	<p>CO1 Students will be able to define the various mechanical systems like flywheel, transmission drives, governor, gyroscope, brake, dynamometer, balancing.</p> <p>L1</p> <p>CO2 Students will be able to describe different mechanical systems through models and experimental setups.</p> <p>L2</p> <p>CO3 Students will be able to solve different kind of problems related to force analysis in different mechanical systems experimentally.</p> <p>L3</p> <p>CO4 Students will be able to analyse dynamically and determine the parameters involved in the various mechanical systems experimentally.</p> <p>L4</p> <p>CO5 Students will be able to select and design appropriate mechanical system required for a particular application.</p> <p>L5</p>
PCC-ME306-T	AUTOMOBILE ENGINEERING	<p>CO1 Students will be able to define the basic components of an automobile. L1</p> <p>CO2 Students will be able to explain the functions of all the basic components of an automobile. L2</p> <p>CO3 Students will be able to demonstrate the working of an automobile. L3</p>

		<p>CO4 Students will be able to examine the conditions of an automobile. L4</p> <p>CO5 Students will be able to evaluate the overall vehicle performance of an automobile. L5</p>
PCC-ME306-P	AUTOMOBILE ENGINEERING (LAB)	<p>CO1 Students will be able to list the basic components required for an automobile. L1</p> <p>CO2 Students will be able to prepare a report on the constructional details, working principles and operation of different components of an automobile. L2</p> <p>CO3 Students will be able to demonstrate the function of basic components used in an automobile. L3</p> <p>CO4 Students will be able to differentiate the performance of different components used in an automobile. L4</p> <p>CO5 Students will be able to select the most suitable component from the available to improve the performance of an automobile. L5</p>
PCC-ME307-T	HEAT TRANSFER	<p>CO1 Students will be able to define and relate different modes of heat transfer. L1</p> <p>CO2 Students will be able to describe, explain and compare the mechanisms of heat transfer. L2</p> <p>CO3 Students will be able to apply the basic principles of heat transfer in daily routine thermal systems and can demonstrate its working. L3</p> <p>CO4 Students will be able to examine and compare the operations of various heat transfer devices. L4</p> <p>CO5 Students will be able to evaluate the performance of various heat transfer devices. L5</p>

		<p>CO6 Students will be able to design and select a better heat exchanging/transfer device under given conditions.</p> <p>L6</p>
PCC-ME307-P	HEAT TRANSFER (LAB)	<p>CO1 Students will be able to define and relate different modes of heat transfer. L1</p> <p>CO2 Students will be able to describe, explain and compare the mechanisms of heat transfer. L2</p> <p>CO3 Students will be able to apply the basic principles of heat transfer in daily routine thermal systems and can demonstrate its working.</p> <p>L3</p> <p>CO4 Students will be able to examine and compare the operations of various heat transfer devices. L4</p> <p>CO5 Students will be able to evaluate the performance of various heat transfer devices. L5</p> <p>CO6 Students will be able to design and select a better heat exchanging/transfer device under given conditions.</p> <p>L6</p>
MC-ME302-T	ENTREPRENEURS HIP	<p>CO1 Students will be able to describe the concept of entrepreneurship, the role of entrepreneurship in economic development of the country and the scope for an entrepreneur</p> <p>L1</p> <p>CO2 Students will be able to understand small enterprises, problems faced by small enterprises, engineering economics, product planning and development, the contents of a project report and formulation of a project report.</p> <p>L2</p> <p>CO3 Students will be able to apply the basic steps in setup a new business. L3</p>

		CO4 Students will be able to examine the development of a startup. L4
PEC-ME351-T	OPERATION RESEARCH	<p>CO1 Students will be able to understand the concept of operation research L1</p> <p>CO2 Students will be able to learn the principles of linear programming problems and their applications</p> <p>L2</p> <p>CO3 Students will be able to apply the principles of transportation problems and assignment problems.</p> <p>L3</p> <p>CO4 Students will be able to formulate the OR models for various needs of the society and organization.</p> <p>L4</p> <p>CO5 Students will be able to solve the problems of society and organization using OR techniques. L5</p>
PEC-ME352-T	WORK STUDY	<p>CO1 Student will be able to understand the concepts of work study and its application area. L1</p> <p>CO2 Student will be able to apply different types of engineering work methods with the help of charting and diagrams to eliminate unproductive activities under the different controls in operations and job analysis.</p> <p>L2</p> <p>CO3 Student will be able to record the activities of the people, materials and equipment to find alternative methods which minimize waste and to implement the devised method.</p> <p>L3</p> <p>CO4 Student will be able to find the standard time of any activity through work measurement</p>

		<p>techniques with the aim to improve the processes.</p> <p>L4</p> <p>CO5 Student will be able to design to the man-machine system ergonomically to improve Human Efficiency and reduce the effort of the workers</p> <p>L5</p>
PEC-ME353-T	TOTAL QUALITY CONTROL	<p>CO1 Student will be able to understand the philosophy and core values of Total Quality Control L1</p> <p>CO2 Student will be able to learn about the statistical quality control in production and apply the knowledge of control charts for monitoring the quality of process/product</p> <p>L2</p> <p>CO3 Student will be able to understand the standard sampling plans, learn the rejection process for a product in an industry.</p> <p>L3</p> <p>CO4 Student will be able to understand the different quality standards in industry. L4</p>
PEC-ME354-T	PRODUCTION MANAGEMENT	<p>CO1 Student will be able to take the right decisions to optimize resources utilization by improving productivity of the Lands, Buildings, People, Materials, Machines, Money, Methods and Management effectively.</p> <p>L1</p> <p>CO2 Student will be able to understand the forecasting and material handling concepts. L2</p> <p>CO3 Student will be able to understand material management and learn different purchasing methods.</p> <p>L3</p>

		<p>CO4 Student will be able to understand the role of Production planning &amp; control and implementation of Just in time technique in Production management.</p> <p>L4</p> <p>CO5 Student will be able to understand the Quality control and apply the control charts in Production management.</p> <p>L5</p>
PEC-ME355-T	INDUSTRIAL ENGINEERING	<p>CO1 Student will be able to take the right decisions to optimize resources utilization by improving productivity of the Lands, Buildings, People, Materials, Machines, Money, Methods and Management effectively.</p> <p>L1</p> <p>CO2 Student will be able to apply work study methods with the help of charting and diagrams to eliminate unproductive activities in different operations and job analysis.</p> <p>L2</p> <p>CO3 Student will be able to record the activities of the people, materials and equipment to find alternative methods which minimize waste and also to find the Standard Time of any activity through work measurement techniques.</p> <p>L3</p> <p>CO4 Student will be able to understand the need of ergonomics in Man–Machine Interface, Human Efficiency and the effort of the workers</p> <p>L4</p> <p>CO5 Student will be able to understand the concepts of value engineering and intellectual property</p>

		rights L5
B.Tech ME(7th Semester)		
PEC-ME401-T	REFRIGERATION AND AIR- CONDITIONING	<p>CO1 Student will be able to describe about the refrigeration, air-conditioning, refrigerant and applications of refrigeration systems.</p> <p>L1</p> <p>CO2 Student will be able to identify the main components, accessories and controls of refrigeration and air-conditioning systems.</p> <p>L2</p> <p>CO3 Student will be able to solve the air-conditioning problem using the principles of psychrometry.</p> <p>L3</p> <p>CO4 Student will be able to analyze the performance of vapour compression and other refrigeration system.</p> <p>L4</p> <p>CO5 Student will be able to select a refrigeration/air-conditioning according to the comfort conditions.</p> <p>L5</p> <p>CO6 Student will be able to design transmission of air in air conditioning system through various types of ducts and design methods</p> <p>L6</p>
PCC-ME401-P	REFRIGERATION AND AIR- CONDITIONING (LAB)	<p>CO1 Student will be able to describe the components of the Refrigeration and air-conditioning systems.</p> <p>L1</p>

		<p>CO2 Student will be able to compare the performance of refrigeration system at different load conditions</p> <p>L2</p> <p>CO3 Student will be able to apply the knowledge of refrigeration and air conditioning principles to conduct experiments.</p> <p>L3</p> <p>CO4 Student will be able to analyze and evaluate the performance of refrigeration and air conditioning systems</p> <p>L4</p>
PROJ-ME401-P	MINOR PROJECT	<p>CO1 Students will be able to trace out the problem using literature survey/ industry survey to draw an outline for the development or improvement in the existing system of mechanical engineering field.</p> <p>L1</p> <p>CO2 Students will be able to summarise various interdisciplinary ideas and technologies which could be used to achieve the desired solution.</p> <p>L2</p> <p>CO3 Students will be able to demonstrate an innovative working mechanical system or product which could be the requirement of new generation.</p> <p>L3</p> <p>CO4 Students will be able to compare various techniques which could be used to solve the identified problem.</p> <p>L4</p> <p>CO5 Students will be able to select the most optimum solution for the identified problem. L5</p>



PROJ-ME402-P	INDUSTRIAL TRAINING PRESENTATION-II	<p>CO1 Students will be able to get the exposure of 'real' working environment and get acquainted with the organization structure, business operations and administrative functions.</p> <p>L1</p> <p>CO2 Students will be able to demonstrate competency in relevant engineering fields through problem identification, formulation and solution.</p> <p>L2</p> <p>CO3 Students will be able to develop the ability to work as an individual and in group with the capacity to be a leader as well as an effective team member.</p> <p>L3</p> <p>CO4 Students will be able to generate a report based on the experiences with the ability to apply knowledge of Engineering fundamentals</p> <p>L4</p> <p>CO5 Students will be master in his profession and perform ethical responsibilities of an engineer L5</p>
MC-ME401-P	GENERAL PROFICIENCY	<p>CO1 Students will be able to state the importance of extra-curricular activities along with academics.</p> <p>L1</p> <p>CO2 Students will be able to discuss the role of social activities in career/professional development of an individual.</p> <p>L2</p> <p>CO3 Students will be able to choose most feasible solution to tackle the problem in a team. L3</p> <p>CO4 Students will be able to criticize the on-going topic in a group discussion. L4</p>

		CO5 Students will be able to argue for the most preferred solution for a project work. L5
PEC-ME451-T	AUTOMATION IN MANUFACTURING	<p>CO1 Students will be able to memorize the concepts of automation theory and its applications in various fields of manufacturing.</p> <p>L1</p> <p>CO2 Students will be able to describe principles, methods, and hardware/software tools used in Hydraulics/Pneumatics Electro-pneumatic controls and devices.</p> <p>L2</p> <p>CO3 Students will be able to illustrate the principles of Rapid Prototyping, classifications of different RP techniques along with their applications.</p> <p>L3</p> <p>CO4 Students will be able to develop the concepts of Automatic transfer machines with assembly automation.</p> <p>L4</p>
PEC-ME452-T	ADVANCED WELDING	<p>CO1 Students will be able to define welding, its mechanism, welding processes and welding defects</p> <p>L1</p> <p>CO2 Students will be able to describe principles, methods, welding defects and their maintenance L2</p> <p>CO3 Students will be able to examine and compare different welding process L3</p> <p>CO4 Students will be able to select the welding process for different materials L4</p>
PEC-ME453-T	TOOL ENGINEERING	<p>CO1 Students will be able to define the different manufacturing devices viz. various cutting and gaging tools and their materials, work holding devices, jigs and fixtures, and dies.</p>

		<p>L1</p> <p>CO2 Students will be able to describe different manufacturing devices along with their principles. L2</p> <p>CO3 Students will be able to solve different kind of problems related to selection of manufacturing devices.</p> <p>L3</p> <p>CO4 Students will be able to compare different manufacturing devices effectively. L4</p> <p>CO5 Students will be able to select and design appropriate manufacturing device required to manufacture a particular component.</p> <p>L5</p>
PEC-ME454-T	MODERN MACHINING PROCESSES	<p>CO1 Students will be able to define the basic principles, construction and working of modern machining methods.</p> <p>L1</p> <p>CO2 Students will be able to explain the applications, advantages, and limitations of new machining methods.</p> <p>L2</p> <p>CO3 Students will be able to differentiate various non-traditional machining processes. L3</p> <p>CO4 Students will be able to select the correct non-conventional material removal process L4</p>
PEC-ME455-T	INTRODUCTION TO TRIBOLOGY	<p>CO1 Students will be able to understand the interdisciplinary subject 'Tribology' and its technological significance</p> <p>L1</p> <p>CO2 Students will be able to examine the genesis of friction and wear L2</p>

		<p>CO3 Students will be able to learn about the principles of lubrication, lubrication regimes, hydrodynamic lubrication and hydrostatic lubrication.</p> <p>L3</p> <p>CO4 Students will be able to analyze real life problem in tribology. L4</p>
PEC-ME456-T	CNC TECHNOLOGY	<p>CO1 Students will be able to describe construction, working and tooling systems in Computer Numeric Control (CNC) machines.</p> <p>L1</p> <p>CO2 Students will be able to demonstrate the working of CNC machines through the Manual part programming and Automatically Programmed Tool (APT) language.</p> <p>L2</p> <p>CO3 Students will be able to distinguish between the different features of CNC Turning Center and CNC Machining Center.</p> <p>L3</p> <p>CO4 Students will be able to select the different CNC process as per the machining process. L4</p> <p>CO5 Students will be able to develop CNC programs as per the ISO standards, process, machine and tooling arrangements.</p> <p>L5</p>
PEC-ME457-T	REVERSE ENGINEERING	<p>CO1 Students will be able to describe phases of reverse engineering for geometric model development.</p> <p>L1</p> <p>CO2 Students will be able to understand methodologies and techniques used for reverse engineering.</p>

		<p>L2</p> <p>CO3 Students will be able to select a reverse engineering system L3</p> <p>CO4 Students will be able to discuss case studies for understanding relationship between reverse engineering and rapid prototyping.</p> <p>L4</p>
PEC-ME458-T	PRODUCT DESIGN AND DEVELOPMENT	<p>CO1 Students will be able to describe design process, design models, design phases, design strategies, design planning and design specifications.</p> <p>L1</p> <p>CO2 Students will be able to understand the concept of design for 'X', particularly design for manufacturing processes, design for aesthetics, design for ergonomics, design for assembly, design for economics and design for environment.</p> <p>L2</p> <p>CO3 Students will be able to demonstrate industrial design concepts. L3</p> <p>CO4 Students will be able to make use of different tools for product design. L4</p>
B.Tech ME(8th Semester)		
PEC-ME402-T	MECHANICAL VIBRATIONS	<p>CO1 Student will be able to understand the fundamentals, principle and cause of mechanical vibrations.</p> <p>L1</p> <p>CO2 Student will be able to understand the various methods of solving vibration problems and apply them to vibration problems.</p> <p>L2</p> <p>CO3 Student will be able to analyse and solve single, two and multi degree of freedom practical</p>

		<p>vibration problems.</p> <p>L3</p> <p>CO4 Student will be able to analyse and solve free and forced mechanical vibration problems. L4</p> <p>CO5 Student will be able to understand and apply Numerical Methods to solve multi DOF vibration problems.</p> <p>L5</p>
PEC-ME403-T	COMPUTER AIDED DESIGN AND MANUFACTURING	<p>CO1 Student will be able to define the scope and applications of CAD/CAM and geometric modeling techniques.</p> <p>L1</p> <p>CO2 Student will be able to understand the basic overview of geometric transformations, curves, surface and solids.</p> <p>L2</p> <p>CO3 Student will be able to use computer assisted part programming for CNC machines L3</p> <p>CO4 Student will be able to generate CNC part programmes L4</p>
PCC-ME403-P	COMPUTER AIDED DESIGN AND MANUFACTURING (LAB)	<p>CO1 Students will be able to draw part drawings and three-dimensional models using CAD techniques.</p> <p>L1</p> <p>CO2 Students will be able to generate part programs for industrial components using CAM techniques</p> <p>L2</p> <p>CO3 Students will be able to demonstrate working of CNC machines L3</p> <p>CO4 Students will be able to examine the industrial drawings and manufactured parts. L4</p>

		CO5 Students will be able to create a product from conceptualization to reality. L5
PROJ-ME403-P	MAJOR PROJECT	<p>CO1 Students will be able to relate the theoretical studies that they learned in the preceding semesters with practical concepts.</p> <p>L1</p> <p>CO2 Students will be able to recognise their skill for the solution of identified problem and to develop a prototype mechanical system.</p> <p>L2</p> <p>CO3 Students will be able to apply the analytical and design procedures to synthesize a working prototype of a functional mechanical system.</p> <p>L3</p> <p>CO4 Students will be able to examine the conditions faced by an engineer starting from the development / modification of an existing functional mechanical system.</p> <p>L4</p> <p>CO5 Students will be able to appraise the necessity of project management, teamwork, time management, system integration skills and other related human factors involved in the design and development cycle of an engineering system.</p> <p>L5</p>
PROJ-ME404-P	SEMINAR	<p>CO1 Students will be able to learn recent trends and technologies in the field of Mechanical Engineering</p> <p>L1</p> <p>CO2 Students will be able to recognizing problems after doing research literature survey using various resources</p>

		<p>L2</p> <p>CO3 Students will be able to prepare concise, comprehend and conclude selective topic in the field of Mechanical Engineering</p> <p>L3</p> <p>CO4 Students will be able to develop skills in presentation and discussion of research topics in a public forum</p> <p>L4</p>
PEC-ME459-T	ROBOTICS	<p>CO1 Students will be able to learn standard terminologies, applications, design specifications, and mechanical design aspects both kinematics, Trajectory planning, work cell control and dynamics of industrial robotic manipulators.</p> <p>L1</p> <p>CO2 Students will be able to understand the robot kinematics and trajectory planning L2</p> <p>CO3 Students will be able to apply the concepts of robotic workspace analysis for design of robotic manipulator for required work cell applications</p> <p>L3</p> <p>CO4 Students will be able to develop the algorithms for design of robotic work cell controller and its programming for given serial robotic manipulator</p> <p>L4</p>
PEC-ME460-T	MECHATRONICS	<p>CO1 Students will be able to construct the block diagram of any physical Mechatronics device used in day-to-day life</p> <p>L1</p> <p>CO2 Students will be able to calculate the output to input relation of any physical model in the form of a transfer function</p>



		<p>L2</p> <p>CO3 Students will be able to evaluate the performance of any physical system in terms of its performance parameters.</p> <p>L3</p> <p>CO4 Students will be able to develop the mathematical model of any physical model from any engineering domain</p> <p>L4</p> <p>CO5 Students will be able to recognize the key features of different type of controllers and develop a suitable controller to obtain the desired performance from the system.</p> <p>L5</p>
PEC-ME461-T	AUTOMATIC CONTROL	<p>CO1 Students will be able to describe the control system, controller and applications of control systems</p> <p>L1</p> <p>CO2 Students will be able to understand response analysis and stability criteria of control system. L2</p> <p>CO3 Students will be able to integrate mechanical, electronics, instrumentation, computer and controls fields.</p> <p>L3</p> <p>CO4 Students will be able to evaluate the performance of control system L4</p>
PEC-ME462-T	FLEXIBLE MAUFACTURING SYSTEM	<p>CO1 Students will be able to recall basic automation, types of automation and transfer mechanism</p> <p>L1</p> <p>CO2 Students will be able to classify different automated assembly systems, quantitative and</p>

		<p>operational analysis of assembly machine.</p> <p>L2</p> <p>CO3 Students will be able to apply the technology, optimum machine arrangement &amp; benefits of group technology.</p> <p>L3</p> <p>CO4 Students will be able to examine robotics, material handling, computer-controlled system with their application &amp; benefits.</p> <p>L4</p> <p>CO5 Students will be able to formulate a flexible manufacturing systems. L5</p>
PEC-ME463-T	RAPID PROTOTYPING	<p>CO1 Students will be able to learn need &amp; development, benefits and applications of Rapid Prototyping systems.</p> <p>L1</p> <p>CO2 Students will be able to understand different types of Rapid Prototyping processes like 3D printing, Stereolithography, Selective Laser Sintering, Laminated Object Modeling and Fusion Deposition Modeling, Electron Beam Melting.</p> <p>L2</p> <p>CO3 Students will be able to point out the applications of Rapid Prototyping particularly in product design &amp; development, medical, tooling, fashion &amp; jewellery, architecture and automotive fields.</p> <p>L3</p> <p>CO4 Students will be able to define virtual prototyping and identify simulation components. L4</p>
PEC-ME464-T	POWER PLANT ENGINEERING	<p>CO1 Students will be able to define and state various thermal power plants. L1</p>

		<p>CO2 Students will be able to classify, compare and explain different power plants. L2</p> <p>CO3 Students will be able to demonstrate the constructional details and working principle of power plants.</p> <p>L3</p> <p>CO4 Students will be able to differentiate conventional/non-conventional/ direct energy conversion devices and power plants.</p> <p>L4</p> <p>CO5 Students will be able to evaluate the performance, operating characteristics and electrical energy costing of a given thermal power plants.</p> <p>L5</p>
PEC-ME465-T	SOLAR ENERGY ENGINEERING	<p>CO1 Students will be able to state heating/cooling and electrical applications of solar engineering. L1</p> <p>CO2 Students will be able to classify and explain different solar energy based devices/equipments and their effects on environment.</p> <p>L2</p> <p>CO3 Students will be able to use different solar based equipments/appliances for various domestic applications.</p> <p>L3</p> <p>CO4 Students will be able to examine performance of various solar engineering equipments/devices.</p> <p>L4</p> <p>CO5 Students will be able to evaluate the thermal performance of solar based equipments. L5</p>
PEC-ME466-T	DESIGN OF HEAT EXCHANGERS	<p>CO1 Students will be able to define and state heat exchangers used in various engineering</p>

		<p>applications.</p> <p>L1</p> <p>CO2 Students will be able to classify, compare and explain different heat exchangers. L2</p> <p>CO3 Students will be able to solve the problems related to the design parameters of a heat exchanger.</p> <p>L3</p> <p>CO4 Students will be able to differentiate and examine various heat exchangers. L4</p> <p>CO5 Students will be able to evaluate the thermal performance/sizing/heat transfer coefficients of a heat exchanger.</p> <p>L5</p>
PEC-ME467-T	TURBO MACHINERY	<p>CO1 Students will be able to define application of thermodynamics and fluid mechanics. L1</p> <p>CO2 Students will be able to describe the analyses of practical gas turbine and propulsion cycles. L2</p> <p>CO3 Students will be able to examine the performance characteristics of gas turbines L3</p> <p>CO4 Students will be able to develop different turbo machineries. L</p>
PEC-ME468-T	COMPUTATIONAL FLUID DYNAMICS	<p>CO1 Students will be able to define the fundamental of CFD and its various approach. L1</p> <p>CO2 Students will be able to understand the governing equations for heat and fluid flow. L2</p> <p>CO3 Students will be able to solve the heat transfer and fluid flow problem using CFD L3</p> <p>CO4 Students will be able to compare the finite volume and finite difference methods L4</p>

S. No. Course Outcomes RBT Level

CO1 Students will be able to ..... (LOTS)

Remembering

CO2 Students will be able to ..... (LOTS)

Understanding

CO3 Students will be able to ..... (LOTS)

Applying

CO4 Students will be able to ..... (HOTS)

Analyzing

CO5 Students will be able to ..... (HOTS)

Evaluating

CO6 Students will be able to ..... (HOTS)

Creating

**BACHELOR OF TECHNOLOGY**

**in**

**PACKAGING TECHNOLOGY**

**4 YEARS PROGRAMME**

**Choice Based Credit System**

**w. e. f. July 2019**

**(70:30)**



**DEPARTMENT OF PACKAGING TECHNOLOGY**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE & TECHNOLOGY**

**HISAR-125001, HARYANA**

**Department of Printing Technology**

**Vision**

To develop Department of Printing Technology, Guru Jambheshwar University of Science & Technology as a center of excellence for quality teaching & consultative research in the areas of Printing Technology to produce competent technocrats for the Printing & Allied Industries.

## **Mission**

To facilitate and promote studies and research in the areas of Printing Technology and also to achieve excellence in this field.

## **B.Tech (Packaging Technology) Program Educational Objectives (PEOs)**

<b>PEO1</b>	Apply technical skill and professional knowledge in engineering practices to face industrial challenges around the world.
<b>PEO2</b>	To prepare the students to lead a successful career in packaging and allied industries or to pursue higher studies or to support entrepreneurial endeavors.
<b>PEO3</b>	Inculcate effective team work, moral ethics and leadership with ability to solve societal problems.

## **Programme Outcomes (POs)**

<b>PO1</b>	<b>Engineering Knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex packaging and related engineering problems.
<b>PO2</b>	<b>Problem Analysis:</b> Identify, formulate, research literature, and analyze complex packaging and related engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
<b>PO3</b>	<b>Design/Development of Solutions:</b> Design solutions for complex packaging and related engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
<b>PO4</b>	<b>Conduct Investigations of Complex Problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
<b>PO5</b>	<b>Modern Tool Usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex packaging and related engineering activities with an understanding of the limitations.
<b>PO6</b>	<b>The Engineer and Society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
<b>PO7</b>	<b>Environment and Sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.
<b>PO8</b>	<b>Ethics:</b> Apply ethical principles and commit to professional ethics, responsibilities and norms of the engineering practice.
<b>PO9</b>	<b>Individual and Team Work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
<b>PO10</b>	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society. Some of them are, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
<b>PO11</b>	<b>Project Management and Finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
<b>PO12</b>	<b>Lifelong Learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

## **Programme Specific Outcomes (PSOs)**

**PSO1:** To prepare the students to understand packaging systems, subsystems, components and processes to address technical and engineering challenges.



**PSO2:** To empower the student to build up career in packaging and allied industry or pursue higher studies in packaging and allied/interdisciplinary program.

**PSO 3:** To enhance the skills of the students with the ability to implement the scientific concepts for betterment of the society considering ethical, environmental and social values.

B. Tech. (Packaging Technology) III- Semester

Course Code	Title of the Paper	Course Outcome	
BSC- PKG201- T --	Applied Sciences for Packaging	CO 1	Describe comprehensive knowledge of science in packaging arena.
		CO 2	Classify technical parameters of printing and packaging materials
		CO 3	Apply knowledge of press room environment in printing and packaging organization
		CO 4	Select suitable instrument for maintaining print standard.
ESC- PKG201- T --	Engineering Science for Printing	CO 1	Define various raw materials used in printing and packaging industry
		CO 2	Describe the utilization of paper, inks and other chemicals in printing and packaging industry
		CO 3	Apply principles of engineering and sciences in the field of printing and packaging industry
		CO 4	Apply principles of engineering and sciences in the field of printing and packaging industry
PCC- PKG201- T	Elements of Packaging	CO 1	Define various raw materials used in packaging industry
		CO 2	Describe the utilization of Product cycle and elements of package design in packaging industry
		CO 3	Apply principles of engineering and sciences in the field of packaging industry
		CO 4	Examine most inclusive areas where various materials can be used packaging industry
PCC- PKG203- T	Package Printing Processes	CO 1	Define various type of printing processes used in packaging industry
		CO 2	Describe the utilization/ advantages/ disadvantages of various printing processes used in packaging industry
		CO 3	Apply principles of engineering and sciences in the field of packaging industry
		CO 4	Examine most inclusive areas where various printing processes can be used packaging industry
PCC- PKG205- T	Graphics Design Essentials in Packaging	CO 1	Outline various graphics designing fundamentals
		CO 2	Describe graphics designing attributes in packaging
		CO 3	Use various softwares for developing design
		CO 4	Create various package designs
MC103- T	Indian Constitution		

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PCC- PKG201- P	Elements of Packaging	CO 1	Define various raw materials used in packaging industry
		CO 2	Describe the utilization of Product cycle and elements of package design in packaging industry
		CO 3	Apply principles of engineering and sciences in the field of packaging industry
		CO 4	Examine most inclusive areas where various materials can be used packaging industry
PCC- PKG203- P	Package Printing Processes	CO 1	Define various type of printing processes used in packaging industry
		CO 2	Describe the utilization/ advantages/ disadvantages of various printing processes used in packaging industry
		CO 3	Apply principles of engineering and sciences in the field of packaging industry
		CO 4	Examine most inclusive areas where various printing processes can be used packaging industry
PCC- PKG205- P	Graphics Design Essentials in Packaging	CO 1	Outline various graphics designing fundamentals
		CO 2	Describe graphics designing attributes in packaging
		CO 3	Use various softwares for developing design
		CO 6	Create various package designs

B. Tech. (Packaging Technology) IV- Semester

Course Code	Title of the Paper	Course Outcome	
BSC- PKG202-T	Applied Sciences for Packaging Materials	CO 1	Describe numerous packaging materials and its specialties
		CO 2	Learn comprehensive knowledge of various packaging materials
		CO 3	Interpret technical knowhow required for different packages.
		CO 4	
		CO 5	Select appropriate materials and its importance for packaging applications
PCC- PKG202-T	Pre-Press Technology in Packaging	CO 1	Define pre-press technology
		CO 2	Explain elements used in pre-press
		CO 3	Use concept of Colour management
		CO 4	Examine different imaging systems
PCC- PKG204-T	Computer Based Package Design	CO 1	Describe package design concept
		CO 2	Recognize colour importance in packaging
		CO 3	Use different graphics/package design softwares
		CO 4	Design different packages
PCC- PKG206-T	Paper Substrate in Packaging	CO 1	Define various fibrous and non-fibrous materials used in packaging
		CO 2	Describe the utilization of non-fibrous materials in packaging
		CO 3	Apply principles of recycling in the field of printing and packaging industry
		CO 4	Examine most inclusive areas where paper can be used in printing and packaging industry
		CO 5	Select and evaluate properties of paper used in packaging
PCC- PKG208-T	Polymers in Packaging	CO 1	Define various Polymers used in packaging industry
		CO 2	Describe the utilization of various polymers in packaging industry
		CO 3	Apply principles of engineering and sciences in the field of packaging industry
		CO 4	Examine most inclusive areas where various polymers can be used in packaging industry
MC104-T	Essence of Indian Traditional Knowledge		

PCC- PKG202-P	Pre-Press Technology in Packaging	CO 1	Define pre-press technology
		CO 2	Explain elements used in pre-press
		CO 3	Use concept of Colour management
		CO 4	Examine different imaging systems
PCC- PKG204-P	Computer Based Package Design	CO 1	Define pre-press technology
		CO 2	Explain elements used in pre-press
		CO 3	Use concept of Colour management
		CO 4	Examine different imaging systems
PCC- PKG206-P	Paper Substrate in Packaging	CO 1	Define various fibrous and non-fibrous materials used in packaging
		CO 2	Describe the utilization of non-fibrous materials in packaging
		CO 3	Apply principles of recycling in the field of printing and packaging industry
		CO 4	Examine most inclusive areas where paper can be used in printing and packaging industry
		CO 5	Select and evaluate properties of paper used in packaging

B. Tech. (Packaging Technology) V- Semester

Course Code	Title of the Paper	Course Outcome	
OEC-I	Open Elective Course-I	NA	
HSMC302-T	Fundamental of Management for Engineers	NA	
PCC- PKG301-T	Colour Management in Packaging	CO 1	Describe concept of colour management and its application.
		CO 2	Compare different colour models and their importance in printing and packaging
		CO 3	Operate different colour measuring instruments
		CO 4	Comparison different print characteristics/parameters.
		CO 5	Evaluate different print characteristics using colour measuring instruments
PCC- PKG303-T	Rigid Packaging Machines	CO 1	To define rigid packaging
		CO 2	To describe corrugations boards and its types
		CO 3	To demonstrate various metals and their applications in rigid packaging
		CO 4	To distinguish utilization of different rigid packaging substrates
		CO 5	To evaluate suitability of various range of substrates for rigid packaging
PCC- PKG305-T	Pharmaceutical and Cosmetics Packaging	CO 1	Extensive knowledge of various aspects of pharmaceutical Packaging
		CO 2	Extensive knowledge of various aspects of cosmetic Packaging
		CO 3	Deal with various pharmaceutical and cosmetics packaging aspects.
		CO 4	Know about different substrates being used in pharmaceutical and cosmetics packaging
		CO 5	Study number of troubleshooting techniques to be encountered in pharmaceutical and cosmetics packaging.
PCC- PKG301-P	Colour Management in Packaging	CO 1	Describe concept of colour management and its application.
		CO 2	Compare different colour models and their importance in printing and packaging
		CO 3	Operate different colour measuring instruments
		CO 4	Comparison different print characteristics/parameters.
		CO 5	Evaluate different print characteristics using colour measuring instruments
PCC- PKG303-P	Rigid Packaging Machines	CO 1	To list various paperboards for rigid packaging
		CO 2	Describe and understand corrugation making machines
		CO 3	To apply extrusion and moulding machine knowledge in rigid packaging
		CO 4	To distinguish between various rigid packaging machines
		CO 5	To select suitable machine for rigid packaging
PROJ- PKG301-P	Industrial Training Presentation-I	For industrial exposure of the students with latest technology and to make them understand the workflow in the industry, training in the Industry forms a compulsory and significant aspect. Students will be trained in industry for a	

		<p>period of 4 weeks during the earlier semester vacations. Their performance will be periodically assessed by the staff in charge from the department and a coordinator industry. After completion of the training period the students will submit a detailed report dully signed with industry coordinator. There will be a viva-voce at the end of the training and grades will be awarded along with the semester examination. The selection of industry for training should be printing, packaging and allied industry (Technical Support in relation with printing and packaging).</p>
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B. Tech. (Packaging Technology) VI- Semester

Course Code	Title of the Paper	Course Outcome
Theory		
OEC-II	Open ElectiveCourse - II	NA



PEC-I	Program Elective Course - I	NA	
HSMC301-T	Economics for Engineers	NA	
PCC- PKG302-T	Print Finishing Techniques	CO 1	To describe various binding materials used in printing
		CO 2	To explain various print finishing and binding operations
		CO 3	To use appropriate binding style for appropriate job
		CO 4	To differentiate numerous print finishing operations
		CO 5	To select appropriate materials during print finishing and book binding
PCC- PKG304-T	Ink Technology in Packaging	CO 1	Describe concept of Printing Ink and its application.
		CO 2	Compare different Drying Mechanisms and their importance in printing and packaging
		CO 3	Understand different properties of Packaging Inks
		CO 4	Comparison of different printing inks
		CO 5	Evaluate different print characteristics of Packaging inks
PCC- PKG306-T	FMCG Packaging	CO 1	To define FMCG packaging
		CO 2	To describe the FMCG packaging process and their applications
		CO 3	To apply CAP and MAP for various food grades
		CO 4	To examine FMCG packaging applications
		CO 5	To select suitable materials for packaging recycling applications
PCC- PKG302-P	Print Finishing Techniques	CO 1	To describe various binding materials used in printing
		CO 2	To explain various print finishing and binding operations
		CO 3	To use appropriate binding style for appropriate job
		CO 4	To differentiate numerous print finishing operations
		CO 5	To select appropriate materials during print finishing and book binding
PCC- PKG304-P	Ink Technology in Packaging	CO 1	Describe concept of Printing Ink and its application.
		CO 2	Compare different Drying Mechanisms and their importance
		CO 3	Understand different properties of Packaging Inks
		CO 4	Comparison of different printing inks
		CO 5	Evaluate different print characteristics of Packaging inks

Program Elective Course-I (PE -1 : Theory)			
Course Code	Title of the Paper	Course Outcome	
PEC- PKG151-T	Digital Printing Process	CO 1	To define various techniques used in Digital print production
		CO 2	To describe the Computer to Technologies
		CO 3	To interpret the Digital printing processes
		CO 4	To examine most inclusive areas where Digital Printing used in printing industry
		CO 5	To identify printing challenges in Digital printing
		CO 6	To develop knowledge about recent trends, future implications and applications of Digital Printing Presses to both consumers and printing & packaging industry
PEC- PKG152-T	Hybrid Printing Technology	CO 1	Overview of Printing Methods and Technologies
		CO 2	Describe concept of Hybrid Printing and its application.
		CO 3	Describe Hybrid Printing Systems combining Conventional Printing Technologies
		CO 4	Understand Radiation curing
		CO 5	Compare different Hybrid Techniques for In-line and off-line Print Production
PEC- PKG153-T	Offset Technology	CO 1	To study and explain the various categories of offset press and the principles behind it.
		CO 2	To describe the various units of a sheet fed offset press.
		CO 3	To demonstrate five units of the offset press
		CO 4	To explain and indicate various print trouble shooting.
		CO 5	To analyse the various print quality factors and their implications
		CO 6	To explain ISO Standards for sheet-fed offset printing

B. Tech. (Packaging Technology) VII- Semester

Course Code	Title of the Paper	Course Outcome
BTPK-701-L	ED/Sales & Marketing/Package Economics & Value Engineering	<ol style="list-style-type: none"> <li>1. Knowledge of basic concept of entrepreneurship development in packaging industry</li> <li>2. Knowledge about various business planning processes</li> <li>3. Knowledge about different kind of firms and models for a new business</li> <li>4. Thorough knowledge of marketing and sales to increase business.</li> </ol>
BTPK-702-L	Converting Process for Packaging	<ol style="list-style-type: none"> <li>1. To gain knowledge about various converting process</li> <li>2. Applications and working of various converting process in packaging industry.</li> </ol>
BTPK-703-L	Quality Control & Waste Management	<ol style="list-style-type: none"> <li>1. Students will be able to understand quality principles in a deeper level.</li> <li>2. Students will be able to reduce wastage in the organizations.</li> </ol>
BTPK-704-L	Packaging of Industrial and Hazardous Goods	<ol style="list-style-type: none"> <li>1. Effectively choose packaging materials based on characteristics of industrial products.</li> <li>2. Describe the various properties &amp; defects of wood packaging material</li> <li>3. Analyze the various hazards &amp; environmental issues related to Packaging and select a specific protection method for the product.</li> <li>4. Choose various bulk carriers for industrial packaging based on the type of product.</li> </ol>
BTPK-705-L	Plastic & Polymer Manufacturing	NA
BTPK-706-L	Supply Chain & Logistic Management in Packaging	This course will help the students to gain the knowledge of efficient optimization and management of operation in Logistics Management and to impart knowledge and understanding on Supply Chain Management with the ability to apply them in the enterprise reality.
BTPK-702-P	Converting Process for Packaging lab	NA
BTPK-703-P	Quality Control & Waste Management Lab	NA
BTPK-704-P	Packaging of Industrial and Hazardous Goods Lab	NA
BTPK-707	Plastic & Polymer Manufacturing lab	NA
BTPK-708	Project Work-I	The concept of major Project will be started by a group of maximum ten students under the guidance of project guide (Faculty member).

BTPK-709	Industrial Training Presentation-II	<p>For industrial exposure of the students to the latest technology and to make them understand the workflow in the industry, training in the Industry forms a compulsory and significant aspect. Students will be trained in industry for a period of 3 weeks during the earlier semester vacations. Their performance will be periodically assessed by the staff in charge from the department and a coordinator industry. After completion of the training period the students will submit a detailed report. There will be a viva-voce at the end of the training and grades will be awarded. The areas of training during these periods will be in different branches of printing and packaging.</p>
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B. Tech. (Packaging Technology) VIII- Semester

Course Code	Title of the Paper	Course Outcome
BTPK-801-L	Green Printing	<ul style="list-style-type: none"> <li>● Introduce the novel concept of green printing process and to enable students to tackle environmental problems in their chosen area of application.</li> <li>● It will impart the concepts of recycling, recycling techniques.</li> <li>● Know the use of bio-degradable and non-biodegradable materials, reducing pollution, use of more eco-friendly and biochemical based materials etc. in printing.</li> </ul>
BTPK-802-L	Latest Trends in Packaging	NA
BTPK-803-L	Bulk & Industrial Packaging	<ol style="list-style-type: none"> <li>1. Knowledge about bulk packaging and its application</li> <li>2. Knowledge about various bulk packaging systems used in market</li> <li>3. Thorough knowledge about different kind of materials used in bulk packaging</li> </ol> <p>How to select proper packaging for industrial product</p>
BTPK-804-L	Packaging Machinery Maintenance	NA
BTPK-804-P	Packaging Machinery Maintenance Lab	<ol style="list-style-type: none"> <li>1. Keen knowledge about various drive and control systems used in Packaging machine</li> <li>2. Thorough knowledge about erecting and testing</li> <li>3. Thorough knowledge about maintenance procedure.</li> </ol>
BTPK-805	Project Work-II	<p>Project will be an innovative working model of machine/equipments used in Printing Industry with required modifications and will be demonstrated during examination with the help of project report by a group of maximum ten students under the guidance of project guide (Faculty member)</p>



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**DEPARTMENT OF PRINTING TECHNOLOGY**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE &  
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**HISAR-125001, HARYANA**

## **Department of Printing Technology**

### **Vision**

To develop Department of Printing Technology, Guru Jambheshwar University of Science & Technology as a center of excellence for quality teaching & consultative research in the areas of Printing Technology to produce competent technocrats for the Printing & Allied Industries.

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<b>PEO1</b>	Apply technical skill and professional knowledge in engineering practices to face industrial challenges around the world.
<b>PEO2</b>	To prepare the students to lead a successful career in printing and allied industries or to pursue higher studies or to support entrepreneurial endeavors.
<b>PEO3</b>	Inculcate effective team work, moral ethics and leadership with ability to solve societal problems.

**Programme Outcomes (POs)**

<b>PO1</b>	<b>Engineering Knowledge:</b> Apply the knowledge of mathematics, science, engineering fundamentals and an engineering specialization to the solution of complex printing and related engineering problems.
<b>PO2</b>	<b>Problem Analysis:</b> Identify, formulate, research literature, and analyze complex printing and related engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
<b>PO3</b>	<b>Design/Development of Solutions:</b> Design solutions for complex printing and related engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
<b>PO4</b>	<b>Conduct Investigations of Complex Problems:</b> Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
<b>PO5</b>	<b>Modern Tool Usage:</b> Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex printing and related engineering activities with an understanding of the limitations.
<b>PO6</b>	<b>The Engineer and Society:</b> Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
<b>PO7</b>	<b>Environment and Sustainability:</b> Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of need for sustainable development.
<b>PO8</b>	<b>Ethics:</b> Apply ethical principles and commit to professional ethics, responsibilities and norms of the engineering practice.
<b>PO9</b>	<b>Individual and Team Work:</b> Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
<b>PO10</b>	<b>Communication:</b> Communicate effectively on complex engineering activities with the engineering community and with society. Some of them are, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
<b>PO11</b>	<b>Project Management and Finance:</b> Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
<b>PO12</b>	<b>Lifelong Learning:</b> Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.

**Programme Specific Outcomes (PSOs)**

**PSO1:** To prepare the students to understand printing systems, subsystems, components and processes to address technical and engineering challenges.

**PSO2:** To empower the student to build up career in printing and allied industry or pursue higher studies in printing and allied/interdisciplinary program.

**PSO 3:** To enhance the skills of the students with the ability to implement the scientific concepts for betterment of the society considering ethical, environmental and social values.

3rd Sem.			
SubjectCode	Subject Name	Course Outcomes	
BSC-PTG201-T	AppliedSciences forPrinting	CO 1	Describe comprehensive knowledge of science in printing arena.
		CO 2	Classify technical parameters of printing materials
		CO 3	Apply knowledge of press room environment in printing
ESC-PTG201-T	Engineering ScienceforPackaging	CO 1	To define various raw materials used in printing and packaging industry
		CO 2	To describe the utilization of paper, inks and other chemicals in printing and packaging industry
		CO 3	To apply principles of engineering and sciences in the field of printing and packaging industry
PCC-PTG201-T	Pre-PressTechnology	CO 1	To label and draw various hardware and software components of computer
		CO 2	To explain the utilization of various displays for pre-press technology
		CO 3	To apply principles of DTP in the field of pre-press technology
PCC-PTG203-T	Introduction toPrintingProcesses	CO 1	To define printing and its applications
		CO 2	To describe various printing processes
		CO 3	To interpret merits and demerits of printing processes
PCC-PTG205-T	GraphicDesign inPrinting	CO 1	Describe printing design concept
		CO 2	Recognize colour importance in printing
		CO 3	Use different graphics/package design softwares

PCC-PTG207-T	ContentManagement inPrinting	<b>CO 1</b>	Describe utilities of content management in printing
		<b>CO 2</b>	Classify different content management systems
		<b>CO 3</b>	Apply the principles of ware housing and digital asset management systems for managing content
		<b>CO 4</b>	Distinguish different content management systems and data warehouse architecture systems
PCC-PTG203-P	Introduction toPrintingProcesses	<b>CO 1</b>	Outline various graphics designing fundamentals
		<b>CO 2</b>	Describe graphics designing attributes in printing
		<b>CO 3</b>	Use various softwares for developing design
		<b>CO 4</b>	

4th sem.			
SubjectCode	Subject Name	Course Outcomes	
BSC-PTG202-T	AppliedScience forPackagingMaterials	CO 1	Describe numerous packaging materials and its specialties
		CO 2	Learn comprehensive knowledge of various packaging materials
		CO 3	Interpret technical knowhow required for different packages.
PCC-PTG202-T	Technology ofFlexography	CO 1	To define various tools and techniques used in flexographic print production
		CO 2	To describe the flexographic printing process, flexo presses and their markets in the current scenario
		CO 3	To apply Quality Control in flexographic printing workflow
		CO 4	To examine most inclusive areas where flexography printing used in printing industry
		CO 5	To identify printing challenges in flexographic printing
PCC-PTG204-T	Methodology ofComposition inPrinting	CO 1	To define various tools and techniques used in print composition
		CO 2	To describe the utilization of composition software and DTP in printing
		CO 3	To apply principles of composition in the field of printing industry
		CO 4	To examine most inclusive areas where DTP, imagesetters and computer can be used in printing
PCC-PTG206-T	TechniquesofPrintin gImageGeneration	CO 1	Students will be able to define various tools and equipments used in Plate making department.
		CO 2	Students will be able to explain various plate making techniques for different printing processes.
		CO 3	Students will be able to apply the concepts related to various machines and tools in plate making department.
		CO 4	Students will be able to compare the different concepts and principles for plate making techniques.
			Students will be able to select appropriate technique to

PCC-PTG202-P	Technology of Flexography	<b>CO 1</b>	To define various practical tools and techniques used in flexographic print production
		<b>CO 2</b>	To describe the practical utilization of flexographic printing process, plate preparation methods and flexo presses
		<b>CO 3</b>	To operate various procedures adopting for flexographic printing
		<b>CO 4</b>	To examine the trouble shoot on flexography machine
PCC-PTG204-P	Methodology of Composition in Printing	<b>CO 1</b>	To define various practical tools and techniques used in print composition
		<b>CO 2</b>	To describe the practical utilization of composition software and DTP in printing
		<b>CO 3</b>	To deploy and demonstrate composition methods in the field of printing industry
		<b>CO 4</b>	To examine most inclusive practical areas where DTP, imagesetters and computer can be used in printing industry
		<b>CO 5</b>	To appraise visiting cards, pamphlets, folders and other
PCC-PTG206-P	Techniques of Printing Image Generation	<b>CO 1</b>	To describe all tools and equipment used in plate making department.
		<b>CO 2</b>	To identify practically the concept and principles of Image generation.
		<b>CO 3</b>	To demonstrate the functioning of machines and tools used in image generation department.
		<b>CO 4</b>	To perform experiments with machines and other materials to prepare the final image on image carrier.

5<sup>th</sup> sem.

SubjectCode	Subject Name	Course Outcomes	
PCC-PTG301-T	Science &Technology ofSheet-fedOffset	<b>CO 1</b>	To study and explain the various categories of offset press and the principles behind it.
		<b>CO 2</b>	To describe the various units of a sheet fed offset press.
		<b>CO 3</b>	To demonstrate five units of the offset press
		<b>CO</b>	To explain and indicate various print trouble
PCC-PTG303-T	ColourAnalysis&Repr oduction Technology	<b>CO 1</b>	To describe basic principles of reproduction photography
		<b>CO 2</b>	To learn comprehensive knowledge of halftone to continuous tone originals
		<b>CO 3</b>	To interpret technical knowhow required for auxiliary exposures
		<b>CO</b>	To know basic principles of line separations

PCC-PTG305-T	Technology of Gravure	<b>CO 1</b>	To describe about Gravure Printing and its market in India & abroad.
		<b>CO 2</b>	To describe about Gravure Printing & Presswork
		<b>CO 3</b>	To describe about Gravure Printing substrates, inks and environmental consideration and safety
		<b>CO 4</b>	To describe about Gravure machine and components with their importance & handling.
		<b>CO 5</b>	To have deep understanding of various major components and their considerations for advance applications and printing of <del>multicolour jobs</del>
PCC-PTG301-P	Science & Technology of Sheet-fed Offset	<b>CO 1</b>	Outline the various operations of sheet fed offset press
		<b>CO 2</b>	Describe and understand the different units of sheet fed offset press
		<b>CO 3</b>	To set the different units of a sheet fed offset press
		<b>CO 4</b>	To set the machine for two colour printing
PCC-PTG303-P	Colour Analysis & Reproduction Technology	<b>CO 1</b>	To describe basic principles of reproduction photography
		<b>CO 2</b>	To learn comprehensive knowledge of preparing halftone negatives and positives
		<b>CO 3</b>	To interpret technical knowhow required for using contact screens
		<b>CO 4</b>	To understand contrast control for halftone
PCC-PTG305-P	Technology of Gravure	<b>CO 1</b>	To understand and handle about Gravure Printing press and its types.
		<b>CO 2</b>	To understand and explain Gravure Printing & Presswork with various components.
		<b>CO 3</b>	To describe about Various Pre & Post-press operations on Gravure Printing machines
		<b>CO 4</b>	To describe about Gravure machine and components with their importance & handling.
		<b>CO 5</b>	To have deep understanding of handling & <del>operation of Gravure Printing machine with</del>

PROJ-PTG301-P	Industrial Training Presentation-I	<p>For industrial exposure of the students to the latest technology and to make them understand the workflow in the industry, training in the Industry forms a compulsory and significant aspect. Students will be trained in industry for a period of 3 weeks during the earlier semester vacations. Their performance will be periodically assessed by the staff in charge from the department and a coordinator industry. After completion of the training period the students will submit a detailed report. There will be a viva-voce at the end of the training and grades will be awarded along with the semester examination. The selection of the industry for the training should be printing/packaging and allied industry (technical support in relation with printing and packaing).</p>
MC-PTG301-P	Technical Presentation/Seminar	<p>The course is introduced to enrich the communication, writing and presentation skills of the student on technical and other relevant topics. In this course, a student has to present technical topic/recent advances in printing, packaging and allied arena. The topic of the '<b>Technical Presentation/Seminar</b>' will be decided by the individual student in consultation with the concerned allotted guide and the report will be submitted by the student at the end of semester dully signed by allotted guide. The plagiarism report for the presentation/content should be enclosed in report dully signed by the student.</p>



6th Sem.			
SubjectCode	Subject Name	Course Outcomes	
PEC-PTG151-T	Newspaper&Multi media	CO 1	To list various newspaper organizations
		CO 2	To describe process of newspaper management
		CO 3	To demonstrate various principles of newspaper designs
PEC-PTG152-T	SubstratesforPrinting	CO 1	Students will be able to define various printing substrates used in printing industry.
		CO 2	Students will be able to explain applications of various substrates.
		CO 3	Students will be able to apply various tests to enhance the print quality.
PEC-PTG153-T	PrintingOrganizations &PlantLayout	CO 1	To define the print organization and management
		CO 2	To describe the procedure of site selection
		CO 3	To interpret the various tools and techniques of Plant Layout
		CO 4	To examine most inclusive areas where Factory Building and Analytical approach of plant layout used in printing technology
PEC-PTG154-T	IntroductiontoPac kaging	CO 1	Describe the concept of packaging
		CO 2	Recognize various hazards of packaging
		CO 3	Choosing different graphics/package design for particular applications
		CO 4	To gain knowledge regarding various cellulosic packaging materials
PEC-PTG155-T	PrintedElectronics	CO 1	To study and explain the various applications and areas of importance related to printed electronics.
		CO 2	To describe the various printing processes being used for printing of printed electronics products.
		CO 3	To discuss different substrates used for printed electronics.
		CO 4	To explain the printed electronics inks.
PCC-PTG302-T	PaperTechnology	CO 1	To list various sources of fibrous and non-fibrous materials used in papermaking
		CO 2	To describe paper making process
		CO 3	To demonstrate various finishing operations used in papermaking

PCC-PTG304-T	Print Finishing	<b>CO 1</b>	To describe various binding materials used in printing
		<b>CO 2</b>	To explain various print finishing and binding operations
		<b>CO 3</b>	To use appropriate binding style for appropriate job
		<b>CO 4</b>	To differentiate numerous print finishing operations
PCC-PTG306-T	Technology of Printing Ink	<b>CO 1</b>	Describe concept of Printing Ink and its application.
		<b>CO 2</b>	Compare different Drying Mechanisms and their importance in printing and packaging
		<b>CO 3</b>	Understand different properties of Printing Inks
		<b>CO 4</b>	Comparison of different printing inks
		<b>CO 5</b>	Understand Radiation curing
		<b>CO 6</b>	Evaluate different print characteristics of Printing Inks
PCC-PTG302-P	PCC-PTG302-P	<b>CO 1</b>	Outline various paper testing instruments
		<b>CO 2</b>	Describe and understand working of paper testing instruments
		<b>CO 3</b>	To apply paper instruments knowledge in printing context
PCC-PTG304-P	PCC-PTG304-P	<b>CO 1</b>	To describe various binding materials used in printing
		<b>CO 2</b>	To explain various print finishing and binding operations
		<b>CO 3</b>	To use appropriate binding style for appropriate job
		<b>CO 4</b>	To differentiate numerous print finishing operations
PCC-PTG306-P	PCC-PTG306-P	<b>CO 1</b>	Describe concept of Printing Ink and its application.
		<b>CO 2</b>	Compare different Drying Mechanisms and their importance in printing and packaging
		<b>CO 3</b>	Understand different properties of Packaging Inks
		<b>CO 4</b>	Comparison of different printing inks

7th Sem.		
SubjectCode	Subject Name	Course Outcomes
BTPT-701-L	(A) Packaging Design	<ol style="list-style-type: none"> <li>1. To work with design softwares.</li> <li>2. To study the concepts and understanding of design fundamentals.</li> <li>3. To apply the knowledge of commercial design.</li> </ol>
BTPT-701-L	(B) Security Printing & Holography	<ol style="list-style-type: none"> <li>1. Analyze &amp; describe the fundamental concepts in Security printing.</li> <li>2. Produce specialty printing items, equipments involved, incorporating security features etc., and also use of special materials like substrate, inks etc.</li> <li>3. Elaborate the importance of security printing with respect to use in everyday documents</li> </ol>
BTPT-702-L	Packaging Techniques and Processes	<ol style="list-style-type: none"> <li>1. Suggest the packaging material use and its conversion as per the product geometry.</li> <li>2. Suggest the filling machine required for the line operations.</li> <li>3. Choose the ancillary machineries required in the line operations based on the product to be packed.</li> <li>4. Analyze the different conveying system used for various line operations.</li> <li>5. Select different online and offline testing methods that are required during the converting operations or on the packaging lines.</li> </ol>
BTPT-703-L	Quality Assurance & Control	<ol style="list-style-type: none"> <li>1. Students will be able to understand quality principle in a deeper level.</li> <li>2. Students will be able to control the quality of raw materials.</li> </ol>
BTPT-704-L	Print Entrepreneurship Development	<ol style="list-style-type: none"> <li>1. Students will be able to understand various qualities required for being successful entrepreneur.</li> <li>2. Students will be able to get deeper knowledge of business planning process required for entrepreneurship development.</li> </ol>
BTPT-705-L	Colour Management Systems	This course is ideal for designers and printers who manage colour file workflow and management. By the end of the course students will have confidence in colour work, and be best positioned to deliver an excellent service to Industries.
BTPT-706-L	Printing Organization and Layout Designing	<ol style="list-style-type: none"> <li>1. Brief knowledge about print organization and management</li> <li>2. Information about various plant layouts in printing industry</li> <li>3. Thorough knowledge about plant layout procedure</li> <li>4. Knowledge about press building</li> </ol>
BTPT-702-P	Packaging Techniques and Processes Lab	At the end of the course, learners should be able to suggest the packaging material use and its conversion as per the product geometry, and also choose the ancillary machineries required in the line operations based on the product to be packed.

<b>8th sem.</b>		
<b>SubjectCode</b>	<b>Subject Name</b>	<b>Course Outcomes</b>
BTPT-801-L	Newspaper and Magazine Technology	<ol style="list-style-type: none"> <li>1. Keen knowledge about various News Paper Magazine Technology</li> <li>2. Thorough knowledge about Magazine Technology</li> </ol>
BTPT-802-L	Printing Maintenance Engineering	<ol style="list-style-type: none"> <li>1. Keen knowledge about various drive and control systems used in printing machine</li> <li>2. Thorough knowledge about erecting and testing</li> <li>3. Thorough knowledge about repair and reconditioning of various parts</li> <li>4. Thorough knowledge about maintenance procedure.</li> </ol>
BTPT-803-L	Total Quality Management	<ul style="list-style-type: none"> <li>• The TQM principles, tools and techniques will help to enhance the productivity in manufacturing and servicing industry.</li> </ul>
BTPT-804-L	Continuous Stationary Printing	<ol style="list-style-type: none"> <li>1. Acquainted with the Continuous stationary and its form</li> <li>2. Security aspects in association with Continuous stationary</li> <li>3. Utility of computer for Continuous stationary</li> </ol>

**MASTER OF TECHNOLOGY**  
**IN**  
**COMPUTER SCIENCE AND ENGINEERING**  
**2 YEARS PROGRAMME**  
**Choice Based Credit System**  
**w. e. f. July 2015**  
**(70:30)**



**DEPARTMENT OF COMPUTER SCIENCE AND  
ENGINEERING**  
**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE &  
TECHNOLOGY**  
**HISAR-125001, HARYANA**

## Vision and Mission of the Department

### *VISION*

The vision of the Department is to become a centre of excellence for education in Computer Science, Engineering and Applications. We visualize ourselves as an agency to nurture young minds into leaders of tomorrow in the field of higher education, research and development, and corporate world. We aim to produce creators and innovators who will work towards the overall well being of the society.

### *MISSION*

- To impart state-of-the-art knowledge in Computer Science and Engineering, Information Technology and Computer Applications.
- To ensure our students graduate with a sound theoretical basis and wide-ranging practical experience.
- To foster linkages between the Department and public and private sectors, traversing research establishments as well as Information Technology industry.
- To promote ethical research of high quality.
- To adopt the best pedagogical methods in order to maximize knowledge transfer.
- To inculcate a culture of free and open discussions in the Department.
- To engage students in learning, understanding and applying novel ideas.
- To infuse scientific temper, professionalism, enthusiasm and team spirit.
- To inspire a zest into students for lifelong learning.
- To promote democratic values, an environment of equal opportunity for everyone irrespective of gender, religion and cast.
- To attract and retain the talented and dedicated teaching and supporting staff, and students.

## **Programme Educational Objectives (PEOs)**

The educational objectives of the M. Tech. (CSE) Programme are:

- PEO1. To set high academic goals for the graduating students and to train them in applying and extending the knowledge to the benefit of the society at large.
- PEO2. To produce post-graduates with a sound theoretical and practical knowledge in the discipline of Computing Science and Engineering.
- PEO3. To create knowledgeable and enthusiastic teaching professionals to engage in higher education institutions.
- PEO4. To craft technically competent, proficient and responsible professionals for IT and its related industries.
- PEO5. To establish a research tradition that supports our post-graduates for pursuing research careers in premier universities and research institutes/organisations in India and abroad.

## Programme Outcomes (POs)

In order to achieve the PEOs, we expect our students to attain the following outcomes by the time of their graduation. The Programme graduates will have:

- PO1. an ability to understand and apply mathematical concepts, algorithmic principles and computer science theory in solving computing based real world problems.
- PO2. an ability to understand and apply advanced networking and security of information systems' concepts.
- PO3. an ability to understand, apply and design Computationally Intelligent techniques/algorithms to solve problems that do not map to mathematical models.
- PO4. an ability to understand and apply database design and knowledge mining techniques for complex predictive and descriptive modeling tasks.
- PO5. an ability to understand and apply the principles of computer architecture and micro-processors based systems.
- PO6. an ability to grasp and specify the requirements of resources to solve a computing problem and further model, design, implement and validate the provided computing solution to meet the specified requirements subject to real-world constraints on time and finance.
- PO7. an ability to critically analyze/examine/judge the existing knowledge about a research problem/domain, identify and formulate a research problem and subsequently select appropriate research methodologies and tools to address the problem.
- PO8. ability to design and conduct research experiments, analyze and interpret data and results related to Computer Science and Engineering problems.
- PO9. an ability to propose original ideas and design novel solutions and communicate them effectively to the stakeholders verbally as well as in writing.
- PO10. an ability to learn and apply modern engineering tools and software to solve problems, to understand the limitations of various tools in context of the domain of the problem and overcome them by extending the functionalities of the available tools or building an interface between different tools.
- PO11. an ability to work individually or in a team exhibiting the leadership qualities.
- PO12. an ability to engage in lifelong learning and tackle unforeseen problems.
- PO13. reflect true professionalism and ethical behaviour in his/her work and understand contemporary issues and the impact of engineering solutions in a global, economic, environmental and societal context.



<b>Department of CSE</b>		
<b>M. Tech CSE (1<sup>st</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
CSL711	Advanced Computer Networks	<ol style="list-style-type: none"> <li>1. To have depth knowledge of computer networks.</li> <li>2. Recognize the different internetworking devices and their functions.</li> <li>3. Explain the role of protocols in networking.</li> <li>4. Analyze the services and features of the various layers of data networks.</li> <li>5. Design, calculate, and apply subnet masks and addresses to fulfill networking requirements.</li> <li>6. Analyze the features and operations of various application layer protocols such as Http, DNS, and SMTP.</li> </ol>
CSL712	Advanced Microprocessors	<ol style="list-style-type: none"> <li>1. Describe the features and use of the real and protected modes of microprocessors.</li> <li>2. Explain the internal architecture of the 16, 32, and 64-bit microprocessors and compare and contrast the features of different Intel microprocessors.</li> <li>3. Analyse memory, input/output and interrupt interfaces to the microprocessors.</li> <li>4. Design the microprocessor based control systems and can develop the software to control them.</li> <li>5. Compare the state-of-the-art technologies in the field of microprocessors.</li> </ol>
CSL713	Advanced Database	<ol style="list-style-type: none"> <li>1. Be able to understand the concept of Normalization in order to remove anomalies of the database.</li> </ol>

	Management Systems	<p>2. Have the knowledge and apply various Locking Protocols and Techniques to control the concurrency for Database Manage System.</p> <p>3. Analyze the classification of failure and apply recovery techniques for database recovery.</p> <p>4. Be able to design and manage database effectively using advanced queries of Oracle.</p>
CSL714	Theory of Computation	<p>1. Understand mathematical and computational principals that are foundations of the Computer Science.</p> <p>2. Understand the relationship between Automata and Regular Expressions, and Context Free Grammar and Push down Automata, Abstract model of computation in the form of Turing Machine and application of Turing Machine.</p> <p>3. Construct pushdown automata and equivalence context free grammars.</p> <p>4. Understand and apply the theory of finite automata and context free grammars in the design of programming language and compilers.</p>
CSL715	Advanced Software Engineering	<p>1. Students will be able to develop and /or improve their technical writing and software development skills after the completion of the course.</p> <p>2. Students are expected to be proficient in methodologies related to object oriented software engineering, component based software engineering, and aspect oriented software engineering.</p> <p>3. Students will be able to apply the concepts reverse engineering and re-engineering widely used in software industry to increase reliability and minimize maintenance efforts.</p>

		4. Student will be in position to develop small projects as Case Study
CSP711	Computer Networks Lab.	<ol style="list-style-type: none"> <li>1. Able to understand different models used for study of computer networks and ability to identify different designs.</li> <li>2. Able to understand, how information transforms while moving through network and understand different technologies used to improve efficiency of communication.</li> <li>3. Able to design and engineer routes to create interconnect of nodes.</li> <li>4. Able to build some simple networking models using the Network Simulator.</li> </ol>
CSP712	Microprocessor Lab.	<ol style="list-style-type: none"> <li>1. Describe the internal architecture of an X86 processor showing the general purpose registers, the segment registers, the ALU, the flags register, the instruction pointer (IP) register, and the instruction register.</li> <li>2. Write code for interfacing of peripherals/devices with processor</li> <li>3. Develop the assembly language programs. 4. design microprocessor controlled system.</li> </ol>

**Department of CSE**

**M. Tech CSE (2<sup>nd</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
CSL721	Soft Computing Concepts and Techniques	<ol style="list-style-type: none"><li>1. To know and the terminology and concept of the soft computing techniques.</li><li>2. To understand and appreciate the soft computing techniques and to identify the situations where soft computing techniques are applicable.</li><li>3. To be able to apply Soft Computing techniques as computational tools to solve a variety of problems related to optimization and machine learning.</li><li>4. To be able to design and experiment with variations of Genetic Algorithms.</li><li>5. Use efficiently tools like MATLAB, R, GALIB and KEEL, NeuroXL etc. available to implement the GAs, ANN and FL systems.</li></ol>
CSL722	Digital Image Processing	<ol style="list-style-type: none"><li>1. Possess a clear understanding of two-dimensional signal acquisition, sampling, and quantization.</li><li>2. Acquire a good understanding of the mathematical foundations for digital manipulation of images such as image acquisition, preprocessing, segmentation, compression and representation.</li><li>3. Learn and understand the image enhancement in the spatial domain and frequency domain.</li><li>4. Design and implement Matlab algorithms for digital image processing operations such as histogram equalization, filtering, enhancement, restoration, and denoising.</li></ol>

		<p>5. Analyze a wide range of problems and provide solutions related to the design of image processing systems and apply these techniques to real world problems.</p> <p>6. Practice self-learning by using e-courses and web materials.</p>
CSL723	High Speed Networks and Mobile Technologies	<p>1. Have knowledge of different high speed communication LAN technologies like 10G Ethernet, Wi-Fi, WiMAX, WiMAX Fiber Channel.</p> <p>2. Have knowledge of different high speed WAN technologies like ATM, ISDN and Frame Relay.</p> <p>3. Understand different mobile communication technologies and protocols.</p> <p>4. Be able to start research for improvement of performance of these technologies.</p>
CSL724	Cloud Computing	<p>1. Able to understand about Cloud Computing Platforms and Technologies.</p> <p>2. Students will be aware about Architecture and Open Challenges in Cloud Computing.</p> <p>3. Students will be able to monitor and manage cloud computing applications.</p> <p>4. Students will be able to describe the mechanisms needed to harness Cloud Computing in their own respective endeavors. 5. Students will be able to solve develop case studies related to Cloud Computing.</p>
CSL725	Research Methods	<p>1. Identify and define a research problem and its parameters.</p> <p>2. organize and conduct research in an organized manner.</p> <p>3. To understand and apply probability distributions.</p> <p>4. Use software tools to apply statistics.</p> <p>5. To conduct experiments, interpret data and results.</p>

CSL726	Security of Information Systems	<ol style="list-style-type: none"> <li>1. Be able to apply Symmetric and Asymmetric Cryptographic Algorithms, Hashing functions, Digital Signatures, Key Management.</li> <li>2. Have knowledge of the tools for Intrusion Detection Systems like nmap, Nessus, Tripwire etc.</li> <li>3. Have knowledge of cyber laws.</li> <li>4. Be aware of ethical aspects of security and privacy of information.</li> </ol>
CSL727	Sensor Networks	<ol style="list-style-type: none"> <li>1. Specific use of sensor networks and basic sensor network operations.</li> <li>2. Lower Layer Issues-Mac, Scheduling, And Transmission.</li> <li>3. Network layer protocols, energy efficient routing protocols.</li> <li>4. The application and utility of sensor network.</li> </ol>
CSL 728	Computational Geometry	<ol style="list-style-type: none"> <li>1. Analyze the complexity of a given algorithm.</li> <li>2. Argue regarding the correctness and efficiency of an algorithm.</li> <li>3. Apply theoretical and practical aspects of a problem in the different application domains.</li> <li>4. Provide algorithmic solutions for different geometric problems.</li> </ol>
CSL729	Mathematical Concepts for Computer Science	<ol style="list-style-type: none"> <li>1. Understand and apply the knowledge of mathematics in the domain of computing problems.</li> <li>2. Create and comprehend mathematical arguments.</li> <li>3. Be able to formulate logical expressions, fuzzy logic to solve a variety of problems related to real scenarios.</li> <li>4. Be able to apply the mathematical constructs to solve problem that re modeled by graphs.</li> </ol>

		5. To be able to understand and apply mathematics related to random and stochastic processes.
CSL730	Analysis and Design of Computer Algorithms	<ol style="list-style-type: none"> <li>1. Understand the various algorithmic techniques.</li> <li>2. Analyze the time and space complexity of algorithms.</li> <li>3. Design algorithms for unforeseen problems.</li> <li>4. Compare and critically analyze the different algorithm design techniques for a given problem.</li> <li>5. Modify existing algorithms to improve efficiency</li> </ol>
CSP721	Soft Computing Lab.	<ol style="list-style-type: none"> <li>1. Practically apply Genetic Algorithms using C/C++ programming language to optimize some benchmark functions.</li> <li>2. Conduct experiments applying soft computing techniques and interpret the results.</li> <li>3. Design Genetic Algorithms for unforeseen problems.</li> <li>4. Use the tools like R and MATLAB proficiently to implement the Soft Computing techniques.</li> </ol>
CSP722	Digital Image Processing Lab.	<ol style="list-style-type: none"> <li>1. Describe and write the programs to represent 2-D data, time and frequency domain representations, filtering.</li> <li>2. Apply the enhancement, and segmentation algorithms for particular applications.</li> <li>3. Analyze the image processing problems.</li> <li>4. Design the image processing algorithms to be applied on real world data manipulation.</li> </ol>

**Department of CSE**

**M. Tech CSE (3<sup>rd</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
CSL731	Technical Writing and Effective Communication Skills	<ol style="list-style-type: none"><li>1. Know the process of research and the ethical issues related to it.</li><li>2. Be able to listen and contribute to the discussions.</li><li>3. Be able to organize research ideas and present it to others through presentations</li><li>4. Write a research/project proposal, synopsis, dissertation and research paper</li><li>5. Be proficient with English usage and style for technical writing</li><li>6. Be able proficiently to compile and format documents in MSWORD and Latex</li><li>7. References managing tools like Zotero and Endnote etc.</li></ol>
CSL732	Data Mining Concepts and Techniques	<ol style="list-style-type: none"><li>1. Be able to appreciate the need for data mining.</li><li>2. Be able to identify variable types and select the appropriate statistics.</li><li>3. Be able to understand and pre-process data to make it suitable for mining</li><li>4. Apply data mining techniques to discover interesting knowledge from various types of databases/datasets.</li><li>5. To be able to interpret and evaluate the outcomes of data mining process.</li><li>6. To use the tools available for data mining.</li><li>7. To choose a suitable data mining algorithm for addressing a given data mining task.</li></ol>



CSL733	Performance Evaluation	<ol style="list-style-type: none"> <li>1. Understand the stochastic processes both discrete and continuous.</li> <li>2. To be able to apply of queuing theory for performance evaluation.</li> <li>3. To be able to evaluate the performance for limited and infinite storage.</li> <li>4. To be able analyze equilibrium and Erlangian distribution.</li> </ol>
CSL734	Machine Learning and Pattern Recognition	<ol style="list-style-type: none"> <li>1. Describe how to build systems that learn and adapt using real-world applications.</li> <li>2. Apply feature extraction and feature selection techniques.</li> <li>3. Develop pattern recognition techniques for practical problems such as document recognition.</li> <li>4. Compare and Contrast supervised learning and unsupervised learning.</li> </ol>
CSL735	Software Project Management	<ol style="list-style-type: none"> <li>1. Students will be able to understand and practice the process models, project life cycle models and the metrics road map along with typical metrics strategy used in software project management.</li> <li>2. Understand risk management analysis techniques that identify the factors that put a project on risk and to quantify the likely effect of risk on project timescales.</li> <li>3. Students will be able to understand and use process and activities related to configuration management, Software Quality Assurance, project initiation and completion criteria for the project intimation phase.</li> <li>4. Students will be able to demonstrate use of tools and techniques for project planning and tracking, estimation along with the activities involved in testing phase and maintenance in software project management.</li> </ol>

CSL736	Bio-informatics	<ol style="list-style-type: none"> <li>1. Be aware of basic terminologies used in the field of Bioinformatics.</li> <li>2. Be aware of databases related to Bioinformatics and able to comprehend data in these databases.</li> <li>3. To be able to perform sequence alignment and analysis using software tools.</li> <li>4. To be able to apply computational techniques and prediction algorithms to solve problems related to the domain of Bioinformatics.</li> </ol>
CSL737	Introduction to Natural Language Processing	<ol style="list-style-type: none"> <li>1. Understand the mathematical and linguistic foundations in the area of NLP.</li> <li>2. Design, implement and test algorithms for NLP problems.</li> <li>3. Assess or evaluate NLP based systems.</li> <li>4. Choose appropriate solutions for Natural Processing Language.</li> </ol>
CSD-731	Dissertation and Seminar-I	<ol style="list-style-type: none"> <li>1. Planning research including steps like indentifying research problem and selecting appropriate research methods and tools.</li> <li>2. Organising ideas into the form of a research synopsis/proposal.</li> <li>3. Organising and write references.</li> <li>4. Communicating effectively verbally and in writing.</li> <li>5. Discussing novel ideas critically and openly, and improving the research proposal in the light of the feedback given by others.</li> <li>6. MS Office and other tools for writing and presenting the research proposals.</li> </ol>

BME 700	Bio-medical Instrumentation	<ol style="list-style-type: none"> <li>1. Learners are expected to get acquainted with the construction and operation of biomedical equipment and their significance in health care sector.</li> <li>2. Stimulation among the students to start research and development in biomedical instrumentation and engineering.</li> </ol>
ECE 700	Advancements in Communication Systems	<ol style="list-style-type: none"> <li>1. Ability to understand about the advanced communication systems.</li> <li>2. Students get introduction about navigational techniques.</li> <li>3. Satellite is the core of modern communication. Students get the introduction about satellite by this subject.</li> </ol>
ME700	Computer Aided Design and Manufacturing	<ol style="list-style-type: none"> <li>1. Students would learn about the concepts of surface modeling, physically based modeling and surface visualization.</li> <li>2. Students would be able to Implement CNC programs for milling and turning machining operations</li> </ol>
MTPT 700	Advanced Printing Technologies	<ol style="list-style-type: none"> <li>1. The learning outcome of this course is expected that after completion of this course the students will be having the detail knowledge of various printing processes and the recent development in this industry and they will implement their knowledge for print production operations.</li> </ol>
CSP-731	Research Tools for Computer Science and Engineering Lab.	<ol style="list-style-type: none"> <li>1. Be able to practically select and appropriate research tools to solve a real world research problem.</li> <li>2. Design experiments to test a research hypothesis.</li> <li>3. Be able to use the tools like MATLAB and R.</li> <li>4. Understand data and interpret results.</li> </ol>

**Department of CSE**

**M. Tech CSE (4<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
CSD-741	Dissertation and Seminar-II	<ol style="list-style-type: none"><li>1. Handle research problems independently.</li><li>2. Analyse and review the existing literature on a research question.</li><li>3. Read research material/papers critically and make original comments on it.</li><li>4. Design and conduct experiments.</li><li>5. Interpret data and result, and critically evaluate empirical evidence.</li><li>6. Use research methods efficiently.</li><li>7. Use modern research tools.</li><li>8. Write dissertation and technical reports.</li><li>9. Publish research papers.</li><li>10. Understand the social relevance of research.</li><li>11. Communicate research ideas verbally and in writing.</li><li>12. To discuss ideas in a groups and accept critical comments.</li></ol>

**MASTER OF TECHNOLOGY**  
**IN**  
**ELECTRONICS AND COMMUNICATION**  
**ENGINEERING**

**2 YEARS PROGRAMME**  
**Choice Based Credit System**  
**w. e. f. July 2015**  
**(70:30)**



**DEPARTMENT OF ELECTRONICS AND COMMUNICATION**  
**ENGINEERING**

## **Programme Educational Objectives (PEOs)**

**PEO1:** To prepare PG students with a solid foundation in Engineering and Technology for a successful career in Electronics and Communication Engineering.

**PEO 2:** To prepare PG students to engage in professional development through self-study, professional studies and research in engineering & technology.

**PEO 3:** To prepare PG students to become effective collaborators / innovators in efforts to address social, technical and engineering challenges and become responsible engineers.

## **Programme Outcomes (POs)**

POs describe what students are expected to be able to do by the time of graduation from the program. Following are the Program Outcomes:

**PO1:** An ability to independently carry out research/investigation and development work to solve practical problems.

**PO2:** An ability to write and present a substantial technical report/document.

**PO3:** Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

## **Programme Specific Outcomes (PSOs)**

**PSO1:** Students should be able to develop advanced understanding of the concepts of Electronics & communication engineering and their applications in the specific areas of VLSI, Communication Engineering and signal processing.

**PSO2:** Students should have an ability to apply technical knowledge of modern hardware & software tools for the design of electronic subsystems for solving various engineering problems.

<b>Department of ECE</b>		
<b>M. Tech ECE (1<sup>st</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
ECL-712	IC Fabrication Technology	<p>CO-1 Understanding of different techniques and measures for IC fabrication.</p> <p>CO-2 Ability to apply fabrication principles in industry as a fabrication engineer.</p> <p>CO-3 Ability to contribute for further research in IC fabrication.</p>
ECL-713	Digital VLSI Design	<p>CO-1 Understanding of building blocks of VLSI circuits and design equations.</p> <p>CO-2 Gain knowledge of design principles and layouts of various logic circuits.</p> <p>CO-3 Ability to identify and analyze problems in digital VLSI circuits.</p> <p>CO-4 Apply subject knowledge of digital circuit design through software tools for advanced research.</p>
ECL-714	Hardware Description Languages	<p>CO-1 Gain knowledge of hardware design methodologies using VHDL &amp; Verilog.</p> <p>CO-2 Ability to write VHDL code in various modelling styles i.e. structural, behavioral and sequential.</p> <p>CO-3 Ability to develop circuits and project for professional development.</p>
ECL-715	Embedded System Design	<p>CO-1 Understanding of detailed architecture of conventional as well as the latest microcontroller.</p> <p>CO-2 Develop assembly language programs for problem Solvay related to embedded systems.</p>

		CO-3 Ability to design and implement an embedded system using model circuits design.
ECL-719	Signal Processing	CO-1 Ability to understand the significance of signal processing in the fields of speech processing.  CO-2 Ability to gain an appreciation of the technology and the software tools currently available  CO-3 Ability to study in detail some of the most important design techniques for speech recognition systems.
ECP-716	Digital VLSI Design Lab	CO-1 Ability to characterize and model the circuit behaviors. CO-2 Ability to apply theoretical concepts of digital VLSI design in practice through simulation tools.  CO-3 Develop logic circuits using MOS transistors, memory design and layout.  CO-4 Ability to work with industry standard simulation on tools and become a successful design engineer.
ECP-717	HDL Lab	CO-1 Understanding of system and concepts required to write a UHDL code.  CO-2 Ability to simulate UHDL code and develop circuits models.  CO-3 Ability to identify and debug system and logical problems. CO-4 Ability to address research challenges through circuits analysis and modelling
ECP-718	Embedded System Design Lab	CO-1 Practical understanding of architect use, interfacing issues and programming skills of latest microcontroller.  CO-2 Hands on experience on industry standard KEIL make development boards related to 8051, PIC, ARM and ARM9 processors.  CO-3 Develop assembly long programs for problem solving as well as interfacing of external devices with microcontroller.



		CO-4 Ability to design and develop an imbedded system for variety of applications.
AC01	English For Research Paper Writing	<ol style="list-style-type: none"> <li>1. Understand that how to improve your writing skills and level of readability.</li> <li>2. Learn about what to write in each section.</li> <li>3. Understand the skills needed when writing a Title Ensure the good quality of paper at very first-time submission</li> </ol>
AC02	Disaster Management	<ol style="list-style-type: none"> <li>1. Learn to demonstrate a critical understanding of key concepts in disaster risk reduction and humanitarian response.</li> <li>2. Critically evaluate disaster risk reduction and humanitarian response policy and practice from multiple perspectives.</li> <li>3. Develop an understanding of standards of humanitarian response and practical relevance in specific types of disasters and conflict situations.</li> <li>4. Critically understand the strengths and weaknesses of disaster management approaches, planning and programming in different countries, particularly their home country or the countries they work in.</li> </ol>
AC04	Value Education	<ol style="list-style-type: none"> <li>1. Knowledge of self-development</li> <li>2. Learn the importance of Human values</li> <li>3. Developing the overall personality</li> </ol>
AC07	Stress Management By Yoga	<ol style="list-style-type: none"> <li>1. Develop healthy mind in a healthy body thus improving social health also</li> <li>2. Improve efficiency</li> </ol>

<b>Department of ECE</b>		
<b>M. Tech ECE (2<sup>nd</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
ECL-721	Mobile Communication	<p>CO-1 Develop thorough understanding of the advanced concepts used in wireless communication i.e. Mobile tail propagation, wireless system and analysis Diversity, etc.</p> <p>CO-2 In-depth knowledge of the latest and future technologies prevalent in mobile communication industry i.e. Multicarrier, u-u, MUD, MIMO, etc.</p> <p>CO-3 Develop interest/acumen to pursue further research in the area of broadband wireless comm.</p>
ECL-722	Advanced Optical Communication Systems	<p>CO-1 Thorough understating of the optical components and design of optical comm. System.</p> <p>CO-2 Analysis of performances of optical filer comm. System and calculation of various performance parameters of optical link.</p> <p>CO-3 Ability to apply concepts of optical comm. In further research for last mile affordable connectivity.</p>
ECL-723	Analog IC Design	<p>CO-1 Design and analysis of various linear and non-linear along circuits.</p> <p>CO-2 Ability to apply design methodology for the design of various application specific integrated circuits.</p> <p>CO-3 Gain knowledge of design principles and design parameters related to along IC design.</p>
ECL-724	Adaptive Signal Processing	<p>CO-1 Ability to understand the significance of signal processing (DSP) in the fields of computing, telecommunications and</p> <p>CO-2 Ability to gain an appreciation of the technology and the software tools currently available</p>

		CO-3 Ability to study in detail some of the most important design techniques for DSP systems.
ECL-725 (i)	Algorithm for VLSI Design Automation	CO-1 Ability to understand various algorithms related VLSI design techniques CO-2 Ability to understand CAD tools for the design of VLSI circuits. CO-3 Ability to understand application based routing and compaction process
ECL-725(ii)	Advanced Computer Architectures	CO-1 Ability to understand the basic architecture of advance computer systems. CO-2 Ability to understand storage organization and problem solving. CO-3 Ability to understand application oriented designing and assembling of computer system.
ECL-725(iii)	MEMS and IC Integration	CO-1 Ability to Understand CMOS IC fabrication and MEMS applications. CO-2 Ability to understand the use of a new set of design and verification tools, in addition to AutoCAD tools. CO-3 Ability to understand the materials and processes used to design and fabricate MEMS
ECP-726	Adaptive Signal Processing Lab	CO-1 Ability to understand various algorithms related to windowing techniques. CO-2 Ability to understand tools for the design of practical applicable filters. CO-3 Ability to understand application based signal processing systems.
AC03	Sanskrit For Technical Knowledge	1. To get a working knowledge in illustrious Sanskrit, the scientific language in the world

		<p>2. Learning of Sanskrit to improve brain functioning</p> <p>3. Learning of Sanskrit to develop the logic in mathematics, science &amp; other subjects enhancing the memory power</p> <p>4. The engineering scholars equipped with Sanskrit will be able to explore the huge knowledge from ancient literature</p>
AC05	Constitution Of India	<p>1. Discuss the growth of the demand for civil rights in India for the bulk of Indians before the arrival of Gandhi in Indian politics.</p> <p>2. Discuss the intellectual origins of the framework of argument that informed the conceptualization of social reforms leading to revolution in India.</p> <p>3. Discuss the circumstances surrounding the foundation of the Congress Socialist Party [CSP] under the leadership of Jawaharlal Nehru and the eventual failure of the proposal of direct elections through adult suffrage in the Indian Constitution.</p> <p>4. Discuss the passage of the Hindu Code Bill of 1956.</p>
AC06	Pedagogy Studies	<p>1. What pedagogical practices are being used by teachers in formal and informal classrooms in developing countries?</p> <p>2. Model Curriculum of Engineering &amp; Technology PG Courses [Volume -II] [ 306 ]</p> <p>3. What is the evidence on the effectiveness of these pedagogical practices, in what conditions, and with what population of learners?</p> <p>4. How can teacher education (curriculum and practicum) and the school curriculum and guidance materials best support effective pedagogy?</p>
AC08	Personality Development Through Life	<p>1. Study of Shrimad-Bhagwad-Geeta will help the student in developing his personality and achieve the highest goal in</p>

	Enlightenment Skills	life 2. The person who has studied Geeta will lead the nation and mankind to peace and prosperity  3. Study of Neetishatakam will help in developing versatile personality of students.
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<b>Department of ECE</b>		
<b>M. Tech ECE (3<sup>rd</sup> Semester)</b>		
Course Code	Title of the Paper	Course Outcome
ECL-731 (i)	Mixed-Signal Design	<p>CO-1 Ability to understand the principles of operation of mixed signal circuits and typical analogue building blocks.</p> <p>CO-2 Ability to understand the various factors that go into design and layout of mixed signal chip.</p> <p>CO-3 Ability to understand application based design issues related to advance mixed signal design.</p>
ECL-731 (ii)	RF Micro-electronics	<p>CO-1 Ability to understand the architectures, operation and performance specifications, tradeoff of a RF receiver and its building blocks.</p> <p>CO-2 Ability to design and analyze various building blocks of receiver like filters, LNA, Mixer, Power Amplifiers, and VCO as per the specifications.</p> <p>CO-3 Ability to understand the sources of nonlinearity, noise, process technology and its impact on the performance parameters of individual blocks of receiver and on receiver performance.</p>
ECL-731 (iii)	VLSI Testing & Testability	<p>CO-1 Ability to analyze the CMOS layout levels, how the design layers are used in the process sequence, and resulting device structures (i.e. cross-sectional views).</p> <p>CO-2 Ability to Implement digital logic designs of various types (i.e. combinational logic, multiplexers).</p> <p>CO-3 Ability to analyze performance issues and the inherent trade-offs involved in system design (i.e. power vs. speed).</p>
ECL-731 (iv)	Memory System Design	<p>CO-1 Ability to demonstrate characterization and mathematical modeling</p>

		<p>CO-2 Ability to understand various memory system organization.</p> <p>CO-3 Ability to understand advance application based ultra-low power memory circuits.</p>
ECL-731 (v)	Low Power VLSI Design	<p>CO-1 Ability to mathematical model to evaluate low power VLSI circuits.</p> <p>CO-2 Ability to understand the various sources of power dissipation and their optimization.</p> <p>CO-3 Ability to understand low power architecture.</p>
ECL-731 (vi)	Embedded System for Wireless & Mobile Communication	<p>CO-1 Ability to develop basic understanding and impart in-depth knowledge of various topics like wireless communication technologies, Bluetooth protocol, its hardware, etc.</p> <p>CO-2 Ability to understand the concepts, architecture and programming related to JAVA and various mobile applications. CO-3 Ability to understand various kinds of antennas used for mobile applications.</p>
ECL-731 (vii)	Hardware & Software Co-Design	<p>CO-1 Ability to understand the issues related with hardware software co-design with introduction, co design concept, performance evaluation, etc.</p> <p>CO-2 Ability to compare the performance evaluation of VLSI circuits.</p> <p>CO-3 Ability to design and develop application based hardware and software model.</p>
ECL-731 (viii)	Advanced Digital Communication	<p>CO-1 Ability to understand the working principles of existing and advanced digital communication techniques.</p> <p>CO-2 Ability to understand basic techniques suitable to understand, design and evaluate the main elements of a modern digital communication system.</p>

		CO-3 Ability to recognize the broad applicability of digital communication systems in society
ECL-731 (ix)	Satellite Communication	CO-1 Ability to demonstrate an understanding of the basic principles of satellite orbits, placement and control, satellite link design and the communication system components.  CO-2 Ability to specify systems design and analyze the performance of satellite communications systems.  CO-3 Ability to implement the satellite communication techniques for industry, social problems etc.
3OE01	Business Analytics	1. Students will demonstrate knowledge of data analytics.  2. Students will demonstrate the ability of think critically in making decisions based on data and deep analytics.  3. Students will demonstrate the ability to use technical skills in predicative and prescriptive modeling to support business decision-making.  4. Students will demonstrate the ability to translate data into clear, actionable insights.
3OE02	Industrial Safety	
3OE03	Operations Research	1. Students should able to apply the dynamic programming to solve problems of discreet and continuous variables.  2. Students should able to apply the concept of non-linear programming  3. Students should able to carry out sensitivity analysis  4. Student should able to model the real world problem and simulate it.
3OE04	Cost Management of Engineering Projects	



3OE05	Composite Materials	
3OE06	Waste to Energy	
3OE07	Advancements in Communication Systems	<p>CO-1 Ability to understand about the advanced communication systems.</p> <p>CO-2 Students get introduction about navigational techniques. CO-3 Satellite is the core of modern communication. Students get the introduction about satellite by this subject.</p>
3OE08	Biomedical Instrumentation	<p>1. Learners are expected to get acquainted with the construction and operation of biomedical equipment and their significance in health care sector.</p> <p>2. Stimulation among the students to start research and development in biomedical instrumentation and engineering.</p>
ECP-732	Advance VLSI Design Laboratory	<p>CO-1 Introduce the technology, design concepts, electrical properties and modeling of Very Large Scale Integrated circuits.</p> <p>CO-2 Ability to understand concepts of modeling a digital system using Hardware.</p> <p>CO-3 Ability to design application oriented hardware.</p>
ECP-733	Communication System Design Lab	<p>CO-1 To demonstrate and design WDM high bit-rate fibre optic communication systems. CO-2 To analyse, model and implement advanced optical communication systems. CO-3 To use optical communications simulation tools to assess the results obtained from theoretical studies.</p>
ECD-730	Thesis – Part I	<p>CO-1 Ability to identify research issue/problem on complex engineering topics related to ECE.</p> <p>CO-2 Gain knowledge on the research problem identified through extensive literature survey.</p>

		<p>CO-3 Ability to work in group and manage and understand research papers/literature related to research topic through group-discussion.</p> <p>CO-4 Understanding of professional &amp; ethical research issues. CO-5 Ability to present/communicate effectively the research topic through synopsis presentation.</p> <p>CO-6 Understanding of simulator tools required to carry out research work.</p>
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**Department of ECE**

**M. Tech ECE (4<sup>th</sup> Semester)**

Course Code	Title of the Paper	Course Outcome
ECD-740	Thesis – Part II	<p>CO-1 Ability to bring ideas into practice through simulation of analysis of research topic.</p> <p>CO-2 Ability to identify specific problems/issues in the form of research objectives.</p> <p>CO-3 Ability to propose a novel idea/modified technique/new interpretation after analyzing the existing research work.</p> <p>CO-4 Ability to contribute towards the knowledge up gradation of scientific community and society in general.</p> <p>CO-5 Improved communication skills (oral as well as writing) through seminars, group discussions, thesis writing and research paper writing.</p> <p>CO-6 Understanding of significance of ethical and research professional.</p> <p>CO-7 Ability to stay updated through continuous learning.</p> <p>CO-8 Understanding of research techniques and simulation tools for detected analysis of research issues.</p> <p>CO-9 Interpretation and compilation of simulation result to issue at a meaningful conclusion.</p>

**MASTER OF TECHNOLOGY**  
**IN**  
**MECHANICAL ENGINEERING**

**2 YEARS PROGRAMME**

**Choice Based Credit System**

**w. e. f. July 2015**

**(70:30)**



**DEPARTMENT OF MECHANICAL ENGINEERING**

## **PROGRAMME EDUCATIONAL OBJECTIVES**

- PEO1 : To impart knowledge to students in the latest technological topics on Mechanical Engineering and to provide them with opportunities in taking up advanced topics in the field of research.
- PEO2 : To create a congenial environment that promotes learning, growth and imparts ability to work with inter-disciplinary research.
- PEO3 : To broaden and deepen their capabilities in analytical and experimental research methods, analysis of data, and drawing relevant conclusions for scholarly writing and presentation of their research work.
- PEO4 : To provide guidance to students for their choices in research and professional career outlook and to encourage students to take up research.
- PEO5 : To equip students with integrity and ethical values so that they become responsible technocrats.

## **PROGRAMME OUTCOMES**

- PO1 : Acquiring fundamental knowledge and understanding in the field of Mechanical Engineering.
- PO2 : Formulating relevant research problems; conducting experimental and/or analytical work and analyzing results using modern mathematical and scientific methods.
- PO3 : Reviewing and documenting the knowledge developed by scholarly predecessors and critically assess the relevant technological issues.
- PO4 : Designing and validating technological solutions to defined problems and write clearly and effectively for the practical utilization of their work.
- PO5 : Ability to use the techniques, skills, and modern engineering tools necessary for mechanical engineering practice.
- PO6 : Ability to function effectively on multidisciplinary teams

<b>DEPARTMENT OF MECHANICAL</b>		
<b>M.Tech ME(1<sup>st</sup> Semester)</b>		
Course Code	Tittle of the Paper	Course Outcome
ME-751	Advanced Mechanics of Solids	<p>Students would be able to</p> <ul style="list-style-type: none"> <li>•understand the concepts of stress and strain, strength and stiffness, deformation and displacement and energy theorems</li>   <li>•predict the behaviour of the solid bodies subjected to various types of loading.</li>   <li>•design machine elements using theories of deformable bodies.</li> </ul>
ME-753	Advanced Engineering Materials	<p>Students would be able to</p> <ul style="list-style-type: none"> <li>•understand significance of material science and its role in manufacturing.</li>   <li>•analyze the importance of various engineering materials (metals, polymers, ceramics, composites, Semi-conductor).</li>   <li>•recite ceramics and composites, their manufacturing techniques, properties and applications.</li>   <li>•propose appropriate plastics and polymers for different applications.</li> </ul>
ME-755	Automation in Manufacturing	<p>Students will be able to</p> <ul style="list-style-type: none"> <li>•understand the concepts of automation theory and its applications in various fields of manufacturing.</li>   <li>•understand principles, methods, and hardware/software tools used in modern computerized design and manufacturing of discrete parts.</li>   <li>•understand the main principals and components involved in optimizing production system design and operations.</li> </ul>

ME-757	CNC Technology and Programming	Students will be able to : <ul style="list-style-type: none"> <li>•understand the basics of CNC machines.</li> <li>•write CNC programs proficiently.</li> </ul>
ME-759	Advanced Heat and Mass Transfer	<ul style="list-style-type: none"> <li>•Students will be able to understand and can analyze heat conduction problems under steady and transient states.</li> <li>•Student will be to understand the physical phenomena associated with free and forced convection, boiling and condensation and will be able to solve problems based on them.</li> <li>•Each student understands the physical mechanisms involved in radiation heat and mass transfer.</li> </ul>
ME-761	Advanced Mechanics of Solids Lab	Students will be able to <ul style="list-style-type: none"> <li>•predict the behaviour of the solid bodies subjected to various types of loading.</li> <li>•design machine elements using theories of deformable bodies.</li> <li>•select material in engineering applications based upon experimental data.</li> </ul>
ME-763	CNC Technology and Programming Lab	Students will be able to <ul style="list-style-type: none"> <li>•manually write, edit, debug, and use CNC programs to produce products.</li> </ul>
M.Tech ME(2 <sup>nd</sup> Semester)		
ME-752	Advanced Machine Design	Students would be able to <ul style="list-style-type: none"> <li>•design products for manufacturing, assembly, aesthetics, ergonomics, fatigue and creep.</li> </ul>
ME-754	Computer Aided Design and Manufacturing	Students will be able to <ul style="list-style-type: none"> <li>•create the different wireframe and surface primitives using parametric modeling.</li> </ul>

		<ul style="list-style-type: none"> <li>•create the different solid primitives using the different representation schemes.</li> <li>•manipulate the created wireframe, surface and solid models.</li> </ul>
ME-756	Finite Element Methods	<p>The students will be able to</p> <ul style="list-style-type: none"> <li>•select the different types of element, generate mesh, construct element stiffness matrices, assemble element stiffness matrices, impose boundary conditions, solve the equations and interpret the results for different problems.</li> <li>•apply Finite Element Methods to 1D, 2D, 3D practical engineering problems.</li> </ul>
ME-758	Tool Engineering	<p>Students would be able to</p> <ul style="list-style-type: none"> <li>•understand the mechanics of various advanced machining processes including the material removal, tool design, effect of process parameters on the output responses.</li> <li>•impart depth knowledge on principle involved, accuracy involved, tooling requirement and knowledge about the process capability.</li> <li>•develop knowledge and skills design of various jigs and fixtures to increase the production rate.</li> </ul>
ME-762	Finite Element Methods Lab	<p>Students will be able to</p> <ul style="list-style-type: none"> <li>•develop the computer program for the analysis and solution of practical engineering problems.</li> <li>•analyze and solve the practical engineering problems by using the FEM software (ANSYS).</li> </ul>
ME-760	Computer Aided Design and Manufacturing Lab	<p>Students will be able to</p> <ul style="list-style-type: none"> <li>•use parametric CAD software(s) for geometric modeling, analysis and computer assisted manufacturing of mechanical components.</li> </ul>



		<ul style="list-style-type: none"> <li>manually write, edit, debug, and use CNC programs to produce complex profiles on CNC machines.</li> </ul>
M.Tech ME(3 <sup>rd</sup> Semester)		
ME-765	Tribology	<p>The students will be able to</p> <ul style="list-style-type: none"> <li>to understand the interdisciplinary subject 'Tribology' and its technological significance</li> <li>to understand the genesis of friction and wear</li> <li>to learn about the principles of lubrication, lubrication regimes, hydrodynamic lubrication and hydrostatic lubrication</li> <li>to learn about emerging areas such as bio Tribology and micro/nano Tribology</li> </ul>
ME-767	Tribology Lab	<p>Students will be able to</p> <ul style="list-style-type: none"> <li>predict the performance characteristics of hydrodynamic journal bearings experimentally.</li> <li>determine the behaviour of lubricants under different operating conditions.</li> <li>predict the friction and wear characteristics under different loads.</li> <li>analyze and predict the performance characteristics of hydrodynamic/hydrostatic journal bearings using software (ARMD).</li> </ul>
ME-769	SEMINAR	<p>Students will be able to</p> <ul style="list-style-type: none"> <li>expose themselves to the world of research</li> <li>review of a research area of current era</li> </ul>
ME-771	THESIS (STARTS)	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>gain knowledge on the research problems identified through extensive literature survey.</li> <li>understand professional &amp; ethical research issues.</li> </ul>

		<ul style="list-style-type: none"> <li>•present effectively the research topic through synopsis presentation.</li> </ul>
M.Tech ME(4 <sup>th</sup> Semester)		
ME-772	Thesis	<p>Students will be able to</p> <ul style="list-style-type: none"> <li>•contribute in the Research and Development</li> <li>•upgrade knowledge of scientific community and society in general through their research.</li> </ul>

**MASTER OF TECHNOLOGY**  
**IN**  
**PRINTING TECHNOLOGY**  
**2 YEARS PROGRAMME**

**Choice Based Credit System**  
**w. e. f. July 2015**  
**(70:30)**



**DEPARTMENT OF PRINTING TECHNOLOGY**

## **Programme Educational Objectives (M. Tech. Printing Technology)**

PEO 1: Post graduate technocrats will have the expertise of phenomenal principles and modern techniques to cope up with state-of-art technology.

PEO 2: To develop post graduate technocrats with a strong foundation in the areas of printing technology.

PEO 3: To equip the print technocrats with deep awareness of ethical responsibilities in profession.

## **Programme Outcomes (POs)**

In order to achieve the PEOs of M. Tech.(Printing Technology), we expect our students to attain the following outcomes by the time of their graduation. The Programme graduates will have:

PO 1: Ability to apply knowledge of state-of-art techniques in Printing Technology. PO 2: Ability to analyze a problem, identify and define appropriate solution to it. PO 3: Ability to design, implement and evaluate a print centric system to meet desired needs with appropriate societal considerations.

PO 4: Ability to conduct observations, interpret data and provide conclusions in solving complex problems related to Printing Technology.

PO 5: Ability to use appropriate techniques, skills, and modern tools necessary for preparing print entrepreneurs.

PO 6: Ability to apply safety and legal aspects in technology management related issues.

PO 7: Ability to practice knowledge of the impact of professional engineering solutions in environmental concerns.

PO 8: An understanding of professional, ethical, security and social issues and responsibilities.

PO 9: Ability to perform effectively as team member and leader both in different circumstances.

PO 10: Ability to communicate effectively on complex engineering perspectives. PO 11:

Ability to demonstrate knowledge on project management principles and research aptitudes.

PO 12: Ability to impart sustainable professional knowledge for future printing needs.

Department of Printing Technology		
M.Tech. 1 <sup>st</sup> & 2 <sup>nd</sup> year		
Course Code	Title of the Paper	Course Outcome
MTPT -701	Graphics in Printing and Packaging	<ol style="list-style-type: none"> <li>1. The students will be able to execute Interactive devices.</li> <li>2. The students will become able to work with publishing software and file formats.</li> <li>3. The students will able to implement their skills &amp; knowledge in the organization.</li> </ol>
MTPT -702	Print and Packaging Material and Testing	<ol style="list-style-type: none"> <li>1. The students will be having the detailed knowledge of different conventional and non conventional printing and packaging materials used in the industry along with their identification.</li> <li>2. The students will understand the testing techniques of printing and packaging materials.</li> <li>3. They will able to implement their knowledge for quality printing and packaging.</li> </ol>
MTPT -703	Newspaper and Multi Media Technologies	<ol style="list-style-type: none"> <li>1. The students will be able to understand the latest technology in this field.</li> <li>2. The students will become a skilled and creative user of current multimedia and newspaper technology.</li> <li>3. Students will be able to implement their skills and knowledge in newspaper &amp; multimedia organizations.</li> </ol>
MTPT -704	Print Entrepreneurship	<ol style="list-style-type: none"> <li>1. Students will be able to learn fundamentals of Entrepreneurship.</li> <li>2. Students will be aware of legal aspects of Industries. Preparing Print Technocrat for fulltime involvement in his own/her occupation as an entrepreneur</li> </ol>
MTPT-705	Advanced Print Finishing Techniques	<ol style="list-style-type: none"> <li>1. The students will be able to understand the elementary as well as the latest finishing techniques in printing &amp; packaging field.</li> <li>2. The students will be able to understand different forms of packaging.</li> <li>3. The students will be able to use packaging materials and techniques as per the need in Industry.</li> </ol>

2ndsem.				
Course Code		Title of the Paper	Course Outcome	
MTPT-711	Digital workflow Lab	Modern Printing Systems		<ol style="list-style-type: none"> <li>1. The students will learn the new work with Modern Printing Systems and various perspectives workflow system.</li> <li>2. The students will be able to understand digital workflow system.</li> <li>3. The student will understand about the CMS.</li> <li>4. The students will be able to use their knowledge in the Industry.</li> </ol>
MTPT-712	Digital Imaging Techniques			<ol style="list-style-type: none"> <li>1. The students will be having detailed knowledge about latest technologies of Digital Imaging and Colour Management.</li> <li>2. It will educate the students in the field of Digital imaging.</li> <li>3. Students will effectively learn the usage CMS in the Industry..</li> </ol>
MTPT-713	Advanced Quality Control and Instrumentation			<ol style="list-style-type: none"> <li>1. The students will learn the concept of Quality Control.</li> <li>2. The students will learn about different Standards &amp; their technical know-how.</li> <li>3. The different techniques and measures for quality control provide the students a better understanding which they need in industries or during research as a successful printing technocrat.</li> </ol>
MTPT-714	Print Technology Management			<ol style="list-style-type: none"> <li>1. The students will be able to work with forecasting techniques.</li> <li>2. The students will be having adequate knowledge in depth about latest technologies.</li> </ol> <p>The students will be able to use the advantages of Intellectual property rights.</p>
MTPT-715	Modern Security Printing			<ol style="list-style-type: none"> <li>1. On completion of this course, the students will have deep understanding of various security printing methods and recent trends in security printing.</li> <li>2. Students will be able to implement their knowledge for innovative printing of secured documents in</li> </ol>
MTPT-716	Print Machine Maintenance Lab			<ol style="list-style-type: none"> <li>1. The student will learn about working of advance printing processes.</li> <li>2. They will be able to understand the working of digital presses.</li> </ol>

3rdSem.		
Course Code	Title of the	Course Outcome
MTPT-721(A)/MTPT-721(B)	Program Elective(Choose anyone)	<ol style="list-style-type: none"> <li>1. The students will be having the detailed knowledge of maintenance management techniques used in printing organizations.</li> <li>2. Students will be able to implement their knowledge for effective maintenance and fault rectification plans for printing and packaging industries.               <ol style="list-style-type: none"> <li>1. After completion of this course, the students will have understanding of various packaging processes.</li> <li>2. They will be able to work with the industry by knowing the latest trends.</li> <li>3. Students will be able to implement this knowledge for innovative</li> </ol> </li> </ol>
MTPT-722	Major Project(Part-I)	<ol style="list-style-type: none"> <li>1. Students will be able to make literature review.</li> <li>2. Students will be able to find out the problems of Industry for the selection of research topic.</li> </ol>
MTPT-723	Print and Packaging Quality Control Lab.	<ol style="list-style-type: none"> <li>1. The students will learn the characteristics of different substrate.</li> <li>2. Students will learn about various testing parameters on paper and non paper substrate.</li> </ol>

4thSem.		
Course Code	Title of the Paper	Course Outcome
MTPT-731	Major Project(Part-II)	<ol style="list-style-type: none"> <li>1. Literature review techniques</li> <li>2. Experimental work</li> <li>3. Data collection &amp; analysis techniques</li> <li>4. To get the conclusion &amp; findings</li> <li>5. And to implement the findings of research work for the betterment of printing and packaging industries.</li> </ol>

**THE CURRICULUM BOOK**  
**OF**  
**MASTER OF BUSINESS ADMINISTRATION (MBA)**

**Specializations: Human Resource Management, Marketing, Finance, International Business, Production and Operation Management, Business Analytics, Information Technology Management, Entrepreneurship Development, Rural and Agricultural Management**

**TWO YEARS (FOUR SEMESTERS) PROGRAMME**  
**Choice Based Credit System on Outcome Based Education**  
**(Effective from Session 2020-21)**



**HARYANA SCHOOL OF BUSINESS**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE**

**AND TECHNOLOGY HISAR-125001, HARYANA**



**(YEAR-2020)**

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# **THE CURRICULUM BOOK**

**OF**

## **MASTER OF BUSINESS ADMINISTRATION (MBA)**

**Specializations: Human Resource Management, Marketing, Finance, International Business, Production and Operation Management, Business Analytics, Information Technology Management, Entrepreneurship Development, Rural and Agricultural Management**

### **1.1. Vision and Mission of the Haryana School of Business**

#### **1.1.1** Vision

The school shall strive to achieve the vision of a globally respected institution engaged in generation of knowledge and dissemination of the same through teaching, research and collaboration with leading business schools, the industry, government and society in the fields of business management studies for the benefits of the economy, nation and the world.

#### **1.1.2** Mission

- i)** Striving to contribute its best in transforming raw brains into effective business leaders ready to contribute towards the emerging frontiers of economic and societal growth.
- ii)** Imparting state-of-the-art knowledge in the field of business and management keeping into the changing requirements of the industry.
- iii)** Ensuring that our students graduate with a sound theoretical basis and wide-ranging practical business cases and problem solving experience.
- iv)** Fostering linkages between the academics, business and industry.
- v)** Promoting ethical research of high quality in the field of business and management.
- vi)** Adopting the best pedagogical methods in order to maximize knowledge transfer to ensure outcome based education in business and management.

- vii) Inculcating a culture of free and open discussions in the School thereby engaging students in evolving original business ideas and applying them to solve complex business problems.
- viii) Inspiring an enthusiasm into students for lifelong learning thereby infusing scientific temper, enthusiasm, professionalism, team spirit and business leadership qualities in the students.
- ix) Sensitizing students to look for environmentally sustainable vis-à-vis globally acceptable business solutions.
- x) Upholding democratic values and an environment of equal opportunity for everyone vis-à-vis preparing the students as global humane citizens.

## **1.2. Vision Programme Educational Objectives (PEOs) of the MBA Programme**

The Programme Educational Objectives of the MBA Programme are:

- PEO5. To prepare responsible and ethical management professionals to be successfully employed in public and private sector especially in the corporate sectors at national and global levels, who will be able to apply the principles of business and management to evolve, develop and deploy best possible solutions for real world business and management problems after assessing their economic, environmental, cultural and societal implications.
- PEO6. To groom the budding professionals for analyzing, evaluating and designing complex business and management solutions individually or in teams by doing a methodical and in-depth research and analysis in the related business and management problem domains, by using embryonic modern tools and by communicating effectively among the various stakeholders about due awareness of such business and management solutions.
- PEO7. To mentor the budding professionals and entrepreneurs of tomorrow with global business leadership qualities and deep economic and societal concerns who can move up in their business professional career or start their own ventures as well.
- PEO8. To guide the management graduates to develop a positive attitude towards ethical and value based learning and motivate them to take up higher studies and research in the field of business and management.
- PEO9. To groom budding professional to make them sensitive human beings who can keep due emotions towards humanity and global diversities.

## **1.3. Programme Outcomes (POs) of MBA Programme**

The MBA is a highly prestigious management course of modern times and prepares the participants for taking up middle and top level challenging executive assignments in private and public sectors. Accordingly, they are imparted adequate conceptual knowledge and practical training in various functional areas of management comprising Finance, Marketing, Human Resource Development, International Business and Business Analytics. MBA at HSB is a two years programme divided into four semesters. The programme is aimed at following outcomes:

- PO25. **Business Management Knowledge:** Apply knowledge of business management theories and practices to solve business problems.
- PO26. **Critical Thinking and Problem Analysis:** Foster Analytical and critical thinking abilities for databased decision-making.
- PO27. **Leadership and Business Solutions:** Ability to develop Value based Leadership ability that offers business solutions.
- PO28. **Communication and Other Skills:** Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
- PO29. **Team Dynamics and Management:** Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

#### **Programme Specific Outcomes (PSOs) of MBA Programme**

- PSO1. **Environmental Awareness for Sustainability:** Understand the impact of the professional business solutions in economic, societal and environmental contexts, and demonstrate the business knowledge for sustainable global business development.
- PSO2. **Business Ethics and Values:** Apply ethical principles and commit to business professional ethics and values for discharging all responsibilities within the laid norms of the business and management practices.
- PSO3. **Social Responsibility and Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of global business environment dynamics.

#### **1.4. Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA Programme**

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1								
CO2								
CO3								
CO4								
CO5								
CO6								
	Overall Mapping Result: .....							

**Note: The Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA Programme will be done every year independently by the Committee constituted by the Board of Studies and Research by making 360-degree feedback including auditing of previous years' question-papers and answer-sheets as well. It will be part of the annual Academic Audit of the Haryana School of Business.**

### **1.5. Important Instructions-cum-Ordinance for Implementing the Outcome based Education Scheme and Syllabus of MBA Programme**

- i) The MBA programme will be divided into four semesters (two semesters in the first year and two semesters in the second year). Every semester, generally, shall be of 21 weeks of duration inclusive of teaching and examination. Since, University is in five-days a week functioning mode, hence, allotted credits to each and every course of the programme would be duly compensated with extra hours to essentially fulfill the objective of minimum working days, per semester, as prescribed by the UGC/AICTE for the Universities and Colleges in this connection.
- ii) The course of 05 (five) credits shall be of 100 marks in the ratio of 60% external and 40% internal. If otherwise not specifically mentioned against each course, each course of study, ordinarily, consist of five hours lectures per week per semester and one-hour tutorial per week, per group, per semester.

- iii) Unless and otherwise specified at appropriate places, the division and distribution of marks is as under:

**Final/Major Test (External)** : 60 Marks

**Internal Assessment (Internal)** : 40 Marks

Distribution of weightage of 40 marks of Internal Assessment will be as per following details:

**Minor Tests** : 15 Marks

**Attendance & Co-curricular Activities** : 25 Marks (Attendance: 05)

(To be announced by the teacher or course coordinator, in the light of expected Course Outcomes in the concerned course, in the beginning of the semester, which may include Attendance, Home-Assignment, Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc. However, a teacher or course coordinator will choose at any five components and announce to the class in the beginning of the semester)

- iv) Each individual course will consist of Maximum Marks as 100 Marks and Passing Marks will be 40 Marks only. However, the aggregate passing marks in a semester will be 50 per cent of the total marks per semester.
- v) A wide range of assessment types for evaluating students is available for the teachers/ institutions to use for internal assessment. Each assessment type has its distinct utility, advantages and limitations. A suitable compendium of such types needs to be carefully chosen for a particular course depending on its nature, objectives and available resources.
- vi) The Internal Assessment awarded to a student in any particular course will be based on performance of the students in Two Minor Tests, Attendance and Co-Curricular Activities (which may include Attendance, Home-Assignment,

Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc.)

- vii)** The internal assessment should be designed with learner attributes in mind. These attributes, which have clear linkages to Programme Education Objectives and Course Outcomes, stem from the taxonomy, should be clearly told to the students in the beginning of the semester.
  
- viii)** At least, one or two activities of the internal assessment should focus to achieve the 5<sup>th</sup> or 6<sup>th</sup> Course Outcome in each course of study in every semester.
  
- ix)** The students who fail in internal assessment as well as in aggregate will have the option to improve their score in the internal assessment giving a special chance to such students. However, no student will be allowed to improve his/her score of internal assessment, if he/she has already scored 50% marks in aggregate as well as in external examination.
  
- x)** A student who could not secure 40% marks in external examination of the particular course will have to reappear in the external examination of the respective paper as per university rules in this connection.
  
- xi)** Unless and otherwise specified at appropriate place for specific course, the instructions to the examiners and students for the External Exam/Major Test of 60 marks will be given as under:
  - a)** The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus.
  - b)** In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.
  - c)** The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the External Exam/Major Test is 03 (three) hours.
  
- xii)** All courses in 1<sup>st</sup> and 2<sup>nd</sup> semesters will be compulsory, whereas, the courses in 3<sup>rd</sup> and 4<sup>th</sup> semesters will be compulsory, optional-elective, project-work-report and open-elective as well.



- xiii)** The specific instructions have been given at appropriate places regarding compulsory, optional-elective, project-work-report and open-elective courses depending upon the specializations opted by the students.
- xiv)** At the end of the second semester, all the students will have to undergo online/offline summer training of 6-8 weeks with an industrial, business or service or academic organization, either through offline or online modes, under the supervision of Training and Placement Office (TPO) in case of Haryana School of Business (HSB) and Director/Principal in case of affiliated institutes.
- xv)** Each student will be required to submit a training report, on a prescribed proforma, in the beginning of third semester along with a certificate issued by the concern where he/she has undertaken the summer training either with an industrial, business or service or academic organization to the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes up to 31st August without late fees, for the purpose of evaluation in the third semester. However, the guidelines along with prescribed proforma for the purpose will be notified at the end of second semester.
- xvi)** Each student shall present a seminar on the summer training, during third semester, before a committee of teachers constituted by the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes.
- xvii)** The distribution of marks of Summer Training Report would be 25 marks for the seminar on training report and 25 marks for the written training report.
- xviii)** The Committee of Examiners to be appointed by the Director/Principal will evaluate this written training report, the Committee will be coordinated by the Programme Coordinator.
- xix)** If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the university.
- xx)** This new Scheme and Syllabus of MBA Programme shall be effective from the academic session 2020-21.
- xxi)** In case of any slip-up in above instructions, the general rules of university ordinance will be applicable if the same is in the interest of students.

## **1.6. General Course Structure and Credit Distribution in Various Components of Teaching-Learning in the MBA Programme**

### **1.6.1 Definition of a Credit may be further classified as under:**

<b>Type of Teaching Learning Activity and Workload</b>	<b>o. of Credits</b>
5 Hours Lecture (L) per week per semester	4 Credit
1 Hour Tutorial (T) per week per semester but maximum two groups irrespective of number of students in the classes	1 Credit
2 Hours Practical (Lab) per week per semester	1 Credit
1 Hour Seminar per week per semester	1 Credit
1 Hour Training Seminar per week per semester	1 Credit
1 Student Guidance for In-Company-Work-Project	2 Credit
2 Hours per week per semester if a teacher is asked to act as Programme Coordinator	2 Credit
1 Hour per week per semester if a teacher is asked to act as Convener of any Standing Committee for discharge of Departmental work during the semester	1 Credit
5 Hours per week for Preparing Students for Training and Placement Activities through mock assessment, group discussion, personal interviews and workshops/seminars per Semester, if officially assigned to a teacher by the Director/Principal during the particular semester.	5 Credit

### **1.6.2 Credits for Different Curriculum Components:**

<b>Semester-Wise Credit Distribution of MBA Programme</b>			
<b>Sr No</b>	<b>Semester-Wise</b>	<b>Number of Courses</b>	<b>Total No of Credits</b>
1.	1 <sup>st</sup> Semester	7 Courses	33 Credits
2.	2 <sup>nd</sup> Semester	7 Courses	35 Credits
3.	3 <sup>rd</sup> Semester	8 Courses	38 Credits

4.	4 <sup>th</sup> Semester	4 Courses	20 Credits
		<b>Total</b>	<b>126 Credits</b>
<b>Core and Elective Courses Wise Credit Distribution</b>			
<b>Sr No</b>	<b>Core Courses-Wise</b>	<b>Elective and Open-Elective Wise Courses</b>	<b>Total Number of Credits</b>
1.	96	30	126
		<b>Total</b>	<b>126 Credits</b>

**1.7. For the purpose of enhancing the current knowledge base, students can also access various online resources (supported by MHRD, Government of India) for their respective courses. These resources are available at:**

- <http://nptel.ac.in/courses>
- [www.mooc.org](http://www.mooc.org)
- <https://epgp.inflibnet.ac.in>

### **1.8. Scheme and Syllabus of MBA Programme**

The Master of Business Administration is a two-year full time programme, which is divided into four semesters. The course structure, viz, the scheme and syllabus of the MBA Programme is given as under:

**SEMESTER-I**

<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBA-101	Management Process and Organisational Behaviour	5-----0-----1	05 Credits
MBA-102	Business Statistics	5-----0-----1	05 Credits
MBA-103	Managerial Economics	5-----0-----1	05 Credits
MBA-104	Accounting for Managers	5-----0-----1	05 Credits
MBA-105	Business Environment	5-----0-----1	05 Credits
MBA-106	Business Communication	5-----0-----1	05 Credits
MBA-107	Seminar  (On Indian Ethos, Computer Applications in Business, Contemporary Issues in Cyber Security and Modern Business)* (Internal)		03 Credits
		<b>Total</b>	<b>33 Credits</b>

\* Seminar will be organized by a committee of not less than three teachers.

<b>SEMESTER-II</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBA-201	Marketing Management	5-----0-----1	05 Credits
MBA-202	Human Resource Management	5-----0-----1	05 Credits
MBA-203	Financial Management	5-----0-----1	05 Credits
MBA-204	Production and Operations Management	5-----0-----1	05 Credits
MBA-205	International Business	5-----0-----1	05 Credits

MBA-206	Management Science	5-----0-----1	05 Credits
MBA-207	Business Research Methods	5-----0-----1	05 Credits
		<b>Total</b>	<b>35 Credits</b>

SEMESTER-III			
Course Code	Course Title	Workload L-----P-----T	Number of Credits
MBA-301	Strategic Management	5-----0-----1	05 Credits
MBA-302	Entrepreneurship Development	5-----0-----1	05 Credits
MBA-303	Business Legislation	5-----0-----1	05 Credits
MBA-304	Summer Internship and Seminar (Internal)		03 Credits
	Elective-I*	5-----0-----1	05 Credits
	Elective-II*	5-----0-----1	05 Credits
	Elective-III*	5-----0-----1	05 Credits
	Elective-IV*	5-----0-----1	05 Credits
	Open Elective-I**	5-----0-----1	05 Credits
		<b>Total</b>	<b>38 Credits</b>

\* The students are required to choose 04 (four) Elective Courses offered in Semester III by selecting 2 (two) courses each from any two areas of specializations offered. In case, a student opts for core specialization, all the four courses must be opted from single area of specialization.

\*\* In addition to above 04 (four) elective courses, the students are also required to choose one course from the list of Open Elective Courses (other than his/her major and minor/ core area of specialization). In any case, if the nomenclature of the paper is same/similar as opted by the student in any semester that course cannot be opted as open elective course.

**The List of Open Elective Papers for Semester III is as follows:**

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
OE-301	Counseling Skills for Managers	5	0	1	5 Credits
OE-302	Fundamentals of Econometrics	5	0	1	5 Credits
OE-303	Personal Finance	5	0	1	5 Credits
OE-304	Applications of Marketing	5	0	1	5 Credits
OE-305	Export Import Procedures and Documentation	5	0	1	5 Credits
OE-306	Corporate Governance and Business Ethics	5	0	1	5 Credits
OE-307	Indian Ethos and Values	5	0	1	5 Credits
OE-308	Computer Application in Business and Cyber Security	5	0	1	5 Credits
OE-309	Disaster Management	5	0	1	5 Credits

SEMESTER-IV					
Course Code	Course Title	Workload		Number of Credits	
		L-----	P-----		T
MBA-401	Comprehensive Viva- Voce (External)			05 Credits	
MBA-402	Research Project (optional in lieu of one paper)**	05-----	0-----	1	05 Credits

	Elective-I*	5-----0-----1	05 Credits
	Elective-II*	5-----0-----1	05 Credits
	Elective-III*	5-----0-----1	05 Credits
	Or		
MBA-410	In-Company-Project-Work***		15 Credits
		<b>Total</b>	<b>20 Credits</b>

\* The students are required to choose 3 (three) Elective Courses offered in Semester IV by selecting 2 (two) courses from major area of specialization and 1 (one) paper from minor area of specialization from out of the specializations offered. In case, a student opts for core specialization, all the three papers must be opted from single area of specialization. In any case, if the nomenclature of the paper is same/similar as opted by the student in any semester that cannot be opted again.

\*\* Instructions for Research Project: The following instructions will be followed:

- i) Research project, which is optional, should be from major or core area of specialization of the student and shall be in lieu of one paper of his/her major or core area of specialization.
- ii) Students opting for MBA-402 Research Project in the 4th semester will have to register for the project in Semester III itself by submitting a synopsis along with consent of the supervisor in the Office of HSB and to the office of Director/ Principal in case of affiliated institutes by 30th November.
- iii) Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, (HSB) in case of HSB and Director/ Principal in case of affiliated institutes.
- iv) External examiner will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the

internal awards out of 40 marks separately on the basis of overall performance of the student in the project.

- v) The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva voce will be appointed by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes.

\*\*\* Instructions for In-Company-Project-Work: The following instructions will be followed:

- i) If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4th semester and willing to join immediately, he or she may opt for In-Company-Project-Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the University.
- ii) However, such In-Company-Project-Work will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes) and Industry Guide (to be appointed by the competent authority of the concerned organization, who has offered appointment letter to the student and the organization requires to join immediately). The Academic Guide will get two hours per week credit per student maximum up to ten credits in his or her teaching workload during the semester.



**The List of Elective Papers for Semester III and IV is as follows...**

## Human Resource Management Area

### 3<sup>rd</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
HRM-301	Management of Industrial Relations	5	0	1	5 Credits
HRM-302	Human Resource Planning	5	0	1	5 Credits
HRM-303	Compensation Management	5	0	1	5 Credits
HRM-304	Managing Interpersonal and Group Processes	5	0	1	5 Credits
HRM-305	Strategic Human Resource Management	5	0	1	5 Credits
HRM-306	Leadership Dynamics	5	0	1	5 Credits
HRM-307	Business Negotiations	5	0	1	5 Credits
HRM-308	Training and Development	5	0	1	5 Credits

### 4<sup>th</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
HRM-401	Labour Laws	5	0	1	5 Credits
HRM-402	Human Resource Development	5	0	1	5 Credits
HRM-403	Performance Management	5	0	1	5 Credits
HRM-404	Organizational Change and Intervention Strategies	5	0	1	5 Credits
HRM-405	Counseling Skills for Managers	5	0	1	5 Credits
HRM-406	Global Human Resource Management	5	0	1	5 Credits
HRM-407	Labour Welfare and Social Security	5	0	1	5 Credits



## Finance Area

### 3<sup>rd</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L	P	T	
FM-301	Risk Management and Insurance	5	0	1	5 Credits
FM-302	Security Analysis	5	0	1	5 Credits
FM-303	Project Management	5	0	1	5 Credits
FM-304	Management of Banks and Financial Institutions	5	0	1	5 Credits
FM-305	Foreign Exchange Management	5	0	1	5 Credits
FM-306	Public Finance	5	0	1	5 Credits
FM-307	Business Taxation	5	0	1	5 Credits
FM-308	Financial Econometrics	5	0	1	5 Credits

### 4<sup>th</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L	P	T	
FM-401	Portfolio Management	5	0	1	5 Credits
FM-402	Financial Markets and Services	5	0	1	5 Credits
FM-403	Funds Management	5	0	1	5 Credits
FM-404	International Financial Management	5	0	1	5 Credits
FM-405	Financial Restructuring and Valuation	5	0	1	5 Credits
FM-406	Financial and Commodity Derivatives	5	0	1	5 Credits
FM-407	Financial Decisions Analysis	5	0	1	5 Credits
FM-408	Behavioral Finance	5	0	1	5 Credits

## Marketing Area

### 3<sup>rd</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
MM-301	Consumer Behavior	5	0	1	5 Credits
MM-302	Marketing Research	5	0	1	5 Credits
MM-303	Integrated Marketing Communication Strategy	5	0	1	5 Credits
MM-304	Sales & Distribution Management	5	0	1	5 Credits
MM-305	Logistics Management	5	0	1	5 Credits
MM-306	Marketing of Services	5	0	1	5 Credits
MM-307	Product and Brand Management	5	0	1	5 Credits

### 4<sup>th</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
MM-401	Global Marketing	5	0	1	5 Credits
MM-402	Industrial Marketing	5	0	1	5 Credits
MM-403	Rural Marketing	5	0	1	5 Credits
MM-404	Customer Relationship Management	5	0	1	5 Credits
MM-405	Retail Management	5	0	1	5 Credits
MM-406	Social Marketing	5	0	1	5 Credits
MM-407	Digital and Social Media Marketing	5	0	1	5 Credits

## International Business Area

### 3<sup>rd</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
IB-301	International Financial Markets	5	0	1	5 Credits
IB-302	Export-Import Procedures and Documentation	5	0	1	5 Credits
IB-303	India's Foreign Trade & Policy	5	0	1	5 Credits
IB-304	Global Marketing	5	0	1	5 Credits
IB-305	International Logistics	5	0	1	5 Credits
IB-306	International Accounting	5	0	1	5 Credits
IB-307	Risk Management in International Business	5	0	1	5 Credits

### 4<sup>th</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
IB-401	Foreign Exchange Management	5	0	1	5 Credits
IB-402	Regional Economic Blocks	5	0	1	5 Credits
IB-403	Management of International Finance	5	0	1	5 Credits
IB-404	Global Strategic Management	5	0	1	5 Credits
IB-405	Cross Cultural and Global Management	5	0	1	5 Credits
IB-406	International Trade Laws	5	0	1	5 Credits
IB-407	Integrated Marketing Communication Strategy	5	0	1	5 Credits

## Business Analytics Area

### 3<sup>rd</sup> Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
BA-301	Fundamental of Business Analytics	5 0 1	5 Credits
BA-302	Making Sense of Data	5 0 1	5 Credits
BA-303	Mathematical Statistics	5 0 1	5 Credits
BA-304	Market Micro Structure	5 0 1	5 Credits
BA-305	Fundamentals of Data Mining	5 0 1	5 Credits
BA-306	Fundamentals of Econometrics	5 0 1	5 Credits

### 4<sup>th</sup> Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
BA-401	Predictive Business Analytics	5 0 1	5 Credits
BA-402	Econometric Modeling for Business Analysis	5 0 1	5 Credits
BA-403	Time Series Econometrics	5 0 1	5 Credits
BA-404	Economics for Business Strategy	5 0 1	5 Credits
BA-405	Applied Multivariate Analysis	5 0 1	5 Credits
BA-406	Information Economics and Its Applications	5 0 1	5 Credits

## Production and Operations Management Area

### 3<sup>rd</sup> Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
POM-301	Purchase and Materials Management	5 0 1	5 Credits
POM-302	Total Quality Management	5 0 1	5 Credits
POM-303	Supply Chain Management	5 0 1	5 Credits
POM-304	Service Operations Management	5 0 1	5 Credits
POM-305	Technology Management	5 0 1	5 Credits

### 4<sup>th</sup> Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
POM-401	Operations Research	5 0 1	5 Credits
POM-402	Goal Programming in Management	5 0 1	5 Credits
POM-403	Transportation Management	5 0 1	5 Credits
POM-404	World Class Manufacturing	5 0 1	5 Credits
POM-405	Warehouse Management and Inventory Control	5 0 1	5 Credits
POM-406	Project Management	5 0 1	5 Credits



## Information Technology Management Area

### 3<sup>rd</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L	P	T	
ITM-301	E-Commerce Applications	5	0	1	5 Credits
ITM-302	Internet and Web Designing	5	0	1	5 Credits
ITM-303	Relational Data Base Management Systems	5	0	1	5 Credits
ITM-304	E-Business Information Systems Management	5	0	1	5 Credits
ITM-305	Enterprise Resource Planning	5	0	1	5 Credits

### 4<sup>th</sup> Semester

Course Code	Course Title	Workload			Number of Credits
		L	P	T	
ITM-401	Data Ware Housing and Data Mining	5	0	1	5 Credits
ITM-402	E-CRM	5	0	1	5 Credits
ITM-403	Systems Analysis and Design	5	0	1	5 Credits
ITM-404	Principles of Programming Language	5	0	1	5 Credits
ITM-405	Multimedia and Web Development	5	0	1	5 Credits

## Entrepreneurship Development Area

### 3rd Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Workload L----P----T</b>	<b>Number of Credits</b>
ED-301	Financing Schemes for Entrepreneurship Development	5 0 1	5 Credits
ED-302	Business Plan	5 0 1	5 Credits
ED-303	Innovation and Intellectual Property Rights	5 0 1	5 Credits

### 4th Semester

<b>Course Code</b>	<b>Course Title</b>	<b>Workload L----P----T</b>	<b>Number of Credits</b>
ED-401	Social Entrepreneurship	5 0 1	5 Credits
ED-402	Legal Framework For Entrepreneurship	5 0 1	5 Credits

**The Detailed Syllabus of MBA Programme as follows...**

**FIRST  
SEMESTER**

**MBA-101      MANAGEMENT PROCESS AND ORGANISATIONAL BEHAVIOR**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:**    *The objective of this paper is to familiarize the students with basic management concepts and behavioral processes in the organization.*

**Course Outcomes:**

**CO1:** Students will be able to recall the concepts of management process and organizational behavior.

**CO2:** Students will be able to understand individual and group behavior, and understand the implications of organizational behavior on the process of management.

**CO3:** Students will be able to employ different motivational theories and evaluate motivational strategies used in a variety of organizational settings.

**CO4:** Students will be able to appraise the basic design elements of organizational structure and evaluate their impact on employees.

**CO5:** Students will be able to evaluate how organizational change and culture affect working relationships within organizations.

**CO6:** Students will be able to design strategies to manage individual, group and organizational behaviour.

## **Course Contents:**

### **UNIT-I**

Introduction to management: Meaning, nature and scope of management; Evolution of management thoughts: School of management thoughts, Approaches to management; Managerial skills; Managerial functions; Social Responsibility of managers and business; Challenges before modern managers

### **UNIT-II**

Managerial functions: Planning, Decision Making, Management by Objectives; Organizing, Organizational Design, Organizational Structure, Authority and Responsibility, Power, Decentralization; Staffing; Directing, Leading, Motivating, Communicating; Controlling; Co-ordinating.

### **UNIT-III**

Organizational Behavior: concepts, determinants, challenges and opportunities of OB; contributing disciplines to the OB; Organizational culture and climate, Impact of organizational structure on OB; Understanding and managing individual behavior: Personality; Perception; Values; Attitudes; Learning.

### **UNIT-IV**

Understanding and managing group processes: Interpersonal and Group Dynamics; Understanding Self: Transactional Analysis; Applications of Emotional Intelligence in organizations; Conflict Management; Stress Management.

### Suggested Readings:

1. Chandan, J.S., *Organizational Behaviour*, Vikas Publications
2. Koontz, H & Wechrich, H., *Management*, Tata McGraw Hill.
3. Luthans, F., *Organizational Behaviour*, Tata McGraw Hill.
4. Robbins, S.P., *Management*, Prentice Hall Ins.
5. Robbins, S., Judge, T. & Sanghi, S., *Organizational Behaviour*, Prentice Hall of India.
6. Stoner, J., *Management*, Prentice Hall of India.
7. Davis, K., *Organisational Behaviour*, Tata McGraw Hill.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-102**

**BUSINESS STATISTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to make students learn about the applications of statistical tools and techniques for decision making.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in statistics.

**CO2:** Students will be able to understand the different methods used in statistics.

**CO3:** Students will be able to apply the knowledge of statistics in their future studies as well as in corporate sector also.

**CO4:** Students will be able to analyze the importance of statistics in business.

**CO5:** Students will be able to evaluate the proficiency of statistical methods in an industry or business.

**CO6:** Students will be able to assemble the different methods of statistics for the well being of business

**Course Contents:**

**UNIT-I**

Univariate analysis: central tendency, dispersion (theoretical concept); Probability: Introduction, addition theorem, multiplication theorem, conditional probability, Bayes



Theorem. Theoretical probability distributions: Binomial, Poisson, Normal Distribution; their characteristics and applications.

## UNIT-II

Sampling: probability and non-probability sampling methods; Sampling distribution and its characteristics; Hypothesis testing: hypothesis formulation, and testing; Statistical Tests: z-test, t-test, F-test, Analysis of variance, Chi-square test, Wilcoxon Signed-Rank test, Kruskal-Wallis test.

## UNIT-III

Correlation analysis: simple, partial and multiple correlations; Regression analysis: simple linear regression model, ordinary least square method. Time series analysis: components of a time series and their measurements and uses.

## UNIT-IV

Index numbers: meaning and types, methods for measuring indices, adequacy of indices; Statistical quality control: causes of variation in quality, Control Charts, Acceptance sampling.

### Suggested Readings:

1. Gupta, S.P., *Statistical Methods*, Sultan Chand & Sons
2. Anderson, Sweeney and Williams, *Statistics for Business and Economics*, Cengage Learning.
3. Ken Black, *Business Statistics*, Wiley.
4. Levin, Richard I and David S Rubin, *Statistics for Management*, Prentice Hall, Delhi.
5. Aczel and Sounderpandian, *Complete Business Statistics*, Tata McGraw Hill, New Delhi.
6. Hooda, R.P., *Statistics for Business and Economics* Macmillan, New Delhi.
7. Heinz, Kohler, *Statistics for Business & Economics*, Harper Collins, New York.
8. Lawrence B. Morse, *Statistics for Business & Economics*, Harper Collins, NY

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition,

eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-103**

**MANAGERIAL ECONOMICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint the students with concepts and techniques used in the field of economics and to enable them to apply this knowledge in business decision-making. Emphasis is given to changes in the nature of business firms in the context of globalization.*

**Course Outcomes:**

**CO1:** Students will be able to define the terms associated with managerial economics.

**CO2:** Students will be able to explain different theories of managerial economics.

**CO3:** Students will be able to apply the models of managerial economics in business decisions.

**CO4:** Students will be able to examine the demand and supply forces and their effect on pricing and output related decisions.

**CO5:** Students will be able to evaluate the effectiveness of various models and theories of managerial economics in demand, supply, production and costs related decision making procedures.

**CO6:** Students will be able to create the competitive strategies to ensure optimum utilisation of resources.

**Course Contents:**

## UNIT-I

Theory of demand and consumer equilibrium-utility and indifference curve approach; Demand function; Elasticity of demand and its significance in managerial decision-making; Demand forecasting and its techniques.

## UNIT-II

Theory of Cost: Types of cost: production cost, selling cost, R&D Cost, short run and long run cost curves, relation between cost and revenue, break-even point; Economies and diseconomies of scale and scope; Production function: Short term and long run production function, law of variable proportion and return to scale, Iso-quant curves.

## UNIT-III

Market Structure and Competition: Price and output determination under perfect competition, monopoly, monopolistic competition and oligopoly.

## UNIT-IV

Modern theories of firm: Bamoul's theory of sales maximization, Managerial Theory, Behavioral Theory; National Income: Concept and Measurement.

### Suggested Readings:

1. Ferguson, P. R. Rothschild, R. Ferguson G.J., Business Economics, Palgrave Macmillan.
2. Dwivedi, D. N., *Managerial Economics*, Vikas Publication.
3. Salvatore, *Managerial Economics in Global Economy*, Thomson Learning.
4. Thomas, C.R. & Maurice S.C., *Managerial Economics*, Tata McGraw Hill.
5. Koutsoyiannis, A., *Modern Economics*, Macmillan

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The basic purpose of this course is to develop an insight of postulates, principles and techniques of accounting and application of financial and accounting information for planning, decision-making and control.*

**Course Outcomes:**

- CO1:** Students will be able to describe various accounting concepts, principles, techniques associated with decision making.
- CO2:** Students will be able to recognize the usefulness of costing to manager and its applications in the business.
- CO3:** Students will be able to apply the principles, postulates and techniques of accounting for planning and decision making.
- CO4:** Students will be able to differentiate between various types of accounting practices being followed within the organisation.
- CO5:** Students will be able to appraise the performance of organisations with the help of financial statements presented at the end of the year.
- CO6:** Students will be able to formulate advanced policy structure comprising of all accounting information required for controlling deviations in the performance.

## **Course Contents:**

### **UNIT-I**

Financial Accounting- Meaning, scope and importance; Accounting concepts and conventions; Accounting process: Journal, Ledger and Trial Balance, Depreciation accounting and policy, Preparation of Final Accounts of Joint-stock Companies, Understanding and Analyzing Published Financial Statements of Companies.

### **UNIT-II**

Cost Accounting: Nature and scope of costing; Cost concepts and Classifications; Usefulness of Costing to Managers; Preparation of Cost sheet. Budgeting: Types of budgets and their preparation

### **UNIT-III**

Management Accounting: Nature, scope and tools of Management Accounting; Management Accounting vs. Financial Accounting; Financial analysis: Ratio analysis, Cash Flow Statement.

### **UNIT-IV**

Marginal costing: CVP analysis, break-even analysis, Decision involving alternative choices: fixation of selling price, exploring new markets, make or buy decision and product mix decision. An overview of Standard Costing

### **Suggested Readings:**

1. Anthony, R.N. & Reece J.S., *Accounting Principles*, Homewood, Illinois, Rd Irwin.
2. Bhattacharya, S.K. & Dearden, J., *Accounting for Management: Text and Cases*, Vikas Publishing House
3. Gupta, R.L. & Ramaswmy, *Advanced Accountancy*, Volume I&II, Sultan Chand & Sons.
4. Hingorani, N.L. & Ramanathan, A.R., *Accounting*, Sultan Chand & Sons.
5. Jawahar Lal, *Cost Accounting*, Vikas Publishing House.
6. Maheshwari, S.N., *Advanced Accounting*, Vikas Publishing House.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBA-105**

**BUSINESS ENVIRONMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the micro and macro environment of business in coherent and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to define and trace all the indicators of micro and macro environment affecting business organizations
- CO2:** Students will be able to identify and illustrate the impact, challenges and opportunities of all environmental indicators on business organizations
- CO3:** Students will be able to apply and demonstrate the gathered knowledge about how the various laws and other national and international policies influence the organizations in order to take proactive measures so that organizational effectiveness is maintained.
- CO4:** Students will be able to distinguish and examine the necessary techniques and skills that help them in handling the organization's global and national issues efficiently.
- CO5:** Students will be able to evaluate and value the importance of environment within which a business organization has to sustain itself successfully
- CO6:** Students will be able to design and develop their approaches and systems in maintaining coherence both at micro and macro level

## **Course Contents:**

### **UNIT-I**

Indicators of Internal and External Business environment; Environmental scanning and risk assessment; Concepts of Economic systems; New Industrial Policy-1991 and Recent Financial and Economic Reforms, Recent Monetary and Fiscal Policy and their impact on Business Environment.

### **UNIT-II**

Impact of Political, Economic, Social and Technological Environment on the Emerging Sectors of Indian Economy: Public Sector, Private Sectors, Services Sector and SME Sector; Privatization in India; Public Private Partnership; Challenges and Opportunities in the Rural sector.

### **UNIT-III**

Globalization Business Environment; Opportunities and challenges for MNCs in India; Foreign investment in India; Indian Foreign Trade and its Impact on Balance of Payment, Exchange rate Movements and India's Competitiveness in the world economy; World Trade Trends and Economic Integration. Contemporary Issues: Climate change, Food security, Geopolitics Sustainable Development and De-Globalization.

### **UNIT-IV**

Legislations for Social Responsibilities- Consumer Protection Act, 1986 and its Amendments, Competition Act, 2002 and its Amendments and Environmental Protection Act, 1986; Foreign Exchange Management Act, 1999 (FEMA) and their influences on the Business Environment.

### **Suggested Readings:**

1. Faisal Ahmed and M. Absar Alam. *Business Environment: Indian and Global Perspective*, PHI, New Delhi. 2014
2. Cherunilam, Francis, *Business Environment*, Himalya Publishing House.
3. Misra, S.K. & Puri, V.K., *Indian Economy*, Himalya Publishing House.
4. Aswath Thapa, K., *Business Environment*, Excel Books.
5. Bedi S.K., *Business Environment*, Excel Books.
6. Khujan Singh, *Business Environment – Theory and Practice*, IAHRW Publications
7. Paul Jastin, *Business Environment*, Tata Mc Graw Hill.
8. Economic Survey, Govt. of India.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-106**

**BUSINESS COMMUNICATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course is aimed at equipping the students with the necessary techniques and skills that help them in communicating effectively for handling inter as well as intra organizational issues.*

**Course Outcomes:**

- CO1:** Students will be able to define and outline all four business communication skills i.e. reading, writing, speaking and listening
- CO2:** Students will be able to identify and illustrate communication abilities to face corporate challenges.
- CO3:** Students will be able to apply and demonstrate the gathered knowledge about the business communication regarding both inter and intra organizational situations
- CO4:** Students will be able to distinguish and examine the necessary techniques and skills that help them in communicating effectively for handling organizational issues.
- CO5:** Students will be able to evaluate and judge which business correspondence is required when and how to use it in order to handle corporate tasks.
- CO6:** Students will be able to design and develop their methods and ways in transmitting information within and outside the organizations in the most effective manner

**Course Contents:**

## **UNIT-I**

Communication: Importance for business organization; Process and associated hurdles; Principles for effective communication; Dimensions of Communication; Network of communication; Grapevine

## **UNIT-II**

Verbal Communication: Oral and Written; Non-Verbal Communication: Kinesics; Paralanguage; Proxemics; Sign Language. Cross Cultural Communication.

## **UNIT- III**

Essentials of effective business correspondence; Business Letter- Types; Proposal writing Report writing- Essentials, Types, and Steps, Introduction to Plagiarism; Notices, Circulars, Office Orders, Memos, Agenda and Minutes, Representations, Employee Newsletters.

## **UNIT-IV**

Presentation Skills; Listening Skills; Small Talks; Public Speaking; Resume' Writing; Meetings; Interview; Group Discussion; Electronic Mail and Telephone Etiquettes.

**Suggested Readings:**

1. Raymond V. Lesikar & Marie E. Flatley, *Basic Business Communication*, TMH
2. Murphy H. A. and Hildebrandt H. W., *Effective Business Communications*, TMH
3. Sinha, K.K. *Business Communication*, Galgotia Publishing Co
4. Courtland L. Bovee, John V. Thill & Barbara E. Schatzman, *Business Communication Today*, Pearson Education.
5. Krishna Mohan & Meera Banerji, *Developing Communication Skills*, Macmillan India Ltd.
6. Taylor, S., *Communication for Business*, Pearson Education.
7. Any leading National English Daily

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

MBA-107

SEMINAR

(On Indian Ethos, Computer Applications in Business,  
Contemporary Issues in Cyber Security and Modern Business)

(Internal)

**Time Allowed: 1 Hour**

**M.M.: 50**

**Course Objective:** *The objective of this course is to acquaint the students with existing issues pertaining to Indian Ethos and business. Also, inculcating in them the ability of expressing themselves to an audience with poise and self-belief.*

**Course Outcomes:**

- CO1:** Students will be able to define the concept and scope of the seminar topic of their interest relating to Indian ethos or contemporary issues in business.
- CO2:** Students will be able to review an existing issue related to business that can help them to get ahead.
- CO3:** Students will be able to illustrate the possible managerial relevance and implications of the specific issue they have approached.
- CO4:** Students will be able to appraise the relevance of arguments prepared for the topic under consideration.
- CO5:** Students will be able to defend difference in opinion towards a topic.
- CO6:** Students will be able to develop their presentation skills.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The list of contemporary topics will be announced in the class and at least one topic will be allotted to each student by the Programme Coordinator.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student and the evaluation will be done on the basis of communication skills, contents, delivery, body-language and question-answer handling skills of the student on a proforma duly notified to the students in advance.

SECOND  
SEMESTER



**Course Objective:** *The purpose of this course is to develop an understanding of the underlying concepts, strategies and issues involved in the marketing of products and services.*

**Course Outcomes:**

- CO1:** Students will be able to recall and describe the fundamental concepts related to marketing.
- CO2:** Students will be able to describe the different approaches of marketing and environment in which marketing systems operate.
- CO3:** Students will be able to demonstrate an understanding of the 4Ps used by the marketers.
- CO4:** Students will be able to examine the upcoming trends of marketing in the ever dynamic business world.
- CO5:** Students will be able to evaluate the marketing strategies and programmes of different products in real world.
- CO6:** Students will be able to design a marketing plan for real world market offering (product/ service).

**Course Contents:**

## **UNIT- 1**

Nature, scope and concept of marketing; Corporate orientations towards the marketplace; Marketing Mix; Understanding 4 A's of Marketing; Marketing Environment and Environment Scanning; Marketing Information System and Marketing Research; Understanding Consumer and Industrial Markets; Market Segmentation, Targeting and Positioning

## **UNIT- II**

Product decisions: Product concept and classification, product mix, product life cycle, new product development; Product branding, packaging and labeling decisions; Pricing decisions: Factors affecting pricing decisions, setting the price, Pricing strategies and methods.

## **UNIT- III**

Distribution Channels and Logistics Management: nature, types and role of intermediaries; Channel design decisions, Channel behavior and organization, Channel management decisions, Logistics management decisions. Marketing communication and promotion decisions: Factors influencing promotion mix; Advertising decisions; Personal Selling; Sales force management; Sales promotions; Publicity and Public relations.

## **UNIT- IV**

Holistic marketing: Trends in marketing practices, Internal marketing, Socially responsible marketing, Marketing implementation and control; New issues in marketing-Globalization, Consumerism, Green Marketing, Direct Marketing, Network Marketing, Event Marketing, Ethics in Marketing.

### **Suggested Readings:**

1. Kotler, Philip and Keller, Kevin, *Marketing Management*, Prentice Hall of India
2. Kotler, Philip and Armstrong, G., *Principles of Marketing*, Prentice Hall of India
3. Czinkota & Kotabe, *Marketing Management*, Thomson Learning
4. Ramaswamy, V.S. & Namakumari, S., *Marketing Management: Planning, Control*, Macmillan
5. Kotler, Lane, Keller., *Marketing Management*, Pearson
6. Rajan Saxena, *Marketing Management*, McGraw Hill
7. R. Srinivas, *Case Studies in Marketing- Indian Context*, PHI Learning
8. Stanton, *Fundamentals of Marketing*, McGraw Hill
9. Sontakki, C.N. et al., *Marketing Management*, Kalyani Publishers
10. Kumar, A and Meenakshi, N, *Marketing Management*, Vikas Publishing House Pvt. Ltd.
11. C.K. Prahalad, *The Fortune at the Bottom of Pyramid*, FT Press
12. Matt Haig, *100 Brand Failures*, Kogan Page
13. W. Chan Kim & Renee Mauborgne, *Blue Ocean Strategies*, Harvard Business Review Press

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-202**

**HUMAN RESOURCE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize students to the various facets of managing people and to create an understanding of the various policies and practices of human resource management.*

**Course Outcomes:**

**CO1:** Students will be able to recall the terms associated with Human Resource Management.

**CO2:** Students will be able to discuss various HR practices used in the business world.

**CO3:** Students will be able to apply various HR practices.

**CO4:** Students will be able to compare and contrast HR practices across companies.

**CO5:** Students will be able to evaluate the effectiveness of HR practices adopted in the organizations.

**CO6:** Students will be able to create and design the HR strategies related to coping in dynamic business environment.

**Course Contents:**

## **UNIT-I**

Introduction to HRM: Concepts and Perspectives of Human Resource Management; Human Resources Management in a Changing Environment; Managerial and Operative Functions of HRM.

## **UNIT-II**

Recruitment, Placement and Retention Strategies: Human Resource Planning; Job Analysis; Methods of Manpower Search; Attracting, Selecting and Retaining Human Resources; Induction and Socialization.

## **UNIT-III**

Training and Development: Manpower Training and Development; Performance Appraisal and Potential Evaluation; Career and Succession Planning; Talent Management.

## UNIT-IV

Employee Relations and Compensation Administration: Job Evaluation and Compensation Management; Incentives and Employee Benefits; Employee Welfare; Industrial Relation; Employee Separation Practices, HR Accounting and audit.

### Suggested Readings:

1. Aswathappa, K., *Human Resource and Personnel Management*, Tata McGraw Hill.
2. Dessler, G., *Human Resource Management*, Pearson Education.
3. Venkatesh, D.N. & Jyothi P., *Human Resource Management*, Oxford University Press.
4. Bohlander, G. & Snell, S., *Human Resource Management*, Cengage Learning.
5. Patnayak, B., *Human Resource Management*, PHI Learning.
6. Rao, V.S.P., *Human Resource Management*, Excel Books.
7. Cascio, W.Y., *Managing Human Resources*, Irwin-McGraw Hill.
8. Noe, Hollenbeck, Gerhart & Wright, *Human Resource Management*, McGraw-Hill Higher Education

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-203**

**FINANCIAL MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to acquaint the students with the broad framework of financial decision-making in business.*

**Course Outcomes:**

- CO1:** Students will be able to outline the basic framework of financial management.
- CO2:** Students will be able to explain the role of financial management for financial decision making in business.
- CO3:** Students will be able to apply various theories of capital structure and dividend policy.
- CO4:** Students will be able to examine risk in capital budgeting decisions.
- CO5:** Students will be able to select various sources of finance with evaluation of their cost.
- CO6:** Students will be able to create working capital policy for organization.

**Course Contents:**

**UNIT-I**

Financial Management: meaning, objectives and scope; types of financial decisions, risk-return framework for financial decision-making, time value of money.

Capital Budgeting Decisions: nature, importance and types of investment decision; techniques of evaluating capital budgeting decisions, risk analysis in capital budgeting.

## UNIT-II

Capital Structure Decisions: optimum capital structure; theories of capital structure; factors determining capital structure. Sources of long term and short term finance.

Cost of Capital: concept and importance; computations of cost of various sources of finance; weighted average cost of capital.

## UNIT-III

Working Capital Management: Concept and types of working capital; operating cycle, determinants of working capital, estimation of working capital requirement; working capital policy; Management of cash, accounts receivables and inventories; financing working capital.

## UNIT-IV

Dividend Policy: Dividend and its forms, theories of dividend policy and their impact on the value of a firm; types of dividend policy. An overview of Corporate Restructuring

### Suggested Readings:

1. Van Horne, James C., *Financial Management and Policy*, Prentice Hall of India.
2. Pandey I. M., *Financial Management*, Vikas Publishing.
3. Damodaran, A, *Corporate Finance: Theory and Practice*, John Wiley & Sons.
4. Hampton, John. *Financial Decision Making*, Englewood Cliffs, Prentice Hall Inc.
5. Khan, M.Y. & Jain, P.K., *Financial Management*, McGraw Hill.



### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The Course is designed to acquaint the students with decision making in planning, scheduling and control of production operations in both manufacturing and service organizations.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in production and operation management.

**CO2:** Students will be able to summarise basic concepts in production and quality control.

**CO3:** Students will be able to apply different techniques/methods for effective management of production.

**CO4:** Students will be able to analyze the utility of different techniques for operation management.

**CO5:** Students will be able to evaluate the performance of different methods used for management of materials, its production process and operation.

**CO6:** Students will be able to create and design new techniques for quality control in the process of production and operation management.

**Course Contents:**

## **UNIT-I**

Nature and Scope of Production and Operations Management; Types of Manufacturing Systems Facility Location; Plant Layout: Layout Planning and Analysis.

## **UNIT-II**

Production Planning: Capacity Planning, Aggregate Planning, Master Production Scheduling, Material Requirement Planning; Maintenance Management.

### UNIT-III

Material Management: An overview of Material Management, Inventory Control, Purchase Management, Just in Time; Material Handling; Scheduling: Gantt Charts, Sequencing.

### UNIT-IV

Quality Control: Statistical Quality Control, Acceptance Sampling, Total Quality Management, ISO-9000; Work Study: Method Study, Work Measurement.

#### Suggested Readings:

1. Heizer, J. & Render, B., Operations Management, Pearson.
2. Gaither, N. & Frazier, G., Operations Management, Thomson.
3. Adams, Everett E. (Jr.) and Ebert, Ronald J., Production and Operations Management: Concepts, Models and Behavior, Prentice Hall of India.
4. Krajewski Lee J. & Ritzman Larry P., Operations Management: Processes and Value Chain, Pearson.
5. Buffa, E. S. & Sareen, Modern Production Management, John Wiley.
6. Chary, S. N., Production and Operations Management, Tata McGraw Hill.
7. Richard, B. Chase, F. Robert Jacobs, Nicolas J. Aquilano & Nitin K Agarwal, Operations Management for Competitive Advantage, Tata McGraw Hill.
8. Nair, N.G. Production and Operations Management, Tata McGraw Hill.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-205**

**INTERNATIONAL BUSINESS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to highlight the international environment, including relationships between business, government, economic groupings and the consumer. The course will also highlight the problems encountered and issues raised in managing overseas business.*

**Course Outcomes:**

- CO1:** Students will be able to describe the different concepts and terms used in the literature of International Business.
- CO2:** Students will be able to identify the importance of tariffs, theories, modes, foreign exchange market, international organization and strategies.
- CO3:** Students will be able to illustrate and interpret the macroeconomic changes that affect the international business.
- CO4:** Students will be able to examine the recent practices followed across functional areas of international business.
- CO5:** Students will be able to evaluate the strategic alliance, merger and acquisition, joint venture and regulation of international business.
- CO6:** Students will be able to design international business strategies.

**Course Contents:**

## **UNIT – I**

Overview of International Business: Evolution and development of international business; International Business Environment: Factors leading to growth in international business, Modes of international business.

## **UNIT –II**

An overview of International trade theories, Commercial Policy Instruments: Tariff and Non-Tariff Measures and their impact; Balance of Payment Account, Foreign Direct Investment, International Financial Environment; Foreign Exchange Rates and Markets, Management of exchange rate.

### UNIT- III

Organizational Structure for International Business, International Marketing Management, International Financial Management, International Production Management, International HRM, International Business Negotiations, Recent developments and issues in International Business.

### UNIT- IV

Multinational Corporations: Conceptual framework of MNCs; MNCs and host and home country relations; Technology transfers, Strategic Alliances, Mergers and Acquisitions, Foreign Trade Promotion, Indian Joint Ventures Abroad, Multilateral regulation of trade and investment: IMF, World Bank, WTO, UNCTAD, Regional Economic Cooperation.

#### Suggested Readings:

1. Korth, Christopher M., *International Business Environment and Management*, Prentice Hall.
2. Ramu, S. Shiva, *International Business: Governance Structure*, Wheeler Publishing.
3. Bhalla, V.K., *International Business Environment and Management*, Anmol Publications.
4. Mithani, D.M., *International Economics*, Himalaya Publishing House.
5. Charles W.L. Hill, *International Business*, Tata MC Graw-Hill.
6. Czinkota, Ronkainen & Moffet, *International Business*, Thomson, South-Western.
7. Daneiels, Radebaugh and Sullivan, *International Business, Environments and Operations*, Pearson Education.
8. V. Sharan, *International Business, concept, environment and strategy*, Pearson Education

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.



- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-206**

**MANAGEMENT SCIENCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop an understanding of basic management science techniques and their role in managerial decision making.*

**Course Outcomes:**

**CO1:** Students will be able to define the basic concepts in the field of Management Science.

**CO2:** Students will be able to recognize the contribution of Management Science in quality decision making.

**CO3:** Students will be able to apply various methods and techniques to optimize the utilization of the resources.

**CO4:** Students will be able to appraise the utility of different methods in finding optimal solutions of the managerial problems.

**CO5:** Students will be able to evaluate the performance and suitability of different methods used for efficient utilization of the resources.

**CO6:** Students will be able to formulate the problems and interpret the results produced by the applied models.

**Course Contents:**

## **UNIT-I**

Management Science - Basic concepts and its role in decision-making. Linear programming: meaning, scope & assumptions, Formulation of linear programming problem & solution by graphical & simplex methods and some special cases.

## **UNIT-II**

Duality and Sensitivity analysis: change in objective function coefficient and availability of resources with simplex method. Transportation - Some special cases like maximization, unbalanced problems, degeneracy in transportation models, Assignment models (HAM).

### UNIT-III

Queuing theory (single channel Poisson arrivals with exponential service time, infinite population model); Inventory management techniques (Deterministic Model), special techniques of inventory management; PERT/CPM - Network analysis, determining the critical path, calculation of float.

### UNIT-IV

Game theory: Pure and mixed games, dominance and graphical method. Decision theory: one stage and multi stage decision trees; Introduction to Integer programming, Goal programming, Dynamic programming.

#### Suggested Readings:

1. Vohra, N.D. *Quantitative Techniques in Management*, Tata McGraw Hill.
2. Budnik, Frank S. Dennis Mcleavey, Richard *Principles of Operations Research*, Richard Irwin, Illinois - All India Traveller Bookseller
3. Sharma, J K. *Operations Research: Theory and Applications*, New Delhi, Macmillian India Ltd.
4. Taha, H A., *Operations Research - An Introduction*, New York, Mc-Millan.
5. Narang, A S. *Linear Programming and Decision Making*, Sultan Chand.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever

possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *This course is designed to introduce the students to the fundamentals of research methods and to equip them to follow scientific methods in solving business problems.*

**Course Outcomes:**

- CO1:** Students will be able to relate with the basic understanding of research methodology in the changing business scenario.
- CO2:** Students will be able to identify and classify the application of analytical techniques to face the tasks aimed at fulfilling the objective of business decision making.
- CO3:** Students will be able to apply and demonstrate an understanding of ethical dimensions of conducting research.
- CO4:** Students will be able to distinguish and examine the necessary experimental techniques that help in scientific decision making.
- CO5:** Students will be able to judge and support best alternatively relating to the practices learnt through research methods.
- CO6:** Students will be able to assemble and formulate advanced ways of taking decisions in a logical manner.

**Course Contents:**

## **UNIT –I**

Introduction to Research: Defining Business Research, Types of Research; Scientific Method, Theory Building, Type of Variables; Research Process: Problem Definition, Exploratory Research.

## **UNIT –II**

Research Designs: Concept, Need and Types of Research Designs; Survey Research: Nature of Surveys, Errors in Survey Research, Personal Interview, Telephone Interview, Self-Administered Questionnaire; Observation Methods; Introduction to Experimental Research.

### UNIT –III

Sampling Design: Census v/s Sampling, Sampling Methods, Determination of Sample Size; Measurement and Scaling Concepts, Attitude Measurement, Questionnaire Design, Basic Concepts of Reliability and Validity

### UNIT –IV

Data Analysis: Descriptive Statistics, Univariate Statistics; Bivariate Analysis: Test of Difference, Measures of Association; Introduction to Multivariate Analysis; Report Writing.

#### Suggested Readings:

1. Zikmund, W. G. *Business Research Methods*. Thomson.
2. Copper, D. R., Schindler P. S. & Sharma, J. K. *Business Research Methods*, McGraw Hill Education.
3. Burns, R. B. & Burns, R. A. *Business Research Methods and Statistics using SPSS*, SAGE Publications Ltd.
4. Bajpai, N, *Business Research Methods*, Pearson.
5. Chawla, D. & Sondhi N., *Research Methodology: Concepts and Cases*, Vikas Publishing House.
6. Panneerselvam, R, *Research Methodology*, Prentice Hall India.
7. Kothari, C.R. *Research Methodology & Technique*, New Age International Publishers.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.



The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FINAL YEAR  
COMPULSORY PAPERS**

**MBA-301**

**STRATEGIC MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at imparting knowledge of formulation, implementation and evaluation of Business Strategies.*

**Course Outcomes:**

- CO1:** Students will be able to outline the type of decisions taken at different levels of organisation.
- CO2:** Students will be able to explain the process of strategic decision making in an organisation.
- CO3:** Students will be able to apply various tools to assess business environment.
- CO4:** Students will be able to differentiate among various stages of strategic management starting from strategy formulation to its evaluation.
- CO5:** Students will be able to evaluate the strategy which best fits in achieving the organisational goals.
- CO6:** Students will be able to develop a framework of how an organisation actually works by developing policies and strategies.

**Course Contents:**

## **UNIT-I**

An introduction to business policy - Nature, Objective and importance of business policy; An overview of strategic management; Strategic decision making; Process of strategic decision making.

## **UNIT-II**

Strategy formulation: Company's vision, mission and objectives; Environmental and organizational appraisal, Strategic alternatives and choice; Types of strategies; Business ethics and corporate strategy, Concept of value chain, core competency, resource base theory and competitive advantage.

### UNIT-III

Strategy implementation: Designing organizational structure and activating strategies; Matching structure and corporate strategy, Structural, Behavioral and Functional implementation.

### UNIT-IV

Strategy Evaluation: Strategic evaluation and Control, Strategic and Operational Control; Techniques of evaluation and control.

#### Suggested Readings:

1. Jauch & Glueck, *Business Policy and Strategic Management*, McGraw-Hill Publications.
2. Thompson A.A. and Stickland A.J, *Strategic Management- Concept and cases*, Pearson
3. Michael Porter, *Competitive Advantage of Nations*, Free Press.
4. Azhar Kazmi, *Business Policy and Strategic Management*, Thomson Learning
5. Kenneth, A. Andrews, *Concepts of corporate Strategy*, Irwin/McGraw-Hill
6. Melvin J. Stanford, *Management Policy*, Prentice-Hall
7. Pearce, J. A., II, and R. B. Robinson, Jr. *Strategic Management: Strategy Formulation, Implementation, and Control*, Chicago, IL: R. D. Irwin, Inc
8. Jean-Louis Schaan, & Micheál J. Kelly *Cases in Alliance Management: Building Successful Alliances*, SAGE Publications

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.

- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-302**

**ENTREPRENEURSHIP DEVELOPMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to expose the students to the growth of entrepreneurship in developing countries with special reference to India.*

**Course Outcomes:**

**CO1:** The students will be able to list various constituents of entrepreneurship development.

**CO2:** The students will be able to identify the various environmental factors affecting entrepreneurship development

**CO3:** The students will be able to demonstrate skills to develop business plan at individual level.

**CO4:** The students will be able to examine the feasibility of a business.

**CO5:** The students will be able to evaluate the funding alternatives available for entrepreneurs.

**CO6:** The students will be able to develop and implement a business plan.

**Course Contents:**

**UNIT-I**

Concept of Entrepreneur and Entrepreneurship, Entrepreneur vs. Manager, Significance of Entrepreneurship in Economic Development; Economic, Social and Psychological needs for Entrepreneurship; Characteristics, Qualities and Pre-requisites of Entrepreneur; Rural Entrepreneurship.

## **UNIT-II**

The Function of the Entrepreneur in Economic Development of a Country; Methods and Procedures to start and expand one's own Business; Achievement Motivation; Environmental Factors affecting success of a new Business.



### UNIT-III

Feasibility Study -Preparation of Feasibility Reports: Selection of factory location, Economic, Technical, Financial and Managerial Feasibility of Project.

### UNIT-IV

Government support to new Enterprises; Role of Government and Promotional agencies in Entrepreneurship Development; Entrepreneurship Development Programmes in India

#### Suggested Readings:

1. Clifton, Davis S& Fyfe, David E., *Project Feasibility Analysis*, John Wiley.
2. Desai, A N., *Entrepreneur & Environment*, Ashish Publications.
3. Drucker, Peter., *Innovation and Entrepreneurship*, Heinemann.
4. Jain R., *Planning a Small Scale Industry: A Guide to Entrepreneurs*, S.S. Books.
5. Kumar, S A., *Entrepreneurship in Small Industry*, Discovery.
6. McClelland, D C & Winter, W G., *Motivating Economic Achievement*, Free Press.
7. Pareek, Udai and Venkateswara Rao, T., *Developing Entrepreneurship -A Handbook Learning Systems*, Learning Systems

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition,

eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA 303**

**BUSINESS LEGISLATION**

**Time Allowed: 3 Hours**

**M.M: 60**

**Course Objective:** *The aim of the paper is to acquaint the students with the Business law and Company law in their future role as managers.*

**Course Outcomes:**

- CO1:** Students will be able to define laws applicable to a business.
- CO2:** Students will be able to classify different laws and explain their specific purpose.
- CO3:** Students will be able to illustrate cases of law and interpret own manner to solve the problems of business class
- CO4:** Students will be able to examine company laws and compare it with previous laws before amendment of 2013
- CO5:** Students will be able to evaluate the existing business laws in India and analyse their importance
- CO6:** Students will be able to formulate guidelines according to regulatory framework of an organisation

**Course Contents:**

**UNIT-I**

The Indian Contract Act, 1872: Meaning of a Contract, Classification of Contracts, Essentials of a Valid Contract; Performance of a Contract; Discharge of a Contract; Breach of Contract; Quasi Contracts; Contract of Indemnity and Guarantee, Bailment and Pledge, Contract of Agency.

**UNIT-II**

The Sales of Goods Act, 1930: Meaning and essentials of a valid contract of sale, Distinction between sale and agreement to sell, Meaning of goods and their classification, Conditions and warranties, Doctrine of Caveat Emptor, Rights of an unpaid seller, Rights of buyer; Negotiable Instruments Act, 1881: Meaning and characteristics of negotiable instrument, Types of negotiable instruments and their characteristics, Holder and Holder-in-due-course, Discharge and Dishonour of negotiable instruments, Negotiation and Assignment.

### UNIT-III

The Companies Act, 2013; Meaning and Characteristics of a Company; Objects and Applications of Companies Act, 2013; Landmark provisions of new Companies Act, 2013; Classification of companies, Concept of One Person Company; Formation of a company, Memorandum and Articles of association, Prospectus, Allotment of shares and share capital, Membership in companies.

### UNIT-IV

Meetings of Companies: General principles of meetings, Types of meetings; Prevention of Oppression and Mismanagement; Winding up of a Company; Consumer Protection Act: Define consumer rights, provisions regarding complaints in consumer courts, Unfair Trade Practices and Restrictive Trade Practices, Consumer Protection Council, Consumer forum.

#### Suggested Readings:

1. Gulshan, S.S. and Kapoor, G.K., *Business Law including Company Law*, New Age International Publication.
2. Macintyre, E., *Business law*, Pearson Education.
3. Tulsian, *Business law*, Tata McGraw Hill.
4. Majumdar A.K. and Kapoor G.K., *Company Law and Practices*, Taxmann Publication.
5. Kothari, V., *Understanding Companies Act, 2013*, Taxmann Publication.
6. Pathak, A., *Contract Law in India*, Oxford University Press.
7. Gogna, P.P.S., *A Textbook of Company Law*, S. Chand Publishing.
8. Nolakha, R.L., *Company Law and Practice*, Vikas Publishing House Private Limited.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBA-304**

**SUMMER INTERNSHIP AND SEMINAR**

**(Internal)**

**Time Allowed: 1 Hour**

**M.M: 50**

**Course Objective:** *The objective of this course is to enable students to explore a career path and give themselves an edge in job market.*

**Course Outcomes:**

- CO1:** Students will be able to describe organizational structure and its functions with all the theoretical aspects learned in class room settings and simulated environment
- CO2:** Students will be able to identify (through understanding and learning the routine tasks within the organization) which work they would prefer to do after completion of MBA.
- CO3:** Students will be able to interpret the organizational dynamics in terms of organizational behavior, culture, competition, future strategies and change initiatives of the organization.
- CO4:** Students will be able to appraise the practical exposure and knowledge related to the job of their interest by working as an intern in any organization.
- CO5:** Students will be able to evaluate their learning during the internship phase and report it in form of a seminar.
- CO6:** Students will be able to assemble and present the learnings from internship.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The list of students will be notified by the Programme Coordinator in the class along with the schedule of seminar presentation by each student during the semester.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student on his/her summer training and the evaluation will be done on the basis of exposure to industry/academics, problem undertaken, communication skills, contents, delivery, body-language and question-answer handling skills of the student on a preform duly notified to the students in advance.



**MBA-401**

**COMPREHENSIVE VIVA-VOCE (External)**

**(Compulsory for all the Students)**

**M.M: 100**

**Course Objective:** *The objective of the course is to enable students to get a thorough understanding of what conceptual knowledge they have acquired and how they will be able to express it unambiguously in a demanding situation*

**Course Outcomes:**

- CO1:** Student will be able to recall the important terms related to core and general courses of management.
- CO2:** Students will be able to explain their understanding about learnings from the programme.
- CO3:** Students will be able to demonstrate their soft and hard skills.
- CO4:** Students will be able to examine their own spontaneity, mannerisms and presence of mind which will help them in introspection for future such events (Job Interviews).
- CO5:** Students will be able to defend the knowledge about their respective field.
- CO6:** Students will be able to assemble their experiences gained during the programme.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The Programme Coordinator will announce in the class in the beginning of the semester regarding the significance of the Comprehensive Viva-Voce Examination and the expectations of the Panel of Examiners from the passing out students of MBA Programme.
- The Panel of Examiners duly constituted by the COE/Director/Principal will conduct an oral viva-voce examination to assess the overall programme objectives and overall course outcomes achieved by the students, during the programmes, on the basis of communication skills, course contents, analytical ability and question-answer handling skills of the student on a proforma duly notified to the students in advance.

**MBA-402**

**RESEARCH PROJECT**

**(Optional in lieu of one paper)**

**Time Allowed: 1 Hour**

**M.M: 100**

**Course Objective:** *The objective of this course is to make students understand the scientific ad systematic way of solving organizational problems by making valuable choices*

**Course Outcomes:**

- CO1:** Students will be able to draw a management problem in a scientific manner.
- CO2:** Students will be able to recognize the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Student will be able to distinguish the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO5:** Students will be able to evaluate the procedure for the scientific and systematic research in solving pragmatic problems of any organization.
- CO6:** Student will be able to construct and formulate research problems objectively thus enabling themselves to make effective decisions.

**Instructions for Research Project:** The following instructions will be followed:

1. Research project, which is optional, should be from major or core area of specialization of the student and shall be in lieu of one paper of his/her major or core area of specialization.
2. Students opting for MBA-402 Research Project in the 4th semester will have to register for the project in Semester III itself by submitting a synopsis along with consent of the supervisor in the office of HSB and to the office of Director/ Principal in case of affiliated institutes by 15th November.
3. Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, (HSB) in case of HSB and Director/ Principal in case of affiliated institutes.
4. The external examiner, appointed by the COE/Director, will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the internal out of 40 marks separately.
5. The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva voce will be appointed by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes.

**MBA-410**

**IN-COMPANY-PROJECT-WORK**

**(Optional in lieu of 3 Elective Courses)**

**Time Allowed: 1 Hour**

**M.M: 300**

**Course Objective:** *The objective of this course is to make the already placed students to understand the procedural scientific and systematic way of solving organizational problems by making valuable choices.*

**Course Outcomes:**

- CO1:** Students will be able to outline the real issues faced by the organization.
- CO2:** Students will be able to convert their learning of research methods into a realistic research design for their topic of research.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Students will be able to examine the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO5:** Student will learn to evaluate and select the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO6:** Students will be able to assemble and present the findings in a report.

**Instructions for In-Company-Project-Work: The following instructions will be followed:**

- If any student gets placement offer from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work-Report for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the university.
- However, such In-Company-Project-Work-Report will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes) and Industry Guide (to be appointed by the competent authority of the concerned Organization, who has offered appointment to our student and any pressing hard to join immediately). The Academic Guide will get two hour per week credit per students maximum up to ten credits in his or her teaching workload.
- The evaluation process will be along with detailed guidelines in this connection.

**OPEN  
ELECTIVES**

**OE – 301**

**COUNSELING SKILLS FOR MANAGERS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To develop basic skills among students to independently handle a wide range of employee counseling and performance counseling.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in counselling.

**CO2:** Students will be able to explain conceptual framework of counselling.

**CO3:** Students will be able to demonstrate the process of counselling.

**CO4:** Students will be able to differentiate between theories of counselling.

**CO5:** Students will be able to evaluate practical solutions to human behaviour related problems in the organization

**CO6:** Students will be able to develop his own model of counselling.

**Course Contents:**

**UNIT-I**

Introduction to Counseling- Emergence, Growth, Definition, Need, Goal, Role and Characteristics of Counselor and Counselee, Difference between Counseling and Psychotherapy, and General Principles of Counseling



## UNIT-II

Approaches to Counseling- Psycho-analytical (Sigmund Freud Theory), Therapeutic (Alfred Adler Theory), Behaviouristic (B. F. Skinner Theory), Cognitive (Albert Ellis Model) and Humanistic Approaches (Carl Rogers Approach);

## UNIT-III

Counseling Process- 5-D Model, the Phases of Counseling Process, Counseling Environment and Procedure, and the Core Conditions of Counseling; Counselor's Attitude and Skills of Counseling- Verbal and Non-verbal Communication Modalities, Listening Skills, Listening Barriers and Strategies to Overcome Listening Barriers;

## UNIT-IV

Organizational Applications of Counseling Skills- Identifying Problems and Coping Strategies with regard to Occupational Stress and Performance Management; Special Problems in Counseling- Selection of Counseling Strategies and Interventions, Changing Behavior through Counseling; Ethical and Legal Aspects of Counseling, and Current trends in Counseling.

### **Suggested Readings:**

1. Cormer, L.S., and Hackney, H., *The Professional Counselor's Process Guide Helping*, Englewood Cliffs, Prentice Hall Inc.
2. Moursund, J., *The Process of Counseling and Therapy*, Englewood Cliffs, Prentice Hall Inc.
3. Munro, C A, *Counseling: A Skills Approach*, Methuen.
4. Reddy, Michael, *Counseling at Work*, British Psychological Society and Methuen.
5. Rao, S. Narayana, *Counselling and Guidance*, Tata McGraw Hill.
6. Gladding, S. T, *Counseling- A Comprehensive Profession*, Pearson.
7. Singh, Kavita, *Counselling Skills for Managers*, Prentice Hall of India.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *Econometrics is concerned with quantifying economic relations, with the provision of numerical estimates of the parameters involved and testing hypotheses embodied in economic relationships. This course aims to provide a basic introduction to econometric analysis, to enable students to examine existing theories with empirical data. In doing so, it examines the difficulties inherent in confronting theory with business data in order to quantify relationships, in dealing with errors and problems in variables, which can be only observed but not controlled, and the means of compensating for uncertainty in data.*

**Course Outcomes:**

- CO1:** Students will be able to define and memorize the various fundamental terms and concepts of econometrics.
- CO2:** Students will be able to explain the basic assumptions, procedures and properties of various estimators.
- CO3:** Students will be able to apply various data analysis models.
- CO4:** Students will be able to compare the results obtained from various models.
- CO5:** Students will be able to evaluate the results and test their statistical significance.
- CO6:** Students will be able to develop a good quality research paper in finance and economics using the econometric methods

## **Course Contents:**

### **UNIT-I**

Nature, scope and methodology of econometrics; Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method.

### **UNIT-II**

Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression co-efficient,  $R^2$  and adjusted  $R^2$ ; Econometric Problems: Multi co linearity, Autocorrelation and Heteroscedasticity.

### UNIT-III

Dummy variables-Nature and uses, Regression on dummy variables, Regression on Dummy Dependent Variable-The basic idea of the Linear Probability Model (LPM), Probit and Logit Models. Dynamic Econometric Models: Koyck distributed lag model, the adaptive expectation model, and the partial adjustment model.

### UNIT-IV

Simultaneous Equation Models: Structural, Reduced and final forms, Identification-Order and rank conditions, Methods for estimating the simultaneous models-Basic idea of Indirect Least Square (ILS) and Two Stage Least Square (2SLS) methods. Seemingly Unrelated Regressions (SUR), SUR versus OLS

#### Suggested Readings:

1. Greene, William H., *Econometric Analysis*, Macmillan.
2. Johnston, J., *Econometric Methods*, McGraw -Hill.
3. Gujarati, Damodar N., *Basic Econometrics*, McGraw-Hill.
4. Stock J. H. and Watson M.W. *Introduction to Econometrics*, Addison-Wesley Series in Economics.
5. Koutsoyiannis, A., *Theory of Econometrics*, Harper & Row.
6. Kmenta, J., *Theory of Econometrics*, Macmillan.
7. Maddala, G.S., *Introduction to Econometrics*, Macmillan.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE - 303**

PERSONAL FINANCE

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to make students learn the various aspects of personal finance.*

**Course Outcomes:**

**CO1:** Students will be able to describe the different concepts of personal finance.

**CO2:** Students will be able to explain the risk profiling.

**CO3:** Students will be able to demonstrate the skills in selecting financial products.

**CO4:** Students will be able to examine the different financial products according to their risk profile.

**CO5:** Students will be able to evaluate the different financial products on the basis of their cost and benefits.

**CO6:** Students will be able to design the different financial products keeping in mind macro and micro variables.

**Course Contents:**

UNIT-I

Personal Finance: Meaning and importance. Financial planning: meaning, process and role of financial planner. Risk profiling: client data analysis, life cycle, wealth cycle. Asset allocation: Strategic, Tactical, Fixed and Flexible.

UNIT-II

Risk Management: Meaning, process and importance. Distinguish between risk assessment, risk management and risk avoidance. Assessment of requirement of Health Insurance, Life Insurance and General Insurance. Choice of products for risk coverage

#### UNIT-III

Investment Management: meaning and importance. Investment avenues: equity, debt, gold, real estate, mutual funds, exchange-traded funds. Portfolio management: meaning, construction, evaluation and revision. Loan management: meaning, types, importance and assessment, personal, car loan, home Loan etc.

#### UNIT-IV

Tax planning: basics terms of income tax, advance tax, tax deduction at source, deductions under section 80C, 80 CCC, 80 D and 80 G. Taxation of investment products. Retirement planning, Management of nomination, power of attorney and will

#### **Suggested Readings:**

1. Kapoor Jack R, *Personal Finance*, The McGraw-Hill companies.
2. Huang. Stanley S C and Randall, Maury R., *Investment Analysis and Management*. Allyn and Bacon.
3. Gaungully, Ashok, *Insurance Management*, New Age Publishers, New Delhi.
4. Ahuja, G K & Gupta Ravi, *Systematic Approach to Income Tax*, Allahabad, Bharat Law House.
5. Pandian, *Security Analysis and Portfolio Management*, Vikas Publishing House, New Delhi.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.



The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE-304**

**APPLICATIONS OF MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to acquaint the students with the various aspects of applications of the marketing principles in corporate world.*

**Course Outcomes:**

- CO1:** Students will be able to outline with the various application areas of marketing.
- CO2:** Students will be able to explain the key concepts related to the application areas of marketing.
- CO3:** Students will be able to use the marketing concepts in interpreting marketing strategies.
- CO4:** Students will be able to appraise a marketing environment from different perspective.
- CO5:** Students will be able to judge the overall marketing mix strategy of an organization.
- CO6:** Students will be able to develop a basic marketing strategy for varied areas of marketing.

**Course Contents:**

**UNIT-I**

Consumer Behavior: Introduction to consumer behavior, Understanding the role of internal and external influences on consumer behavior, Consumer Decision Making Process.

Sales and Distribution: Introduction to Sales, Its Importance, objectives and functions; Sales forecasting & designing sales territories; Distribution Channels: purpose & types of distribution channels.

## UNIT-II

Retailing: Introduction to Retailing; Organized Vs Unorganized retailing, Types of Retail formats. Internet marketing: Relevance of Internet Marketing, Web analytics, SEO, Social Media Marketing.

## UNIT-III

Marketing of Services: Introduction to Services, Characteristics of Services compared to Goods, Service Mix, Gap model of Service Quality, Service classification. Marketing Communication: Elements of Marketing Communication, Relevance of IMC, Designing a Marketing Communication Programme

## UNIT-IV

Industrial Marketing: Meaning and Concept of Industrial Marketing, Types of Industrial Customers, Classification of Industrial Products, Industrial Buying Process. Rural Marketing: Introduction to rural markets in India, Classification of products and services in rural marketing, Analysis of rural demand, Marketing Practices in rural market.

### Suggested Readings:

1. Schiffman, L., & Wisenblit, J., *Consumer Behaviour*, Prentice Hall PTR.
2. Still, Richard R., Edward W. Cundiff, and Norman A.P. Govoni: *Sales Management*, Prentice Hall, New Delhi.

3. Christopher Lovelock, Jochen Wirtz and Jayanta Chatterjee, *Services Marketing*, Pearson Education
4. Bowersox and Others, *Physical Distribution Management*, Tata McGraw Hill, New Delhi.
5. Levy Micheal, Weitz Barton A. And Pandit Ajay, *Retailing Management*, Tata McGraw Hill, New Delhi
6. Havalder, Krishna K., *Industrial Marketing*, TMH, New Delhi.
7. George E. Belch, Michael A. Belch and Keyoor, Purani, *Advertising and Promotion*, McGraw Hill Education.
8. Charlesworth, A., *Internet Marketing: A Practical Approach*, BH Publications.
9. Acharya S. S. and Agarwal N. L., *Agricultural Marketing in India*, Oxford & IBH Publishing Co.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE-305 EXPORT IMPORT PROCEDURES AND DOCUMENTATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of the course is to acquaint the students with the export-import procedures and documentation*

**Course Outcomes:**

**CO1:** Students will be able to describe the legal framework and procedure governing international trade.

**CO2:** Students will be able to explain the incorporation of various terms in drafting of an export contract and understand the importance of risk management.

**CO3:** Students will be able to apply the concepts learned in terms of export order, delivery and international trade pricing to actual transactions.

**CO4:** Students will be able to appraise the role and importance of export-import documentation and procedure framework according to commodities and countries.

**CO5:** Students will be able to evaluate the nuances of import and export clearance procedures.

**CO6** Students will be able to develop the skills to export-import various commodities in different countries and avail benefits of various export incentives and promotional schemes given by government.

**Course Contents:**

**UNIT- I**

Export Preliminaries, Documentation in international trade: Aligned Documentation System (ADS); Commercial documents, Regulatory documents, Documents related to goods, shipment, payment, inspection and legal regulated documents, Official machinery for consultation.

## **UNIT- II**

Export contract: Distinction between domestic sales contract and export sales contract, Major laws for export contracts, Elements in export contracts, Dispute settlement, Role of ICC; INCOTERMS, Containerization.

### UNIT- III

Export order processing; shipping and custom clearance of export and import cargo; central excise clearance; Role of clearing and forwarding agents. Types of risks in international trade, Cargo Insurance and claim Procedures

### UNIT- IV

Methods of payment in international trade; documentary collection of export bills, UCPDC guideline, Instruments of payments, Pre-shipment and post-shipment finance, Negotiation of documents with banks, Main Provisions of FEMA; Procedure and documentation for availing export incentives.

#### Suggested Readings:

1. C. Rama Gopal, *Export Import Procedures, Documentation and Logistics*, New Age International Publishers, New Delhi.
2. M. D. Jitendra, *Export Procedures and Documentation*, Rajat Publications.
3. Pervin Wadia, *Export Markets and Foreign Trade Management*, Manishka Publications.
4. Paras Ram, *Export: What, Where and How*, Anupam, Publications.
5. Government of India, *Handbook of Import - Export Procedures*.
6. Nabhi's *Exporters Manual and Documentation*.
7. Nabhi's *New Import-Export Policy Procedures*

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.

The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**OE-306**

**CORPORATE GOVERNANCE AND BUSINESS ETHICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize the students about the various ethical and corporate governance issues in business management in the current environment.*

**Course Outcomes:**

- CO1:** Students will be able to describe the different concepts of corporate governance.
- CO2:** Students will be able to explain the ethical dimension of doing business.
- CO3:** Students will be able to demonstrate the skills in implementing governance related matters
- CO4:** Students will be able to examine the different issues pertaining to corporate social responsibility of business.
- CO5:** Students will be able to evaluate the regulatory aspects of corporate governance.
- CO6:** Students will be able to design practical ways of inculcating ethics in various functions and operations of business.

**Course Contents:**

**UNIT-I**

Evolution of corporate governance; developments in India; regulatory framework of corporate governance in India; SEBI guidelines on corporate governance; reforms in the Companies Act

## **UNIT-II**

Corporate management vs. governance; internal constituents of the corporate governance; key managerial personnel (KMP); chairman- qualities of a chairman, powers, responsibilities and duties of a chairman; chief executive officer (CEO), role and responsibilities of the CEO.

## **UNIT-III**

Introduction to Business Ethics: The concept, nature and growing significance of Ethics in Business, Ethical Principles in Business, Ethics in Management, Theories of Business Ethics, Ethical Issues in Business, Business Ethics in 21<sup>st</sup> Century.

## UNIT-IV

Ethics in various functional areas of Business: Ethics in Finance, Ethics in HRM, Ethics in Marketing, Ethics in Production and Operation Management.

### Suggested Readings:

1. Mallin, Christine A., *Corporate Governance (Indian Edition)*, Oxford University Press, Delhi.
2. Blowfield, Michael, and Alan Murray, *Corporate Responsibility*, Oxford University Press.
3. Francesco Perrini, Stefano, and Antonio Tencati, *Developing Corporate Social Responsibility-A European Perspective*, Edward Elgar.
4. Sharma, J.P., *Corporate Governance, Business Ethics & CSR*, Ane Books Pvt Ltd, New Delhi.
5. Manuel G. Velasquez, *Business Ethics*, Pearson Prentice Hall.
6. Ravindranath B. & Narayana B., *Business Ethics*, Vrinda Publications Pvt. Ltd

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE-307**

**INDIAN ETHOS AND VALUES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objectives:** *The course aims to help student appreciate the significance of Indian Ethos and Values along with its relevance and implications to managerial decision making.*

**Course Outcomes:**

**CO1:** Students will be able to recall the values related to Indian ethos.

**CO2:** Students will be able to identify how Indian ethos is associated with business organizations.

**CO3:** Students will be able to demonstrate the skills required to develop a holistic approach towards management of organizations

**CO4:** Students will be able to appraise the importance of Indian education system and philosophy behind it.

**CO5:** Students will be able to evaluate the human values thus generating a value-driven management.

**CO6:** Students will be able to develop ways to solve real-life problems related to human behaviour based on his understanding on Indian ethos and values.

**Course Contents:**

**UNIT- I**

Indian Ethos: Meaning of Bharat, relevance of Indian ethos, role of Indian ethos in managerial practices; Sources of Indian Ethos in Management: Vedas, Ramayana, Bible, Quran, Kautilya's Arthashastra, Ethics v/s Ethos; Indian Management v/s Western Management

## **UNIT- II**

Modern Approach towards Indian Ethos : Introduction, Indian Management Thoughts, Holistic Approach to Management; Sadhana –In Management context, The Tatwas in Indian Ethos; Management Thoughts and Practice: Harmony with Environment, Dharma, Swadharma and Detachment, Holistic approach to Personality, Managerial Purusharth Karma yoga & enlightened leadership

## **UNIT- III**

Learning and Education System in India: Learning concept, Gurukul System of Learning, The beginning of modern education system, Achievements of the Indian education system; Law of Karma, Law of creation, law of humility, law of growth, law of responsibility

## **UNIT- IV**

Human Values: Meaning, significance, Vedic literature and values, formation of values, Aristotle's view on value inculcation, Objectives of value-based system, Interrelation of Values and Skills, Values and the workplace, Value-based Human response management, Need of value-based

holistic management, Value-driven management, Indian culture and wisdom, The ethical and spiritual values and Methods of heart and mind purification

### Suggested Readings:

1. Agarwal, T. & Chandorkar, N., *Indian Ethos in Management*, Himalaya Publishing House
2. Nandgopal, R. & Sankar, R.N.A., *Indian Ethos & Values in Management*, Tata McGraw Hill Education
3. **Ganjre, A.K., Pawar, P. & Laxman R.**, *Indian Ethos - Modern Management Mantra*, Himalaya Publishing House
4. **Bansal, I.**, *Management Concept in ancient India psycho-philosophic thought and their significance in present day organization*, Jaipur, Narayan Publication
5. Sharma. S., *Management in New Age: Western Windows Eastern Doors Management*, New Age International

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The Objective of this course is to familiarize the student with basic concepts of information technology, its application in business and make them conscious of cyber security laws and practice.*

**Course Outcomes:**

- CO1:** Students will be able to relate with various software related to office application.
- CO2:** Students will be able to explain and identify electronic data transfer takes place and will be able to handle data base management systems.
- CO3:** Students will be able to use and operate telecommunication networks which are most commonly used in organizations.
- CO4:** Students will be able to question and test the various operations of the internet.
- CO5:** Students will be able to evaluate and examine the perspectives of cyber security hence bearing ethical responsibility.
- CO6:** Students will be able to develop solutions for real-life problems based on computer applications and cyber security.

**Course Contents:**

UNIT-I

Software Packages for Office Applications- Word Processing using MS Word, Spreadsheets using MS Excel, Presentations using MS PowerPoint, Creating web pages and web applications with HTML, Business functionalities using Tally software.

## UNIT-II

Electronic Data Processing: An introduction; Data processing cycle; data hierarchy; data file structure; file organization, Data Base Management Systems

## UNIT-III

Telecommunication and Networks: Types of Telecommunication Networks, Telecommunications Media, Network Topologies, Network Architectures-The OSI Model. The Internet, Intranet and Extranets: Operation of the Internet, Services provided by Internet, World Wide Web, Intranet and Extranets.

## UNIT-IV

Cyber Security: Perspective of Cyber security, Application security, Information security, Network security, End-user education, Cryptography / Encryption, Security issues in wireless, Security Threats and Vulnerabilities, Ethical Responsibility - Business Ethics, Technology Ethics; Cyber Crime and Privacy Issues. Brief introduction to Information Technology Act, 2000, IT (Amendment) Act

### Suggested Readings:

1. Ram, B., *Computer Fundamentals*, New Age Publications.
2. Rajaraman, V., *Introduction to Information Technology*, PHI.
3. Shrivastava., *Fundamental of Computer & Information Systems* ,Wiley Dreamtech.
4. Chwan-Hwa (John) Wu, J. David Irwin, *Introduction to Computer Networks and Cybersecurity*, CRC Press.
5. Aparna Viswanathan, *Cyber Law*, Lexis Nexis Butterworths

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of four short questions covering the entire syllabus. In addition,



eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry 8 marks each. The maximum time allotted for the major test is 03 (three) hours.

**OE-309**

**DISASTER MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to understand the framework for evaluating disaster management regarding the capital expenditure proposals, their planning, finance, appraisal and management in the review of the projects undertaken.*

**Course Outcomes:**

- CO1:** Students will be able to explain the importance, scope and functions of Disaster Management.
- CO2:** Students will be able to illustrate the Life Cycle of any given disaster management project.
- CO3:** Students will be able to sketch estimation of Guidelines for Time, Costs and Resources required for Disaster Management by applying different methods.
- CO4:** Students will be able to examine the Scheduling Resources and Reducing Disaster Duration.
- CO5:** Students will be able to evaluate Role and Responsibilities of the Disaster Manager, Planning, Organizing, Controlling, Skills of the Disaster Manager.
- CO6:** Students will be able to formulate strategies for risk reduction in Disaster.

**Course Contents:**

**UNIT-I**

Introduction to Disasters: Concepts, and definitions (Disaster, Hazard, Vulnerability, Resilience, Risks) Disasters: Classification, Causes, Impacts (including social, economic, political, environmental, health, psychosocial, etc.), Differential impacts- in terms of caste, class, gender, age, location, disability, Global trends in disasters, urban disasters, pandemics, complex emergencies, Climate change

## UNIT-II

Approaches to Disaster Risk reduction: Disaster cycle its analysis, Phases, Culture of safety, prevention, mitigation and preparedness community based DRR, Structural- nonstructural measures, roles and responsibilities of- community, Panchayati Raj Institutions/Urban Local Bodies (PRIs/ULBs), states, Centre, and other stake-holders.

## UNIT-III

Inter-relationship between Disasters and Development: Factors affecting Vulnerabilities, differential impacts, impact of Development projects such as dams, embankments, changes in Land-use etc. Climate Change Adaptation. Relevance of indigenous knowledge, appropriate technology and local resources

## UNIT-IV

Disaster Risk Management in India Hazard and Vulnerability profile of India, Components of Disaster Relief: Water, Food, Sanitation, Shelter, Health, Waste Management Institutional arrangements (Mitigation, Response and Preparedness, DM Act and Policy, Other related policies, plans, programmes and legislation), Contemporary issues in Disaster Management including COVID-19.

### **Suggested Readings:**

1. Alexander David, Introduction in 'Confronting Catastrophe', Oxford University Press
2. Andharia J. Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Papers
3. Blaikie, P, Cannon T, Davis I, Wisner B At Risk Natural Hazards, Peoples' Vulnerability and Disasters, Routledge.
4. Coppola P Damon, Introduction to International Disaster Management,
5. Carter, Nick Disaster Management: A Disaster Manager's Handbook. Asian Development Bank, Manila Philippines.
6. Cuny, F. Development and Disasters, Oxford University Press.
7. Document on World Summit on Sustainable Development.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

# **HUMAN RESOURCE MANAGEMENT AREA**

**THIRD  
SEMESTER**

**HRM-301**

**MANAGEMENT OF INDUSTRIAL RELATIONS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *Organizational efficiency and performance are intricately interlinked with industrial relations. This course attempts to appreciate the conceptual and practical aspects of industrial relations at the macro and micro levels.*

**Course Outcomes:**

**CO1:** Students will be able to describe the basic concepts of Industrial Relations.

**CO2:** Students will be able to explain the importance of organized trade unions.

**CO3:** Students will be able to apply the process of collective bargaining between managers and workers.

**CO4:** Students will be able to appraise the process of resolving industrial disputes in industrial organizations.

**CO5:** Students will be able to evaluate and compare the industrial relations scenario of different countries.

**CO6:** Students will be able construct cases of industrial disputes/ relations of corporate sector.

**Course Contents:**

**UNIT-I**

Industrial Relations: Concept, evolution, significance, perspectives and organization; Anatomy of industrial relations; Industrial relations and the State; Trade Unions: Concept, significance, types, approaches and objectives, Problems of trade unions in India and recommendations of National Commission on labour for strengthening of trade unions.

## **UNIT-II**

Collective Bargaining: concept, importance and process of bargaining; Participative Management: Forms of worker's participation in management; Tripartite and bipartite bodies; Standing order and Grievance procedure; Code of Discipline

## **UNIT-III**

Industrial Disputes: Conciliation and Board of conciliation; Arbitration: types and evaluation; Adjudication: Three tier System, Model principles for reference of dispute to adjudication.



## UNIT-IV

Modern and international Scenario of Industrial relations: Industrial Relations and Technological Change; Industrial Relations and HRD; ILO and Industrial Relations; Legal Framework of Industrial Relations; Industrial Relations systems in India, UK, USA and Japan.

### Suggested Readings:

1. Mamoria & Manoria, *Dynamics of Industrial Relations*; Himalaya Publishing House.
2. Niland, J R., *The Future of Industrial Relations*, Sage.
3. Davar; R.S., *Personnel Management and Industrial Relations*; Vikas Publishing House Pvt Ltd.
4. Ltd.
5. Manappa, A., *Industrial Relations*; Tata McGraw Hill Publishing Company Ltd.
6. Dwivedi; R.S., *Managing Human Resources and Industrial Relations*. Galgotia Publishing Company.
7. Company.
8. Srivatava; S.C., *Industrial Relations and Labour Laws*, Vikas Publishing House Pvt Ltd.
9. Venkata Ratnam, C.S., *Industrial Relations*; Oxford University Press.
10. Sen, R. *Industrial Relations in India*; Macmillan India Ltd.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-302**

**HUMAN RESOURCE PLANNING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this paper is to develop a conceptual as well as a practical understanding of the students regarding human resource planning in organizations*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in Human Resource Planning.

**CO2:** Students will be able to explain conceptual framework of HRP.

**CO3:** Students will be able to demonstrate the process of HRP.

**CO4:** Students will be able to compare job related techniques.

**CO5:** Students will be able to evaluate practical solutions of problems related to manpower planning in the organization.

**CO6:** Students will be able to develop their own model of HR planning suitable to the organization.

**Course Contents:**

**UNIT-I**

Human Resource Planning: Concept, Objectives, Benefits, Problems; Strategic Human Resource Planning; Job Analysis

## **UNIT-II**

Human Resource Planning Process and Action Plans: Human Resource Demand Forecasting: Assessment and Techniques; Human Resource Supply Forecasting: Assessment and Techniques; Action plans for Recruitment and Selection, Separation, Retention, Training and Redeployment

## **UNIT-III**

Productivity Management and Human Resource Planning: Work Study, Method Study, Work Measurement, Job Design, Work Scheduling

## UNIT-IV

Human Resource Planning in Changing Context: Human Resource Information System; Human Resource Accounting and Audit; Structure of Labour Force and Demographic Changes: Problems and Challenges.

### Suggested Readings:

1. Sekhri, A., *Human Resource Planning & Audit*, Himalya Publishing House
2. Bhattacharyya D.K., *Human Resource Planning*, Excel Books India.
1. Dessler, G., *Human Resource Management*, Prentice Hall of India
2. Rao, V.S.P., *Human Resource Management*, Excel Books
3. Ashwathappa, K., *Text & Cases in Human Resources Management*, Tata McGraw Hill
4. D'Enzo, David A. and Robbins, S. P., *Human Resource Management*, John Wiley
5. Gomez-Mejia, Luis R., D. B. Balkin, and. Cardy, R. L., *Managing Human Resources*, Prentice Hall
6. Rothwell, W. J., & Kazanas, H. C., *Planning and Managing Human Resources*, Jaico Publishing House
7. Stevenson, W., *Operations Management*, McGraw Hill

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-303**

**COMPENSATION MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course is designed to promote understanding of issues related to the compensation or rewarding human resources in the corporate sector, public services and other forms of organizations and to impart skills in designing, analyzing and restructuring reward management systems, policies and strategies.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used for compensation management.

**CO2:** Students will be able to explain various compensation management techniques.

**CO3:** Students will be able to demonstrate the process of fixing compensation for various employees of organisations.

**CO4:** Students will be able to compare compensation practices of various companies.

**CO5:** Students will be able to evaluate compensation practices of multinational companies.

**CO6:** Students will be able to develop compensation plans for managers of middle scale organisations.

**Course Contents:**

**UNIT-I**

Compensation Management- Concept, objectives, nature, types, compensation responsibilities, compensation philosophies & approaches.

## **UNIT-II**

Bases for pay- traditional bases, incentive pay and person-focused pay; Pay for Performance, Competency Based Pay, Team rewards; Designing Compensation System- internal alignment (job analysis and job evaluation), external competitiveness and individual contribution.

## **UNIT-III**

Employee Benefits- legally required benefits, discretionary benefits and key issues in employee benefits; Compensating Executives, Laws relating to Compensation.

## UNIT-IV

Contemporary Strategic Compensation Challenges- compensation practices of multinational corporations and working of different institutions related to reward system like wage boards, pay commissions.

### Suggested Readings:

1. Martocchio, Joseph J, *Strategic Compensation: A Human Resource Management Approach*, Pearson Education.
2. Milkovich and Newman, *Compensation*, Tata McGraw-Hill.
3. Armstrong, Michel and Murlis, Helen, *Reward Management: A Handbook of Salary Administration*, Kogan Page.
4. Bhattacharya, M.S.& Sengupta, N., *Compensation Management*, Excel Books

### Important Instructions for the Course Coordinator and the Examiner:

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**HRM-304**

**MANAGING INTERPERSONAL AND GROUP PROCESSES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to advance understanding regarding interpersonal and group processes and help the students to examine and develop process facilitation skills mainly through labouratory and other experience based methods of learning.*

**Course Outcomes:**

**CO1:** Students will be able to define different concepts of Interpersonal and group processes.

**CO2:** Students will be able to explain interpersonal behaviour.

**CO3:** Students will be able to demonstrate the role of transactional analyses in interpersonal behaviour.

**CO4:** Students will be able to compare various group decision making techniques.

**CO5:** Students will be able to evaluate the role of negotiations in group conflicts.

**CO6:** Students will be able to construct their own interpersonal behaviour model.

**Course Contents:**

**UNIT-I**



Group dynamics: types of groups, group properties, roles, norms, status and size, stages of group development and change; Group cohesiveness: factors contributing to group cohesiveness, Influence processes- power and politics in groups.

## UNIT-II

Interpersonal communication: Uncertainty reduction theory, Social exchange theory, Cognitive dissonance theory; Interpersonal awareness and feedback process- Transactional Analysis; Interpersonal trust; Competition and cooperation.

## UNIT-III

Group decision making: The Vroom Yetton Model, Techniques of group decision-making, Advantages and disadvantages of group decision-making; Group synergy; Team building.

## UNIT-IV

Inter-group relation and conflict: nature and types of conflicts, causes of conflicts and remedial measures of group conflicts, Role of Negotiation in group conflicts; distributive and integrative negotiation, third party negotiation; Fundamental interpersonal relations orientation (FIRO-B).

### Suggested Readings:

1. Chandan, J S, Organizational Behaviour, Vikas Publication.
2. Kolb, D., *Organizational Behaviour: Practical Readings for Management*, Englewood Cliffs, Prentice Hall Inc.

3. Mainiero, L A & Tromley C L., *Developing Managerial Skills in OB*, Prentice Hall of India,
4. Moore, M D., *Inside Organizations: Understanding the Human Dimensions*, Sage.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-305**

**STRATEGIC HUMAN RESOURCE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The primary concern to this course is to develop in depth understanding of the strategic role performed by HR in business organizations and to gain insight of the alignment between different HR systems and practices and organizational outcomes.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in strategic human resource management.

**CO2:** Students will be able to explain the practical importance of SHRM.

**CO3:** Students will be able to illustrate the various SHRM practices.

**CO4:** Students will be able to compare various SHRM practices practised by corporate sector.

**CO5:** Students will be able to evaluate practical implementation of various SHRM practices.

**CO6:** Students will be able to develop SHRM model for middle and small scale organisations.

**Course Contents:**

**UNIT-I**

Concept of SHRM and HR environment: investment perspective of SHRM, evolution of SHRM, barriers to strategic HR, role of HR in strategic planning.

## UNIT-II

Strategic fit frameworks: linking business strategy and HR strategy, HR bundles approach, best practice approach, business strategy and human resource planning, HRM and firm performance linkages: Measures of HRM performance, sustained competitive advantages through inimitable HR practices.

## UNIT-III

HR Systems: staffing systems, reward and compensation systems, employee and career development systems, performance management systems.

## UNIT-IV

Strategic options and HR decisions: Downsizing and restructuring, outsourcing and off shoring, Other HR practices/decisions.

### **Suggested Readings:**

1. Mello, Jeffrey A., *Strategic Human Resource Management*, Thomson Learning Inc.
2. Agarwal, Tanuja, *Strategic Human Resource Management*, Oxford University Press.
3. Dreher, George & Thomas Dougherty, *Human Resource Strategy*, Tata McGraw Hill.
4. Greer, Charles, *Strategic Human Resource Management*, Pearson Education.
5. Belcourt, Monica & Kenneth McBay, *Strategic Human Resource Planning*, Thomson

**Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-306**

**LEADERSHIP DYNAMICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to enhance the leadership skills of students and to develop insight into interpersonal dynamics through sensitivity training and experience based methods of learning.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in leadership dynamics.

**CO2:** Students will be able to explain conceptual framework of leadership dynamics.

**CO3:** Students will be able to apply various leadership theories in practical life.

**CO4:** Students will be able to compare the leadership styles practised by famous personalities.

**CO5:** Students will be able to evaluate various contemporary issues in leadership.

**CO6:** Students will be able to develop their own particular style of leadership.

**Course Contents:**

**UNIT-I**

Leadership Dynamics: Concept, Leadership and Management, Leadership and Power, Successful Leadership versus Effective Leadership.

## **UNIT-II**

Leadership Approaches: Trait Approach, Skills Approach, Behavioral Approach, Situational Approach, Contingency Approach, Path Goal Approach.

## **UNIT-III**

Leadership Styles: Autocratic, Democratic, Participative, Supportive, Free- rein; Comparative Analysis of Leadership Styles, Building Effective Leadership Styles, Leadership Styles of Famous Personalities in general perspective and in managerial perspective.

## **UNIT-IV**

Contemporary Issues in Leadership: Charismatic Leadership, Women Leadership, Multicultural Leadership, Team Leadership, Ethics in Leadership, Servant Leadership, Transactional and Transformational leadership.

**Suggesting Readings:**

1. Northouse, G. P., *Leadership: Theory and Practice*, Sage Publications.
2. Yukl, G., *Leadership in Organizations*, Pearson.
3. Hersey, P., Blanchard, K.H. and Johnson, D.E., *Management of Organisational Behaviour*, PHL.
4. Daft, L. R., *The Leadership Experience*, Cengage Learning.
5. Haldar, U. K., *Leadership and Team Building*, Oxford University Press.
6. Tripathi, D. K., *Team Building and Leadership*, Himalaya Publishing House.

#### **Important Instructions for the Course Coordinator and the Examiner:**

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**HRM-307**

**BUSINESS NEGOTIATIONS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To develop a set of conceptual frameworks that will help students to better analyze negotiations in general and master the business negotiation skills.*

**Course Outcomes**

**CO1:** Students will be able to describe the fundamentals of business negotiation.

**CO2:** Students will be able to explain the power of business negotiation in resolving differences across personalities, gender and culture.

**CO3:** Students will be able to apply the process of business negotiation in resolving organisational conflicts.

**CO4:** Students will be able to compare negotiation strategies in resolving organisational conflicts.

**CO5:** Students will be able to appraise the negotiation strategies for resolving differences at individual and organisational levels.

**CO6:** Students will be able to develop innovative negotiation strategies for resolving conflicts.

**Course Contents:**

**UNIT-I**

Negotiation Fundamentals: Nature of Negotiations and conflicts; Distributive and Integrative Negotiation; Negotiation Strategy and Planning: Unilateral vs. Bilateral Strategies, Planning Process, Negotiation Sub Processes: Perception, Cognition, Emotions, and Communication.

## UNIT-II

Negotiation Power: Influence Process, Negotiation Contexts: Relationships in Negotiation; Forms of relationships; Key elements in managing relationships, Agents, Constituents and Audiences: Coalitions, Standards for coalition decision making, Multiple Parties and Teams

## UNIT-III

Individual Differences I: Personality and Negotiations, Individual Differences II: Gender and Negotiations, Negotiation across Cultures: International and Cross Cultural Negotiations, Culture and negotiation, Managerial and research perspective on cross cultural negotiation.

## UNIT-IV

Resolving Differences: Managing Negotiation Impasses; Nature of impasses, resolving impasses; Negotiation Mismatches: Managing the shadow negotiation and social contract, Ury's Breakthrough Approach; Managing difficult negotiation: Third Party Approaches; Ethics in Negotiation.

### Suggested Readings:

1. Lewicki Roy J. , Saunders David M. & Barry Bruce, *Negotiations*, Tata McGraw Hill.
2. Brett, J. M., *Negotiating Globally*, Francisco, Josseys-Bass.

### **Important Instructions for the Course Coordinator and the Examiner:**

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The purpose of this paper is to provide an in-depth understanding of the role of training in organizations and to enable the course students to manage the training systems and processes.*

**Course Outcomes:**

**CO1:** Students will be able to describe the key concepts associated with training and development.

**CO2:** Students will be able to explain the training and development process.

**CO3:** Students will be able to interpret the training needs assessment of various employees.

**CO4:** Students will be able to differentiate between traditional and modern methods of training and development.

**CO5:** Students will be able to evaluate the effectiveness of training and development.

**CO6:** Students will be able to design training programme for various categories of employees.

**Course Contents:****UNIT-I**

Introduction to Training and Development: Concept, Objectives, Types, Importance, Role of Training and Development in HRD, Role, Responsibilities and Challenges of Training Manager, Strategic Training; Overview of Training Process.

## **UNIT-II**

Assessment: Training Needs Assessment-Organizational analysis, Person analysis, Task analysis; Objectives Setting; Learning: Theories and Programme Design, Principles of Adult Learning.

## **UNIT-III**

Implementation: Traditional and Modern Training Methods; Role of Technology in Training; Training Aids; Training Climate.

## **UNIT-IV**

Evaluation: Concept, Process of Evaluation, Evaluation designs, Training Effectiveness, Transfer of Training; Future of Training and Development.

### **Suggested Readings:**

1. Noe, R. A., *Employee Training and Development*, McGraw Hill
2. Blanchard, P. N., Thacker, J.W. and Ram, V.A., *Effective Training: Systems, Strategies and*

Practices, Allyn and Bacon

3. Beebe, S.A., Mottet, T. P. & Roach, K. D., Training and Development: Enhancing Communication and Leadership Skills, Allyn and Bacon.
4. Dessler, G., Human Resource Management, Prentice Hall of India
5. Rao, V.S.P., Human Resource Management, Excel Books
6. Buckley, R. & Caple, J., The Theory & Practice of Training, Kogan Page.
7. Lynton, R.& Pareek, U., Training for Development, Sage Publications.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FOURTH  
SEMESTER**

**HRM-401**

**LABOUR LAWS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims to provide an understanding, application and interpretation of the various labour laws and their implications for industrial relations and labour issues.*

**Course Outcomes:**

- CO1:** Students will be able to list the labour laws and related terminology.
- CO2:** Students will be able to explain the importance of various labour legislations.
- CO3:** Students will be able to apply the knowledge of labour laws in their working organizations.
- CO4:** Students will be able to appraise the implementation of various labour laws.
- CO5:** Students will be able to evaluate the practical implementation of various labour laws.
- CO6:** Students will be able to develop various case laws pertaining to labour issues for corporate sector.

**Course Contents:**

**UNIT-I**

Introduction, Emergence, Need and Objectives of Labour Laws; Principles of Modern Labour Laws; Classification of Labour Laws; ILO, Indian Constitution and Labour Legislations, Code of Labour Laws.



## UNIT-II

Regulative Labour Laws: Trade Union Act; Industrial Dispute Act; Factory Act.

## UNIT-III

Wage-Related Labour Laws: Payment of Wages Act; Minimum Wages Act; Payment of Bonus Act; Payment of Gratuity Act.

## UNIT-IV

Social Security Labour Laws: Workmen's Compensation Act; Employees' State Insurance Act; Employees Provident Fund and Miscellaneous Provisions Act.

### **Suggested Readings:**

1. Singh, B.D., *Labour Laws for Managers*, Excel Books
2. Malik, P L., *Handbook of Industrial Law*, Eastern Books.
3. Kapoor, N.D., *Mercantile Law*, Sultan Chand and Sons.
4. Taxmann's Labour Laws, Taxmann Publishing Pvt. Ltd.
5. Srivastava, S. C., *Industrial Relations and Labour Law*, Vikas Publishing House.
6. Latest Bare Act of each Act.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-402**

**HUMAN RESOURCE DEVELOPMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to facilitate an understanding of the concept, framework and applications of HRD. This course is intended to make students capable of applying the principles and techniques for developing human resources in an organization.*

**Course Outcomes:**

**CO1:** Students will be able to describe the concept of human resource development.

**CO2:** Students will be able to discuss various HRD applications or interventions.

**CO3:** Students will be able to interpret HRD needs of various employees.

**CO4:** Students will be able to appraise the influence of HRD on employee behavior

**CO5:** Students will be able to evaluate the effectiveness of various HRD programmes.

**CO6:** Students will be able to design effective HRD programmes for employees in organizational settings.

**Course Contents:**

**UNIT-I**

Foundations of Human Resource Development (HRD): Evolution, Concept, Goals, Benefits, Functions; Roles and Competencies of HRD professionals; Influence of HRD on Employee Behavior; HRD and Learning; Challenges in HRD.

## UNIT-II

Framework for HRD: Assessing HRD needs, Designing and developing effective HRD programme, Implementing HRD programs, Evaluating effectiveness of HRD Programs: Purpose, Models and Framework of Evaluation, HRD Audit, Ethical Issues in Evaluation; HRD Climate and Culture, HRD strategy

## UNIT-III

HRD Applications: Coaching and Mentoring, Socialization and Orientation, Training and Development, Career management and development, Potential appraisal and development, Succession Planning, Employee counseling, Competency mapping, Organization Development and Change, People Capability Maturity Model (PCMM), Quality of Work Life.

## UNIT-IV

Contemporary Issues in HRD: HRD and Diversity-HRD programmes for culturally diverse employees, Adapting to Labour Market Changes, HRD practices in Indian and International organizations.

### Suggested Readings:

1. Desimone, Werner, Human Resource Development, Cengage Learning.
2. Haldar, U. K., *Human Resource Development*, Oxford Publications
3. Krishnaveni, R., *Human Resource Development*, Excel Books.

4. Wilson, J.P., *Human Resource Development*, Kogan page.
5. Rao, T.V., *Future of HRD*, Macmillan Publishers India.
6. Rao, T.V., *Human Resource Development*, Experiences, Interventions, Strategies, SAGE Publications.
7. Mankin, D., *Human resource development*, Oxford University Press India.
8. Curtis, B., Hefley, W. E., Miller, S. A., *The People Capability Maturity Model: Guidelines for Improving Workforce*, Pearson Education.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM- 403**

**PERFORMANCE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint the students regarding the concept, importance, process and implementation of performance management system in an organization.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in performance management.
- CO2:** Students will be able to identify various performance management practices.
- CO3:** Students will be able to interpret various performance management techniques.
- CO4:** Students will be able to compare performance management practices of different companies.
- CO5:** Students will be able to evaluate the implementation of various performance management practices.
- CO6:** Students will be able to develop a performance management model for corporate sector.

**Course Contents:**

**UNIT-I**

Foundations of Performance Management: Concept, Objectives, Significance of Performance Management, Performance Management Process, Performance Management and Strategic Planning, Performance Management and Performance Appraisal.

## **UNIT-II**

Implementation of Performance Management System: Defining Performance and Choosing Measuring Approach, Models for assessing performance: balanced Scorecard, EFQM Model; Outcome Metrics: Economic Value added (EVA) & other economic measures; Measuring Results and Behavior, Common Problems in Employee Assessment, Gathering Performance Information, Implementing a Performance Management System.

## **UNIT-III**

Performance Management and Employee Development: Personal Developmental Plans, 360 Degree Feedback Systems, Performance Management Skills, Contribution of Human Resource Management Practices to Employee Performance.

## UNIT-IV

Reward Systems and Legal Issues: Traditional and Pay for Performance plans; Impact of leadership on organizational performance, Managing team performance, ethics in performance Management; Performance management practices in Indian organizations.

### Suggested Readings:

1. Aguinis, H., *Performance Management*, Prentice Hall
2. Bagchi, S. N., *Performance Management*, Cengage Learning
3. Bhattacharyya, D, *Performance Management System & Strategies*, Pearson Education
4. Bacal, R., *Performance Management*, McGrawHill
5. Dessler, G., *Human Resource Management*, Pearson Education
6. Armstrong, M., *Performance Management – Key strategies and Practical Guidelines*, Kogan Page

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**HRM-404 ORGANISATIONAL CHANGE AND INTERVENTION STRATEGIES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this paper is to make the students learn about the organizational change and prepare them as change facilitators using the knowledge and techniques of behavioral science.*

**Course Outcomes:**

**CO1:** Students will be able to recall different concepts of organisation change and intervention strategies.

**CO2:** Students will be able to explain the process of organisation changes.

**CO3:** Students will be able to demonstrate the various intervention strategies.

**CO4:** Students will be able to appraise the process of organisation changes.

**CO5:** Students will be able to evaluate the role of change agents.

**CO6:** Students will be able to develop their own consultancy model for corporate sector.

**Course Contents:**

**UNIT-I**

Organizational Change: The domain of change, concept, Change Agents, Strategic management of change; Managerial approaches for implementing change; Models of Organizational Change, Kurt Lewin's Models of Change, Huse's 7 stages model of change

**UNIT-II**

Change Management: Understanding the Change Process, Facilitating Change, Dealing with Individual and Group Resistances, Intervention Strategies and Develop Learning Organization. Organizational Diagnosis- Meaning & Importance, Weisbord's model of Organizational Diagnosis and Methods of obtaining diagnostic information

### **UNIT-III**

Organizational Development: An overview, Steps in OD process, General OD Competencies, OD Skills, Values, Assumption and Beliefs in OD; Designing OD Interventions- Interpersonal, Team, Intergroup, Structural and Comprehensive Interventions; Evaluation of Organizational Development Interventions

## UNIT-IV

Organizational Culture & Change; Corporate Culture, Types of Culture, Importance, Nature, Formal & Informal Components of Organizational Culture, Designing for Cultural Change; Organizational Culture & Leadership; Emerging Trends in Organizational Culture; Ethics of OD Professionals and Future of OD.

### Suggested Readings:

1. French, W. H. and Bell, *Organization Development*, Prentice Hall of India.
2. French, W. H., *Organization Development Theory, Practice and Research*, Prentice Hall of India.
3. Singh, K., *Organization Change and Development*, Excel Books
4. Huse, F. E. and Cummings, T. G., *Organization Development and Change*, West.
5. De Nitish, *Alternative Designs of Human Organizations*, Sage.
6. Harvey, D.F. and Brown, D.R., *An Experiential Approach to Organization Development*, Prentice Hall Inc.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-405**

**COUNSELING SKILLS FOR MANAGERS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To develop basic skills among students to independently handle a wide range of employee counseling and performance counseling.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in counselling.
- CO2:** Students will be able to explain conceptual framework of counselling.
- CO3:** Students will be able to demonstrate the process of counselling.
- CO4:** Students will be able to differentiate between theories of counselling.
- CO5:** Students will be able to evaluate practical solutions to human behaviour related problems in the organization.
- CO6:** Students will be able to develop their own model of counselling.

**Course Contents:**

**UNIT-I**

Introduction to Counseling- Emergence, Growth, Definition, Need, Goal, Role and Characteristics of Counselor and Counselee, Difference between Counseling and Psychotherapy, and General Principles of Counseling

**UNIT-II**

Approaches to Counseling- Psycho-analytical (Sigmund Freud Theory), Therapeutic (Alfred Adler Theory), Behaviouristic (B. F. Skinner Theory), Cognitive (Albert Ellis Model) and Humanistic Approaches (Carl Rogers Approach);

### UNIT-III

Counseling Process- 5-D Model, the Phases of Counseling Process, Counseling Environment and Procedure, and the Core Conditions of Counseling; Counselor's Attitude and Skills of Counseling- Verbal and Non-verbal Communication Modalities, Listening Skills, Listening Barriers and Strategies to Overcome Listening Barriers;

### UNIT-IV

Organizational Applications of Counseling Skills- Identifying Problems and Coping Strategies with regard to Occupational Stress and Performance Management; Special Problems in Counseling- Selection of Counseling Strategies and Interventions, Changing Behavior through Counseling; Ethical and Legal Aspects of Counseling, and Current trends in Counseling

#### **Suggested Readings:**

1. Corner, L.S., and Hackney, H., *The Professional Counselor's Process Guide Helping*, Englewood Cliffs, Prentice Hall Inc.
2. Moursund, J., *The Process of Counseling and Therapy*, Englewood Cliffs, Prentice Hall Inc.
3. Munro, C A, *Counseling: A Skills Approach*, Methuen.
4. Reddy, Michael, *Counseling at Work*, British Psychological Society and Methuen.
5. Rao, S. Narayana, *Counselling and Guidance*, Tata McGraw Hill.
6. Gladding, S. T, *Counseling- A Comprehensive Profession*, Pearson.
7. Singh, Kavita, *Counselling Skills for Managers*, Prentice Hall of India.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-406**

**GLOBAL HUMAN RESOURCE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop a diagnostic and conceptual understanding of the cultural and related behavioral variables in the Human Resource Management of global organizations.*

**Course Outcomes:**

**CO1:** Students will be able to describe the concept of global human resource management.

**CO2:** Students will be able to discuss the human and cultural variables in global organisations.

**CO3:** Students will be able to interpret the various dimensions of Hofstede's study.

**CO4:** Students will be able to compare various studies related to culture.

**CO5:** Students will be able to evaluate various HRM practices prevailing in various global organisations.

**CO6:** Students will be able to formulate negotiation process in cross cultural context.

**Course Contents:**

**UNIT-I**

Human and Cultural Variables in Global Organizations: Culture and values, Cross Cultural Differences and Managerial Implications

## UNIT-II

Cultures in Organizations and Hofstede's Study – Cultural dimensions and their HR and managerial implications

## UNIT-III

Evolution of Global Organizations: Cross Cultural Leadership, Motivation and Decision Making, Cross Cultural Communication and Negotiation.

## UNIT-IV

Human Resource Management in Global Organizations: Selection, Source criteria for International Assignment, Compensation and Appraisal System.

### Suggested Readings:

1. Adler, N.J., *International Dimensions of Organizational Behaviour*, Kent Publications.
2. Bartlett, C. and Ghoshal, S., *Transnational Management: Text, Cases and Readings in Cross Border Management*, Irwin.
3. Dowling, P.J., *International Dimensions of Human Resource Management*, Wadsworth.
4. Hofstede, G., *Cultures Consequence: International Differences in Work Related Values*, Sage.
5. Marcis, D. & Puffer, S.M., *Management International: Cases, Exercises and Readings*, West Publishing.
6. Mead, R., *International Management: Cross Cultural Dimensions*, Blackwell.



7. Ronen, S., *Comparative and Multinational Management*, John Wiley.

**Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**HRM-407**

**LABOUR WELFARE AND SOCIAL SECURITY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint the students with the significance and processes of Labour Welfare activities and Social Security measure adopted by the organizations.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in labour welfare and social security.

**CO2:** Students will be able to describe the labour inspection system in factories.

**CO3:** Students will be able to illustrate various social welfare facilities.

**CO4:** Students will be able to compare various welfare facilities provided by employers in factories.

**CO5:** Students will be able to evaluate the various social security measures provided to employees in factories.

**CO6:** Students will be able to develop labour welfare and social security measures for the employees of middle scale organisations.

**Course Contents:**

**UNIT-I**

Labour Welfare Activities: Concept and Significance, Origin of Labour Welfare activities, Theories of Labour Welfare; Statutory Welfare Provision in Factory Act; Labour Welfare Funds; Labour Inspection System.

## UNIT-II

Critical Estimate of Welfare Work by Employers, Local Bodies and Trade Unions; Welfare of Unorganized Labour; ILO and Labour Welfare

## UNIT-III

Some Special Welfare Activities: Grain Shop Facilities, Educational Facilities, Medical and Reorientation, Workers education scheme; Industrial safety; Industrial housing; Industrial health; Industrial hygiene.

## UNIT-IV

Social Security: Concept and Importance; Employees' Compensation in India; Sickness Insurance in India; Unemployment Insurance in India; Old Age and Invalidity Security; Social Security Measures in the selected Countries (England, Japan & U.S.A.).

### Suggested Readings:

1. Dale Yoder, *Personal Management and Industrial Relations*, Tata McGraw Hill.
2. Monappa, Arun, *Industrial Relations*, Tata McGraw Hill.
3. Sharma, A.M., *Aspects of Labour Welfare and Social Security*, Himalaya Publishing House
4. Sivarethinamohan, R., *Industrial Relation and Labour Welfare*, PHI Learning Private Ltd.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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# **FINANCE AREA**

**THIRD  
SEMESTER**

**FM-301**

**RISK MANAGEMENT AND INSURANCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart knowledge to students regarding the techniques of measurement and control of risk.*

**Course Outcomes:**

- CO1:** Students will be able to define the concept of risk and insurance in India
- CO2:** Students will be able to compare different types of risk faced by Indian companies
- CO3:** Students will be able to apply techniques of risk management and control
- CO4:** Students will be able to differentiate various types of life insurance policies in India
- CO5:** Students will be able to evaluate different policies based on cost and benefits
- CO6:** Students will be able to develop different techniques to control risk

**Course Contents:**

**UNIT-I**

Introduction to risk management: The Concept of Risk, Risk v/s Uncertainty, Different types of risk: Credit Risk, asset liability gap risk, interest rate risk, market risk, currency risk, due-diligence risk, systematic and unsystematic risk; Risk Management: meaning, process and policies;

**UNIT-II**

Measurement and Control of Risk: Identifying Measures and Controlling Risk – Statistical Method, Fixation of limits: open position/deal size/individual dealers/ stop loss limits. Margins: value at risk margin, extreme loss margin, mark to market margin

**UNIT-III**

Introduction to insurance; the evolution and growth of Life Insurance nature and scope of insurance, various types of insurance; Principles of insurance; leading Insurance companies in India



## UNIT-IV

Types of Life Insurance Policies: Term Life Insurance, Whole Life insurance, Endowment Life Insurance, Unit Linked Policies with or without Profit Policies; Customer Evaluation; Policy Evaluation; Cost and Benefit: Group and Pension Insurance Policies; non-life insurance policies: an overview. Financial derivatives: A tool of non-insurable risk management

### **Suggested Readings:**

1. Emmett J. Vaughan, Risk Management, John Wiley & Sons, Inc.
2. Rejda, G.E. & McNamara, J.M., Principle of Risk Management & Insurance, Parson
3. A. Suryanarayana, Risk Management Models: A Primer, ICFAI Reader.
4. Marshall John F. & Bansal, V. K., Financial Engineering, PHI Learning.
5. Watsham Terry J., Futures and Options in Risk Management, Thomson Learning
6. Karam Pal, Bodla & Garg, M.C., Insurance Management, Deep & deep Publications, New Delhi

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**FM-302**

**SECURITY ANALYSIS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart knowledge to students regarding the theory and practice of Security Analysis.*

**Course Outcomes:**

- CO1:** Students will be able to describe the environment and working of capital markets.
- CO2:** Students will be able to discuss and differentiate different financial assets and their holding motives
- CO3:** Students will be able to demonstrate the processes of calculating risk and return of financial assets
- CO4:** Students will be able to able to appraise the processes of doing fundamental and technical analysis
- CO5:** Students will be able to judge the trends in the stock markets.
- CO6:** Students will be able to develop a reasoned argument for security selection and investment choices

**Course Contents:**

**UNIT-I**

The Investment Environment - Meaning and objective of investment, investment vs. gambling and speculation, investment alternatives, investment process, concept of return and risk.

**UNIT-II**

Security Analysis – Fundamental analysis: economic analysis, industry analysis and company analysis. Technical analysis: assumptions Dow theory, chart patterns, moving averages and market indicators. Efficient market theory: weak form hypothesis, semi-strong form hypothesis and strong form hypothesis.

### **UNIT-III**

Fixed Income Securities - Bond fundamentals: bond characteristics, pricing and yields  
Valuation of fixed income and variable income securities

## UNIT-IV

Indian Security Market - New issue market, secondary market: SEBI, NSE, BSE and market indices. Recent trends in Indian and international stock markets, exposure to leading business web portals like [www.moneycontrol.com](http://www.moneycontrol.com), [www.bloomberg.com](http://www.bloomberg.com) etc.

### Suggested Readings:

1. Reilly, Frank K. And Brown, Keith C., *Investment Analysis and Portfolio Management*, South-Western Cengage Learning India Pvt. Ltd.
2. Bodie, Z., Kane, A. and Marcus, A., *Investments*, McGraw-Hill.
3. Fischer, Donald E. and Jordan, Ronald J., *Security Analysis and Portfolio Management*, Prentice Hall of India.
4. Sharpe, William F. et al, *Investment*. New Delhi, Prentice Hall of India.
5. Fuller, Russell J. and Farrell, James L., *Modern Investment and Security Analysis*, New York, McGraw Hill.
6. Alexander, Gordon J. and Bailey, Jeffery V., *Investment Analysis and Portfolio Management*, Dryden Press, Thomson Learning
7. Machiraju, H. R., *Indian Financial System*, Vikas Publishing House.

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM-303**

**PROJECT MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to understand the framework for evaluating capital expenditure proposals, their planning, finance, appraisal and management in the review of the projects undertaken.*

**Course Outcomes:**

**CO1:** Students will be able to explain the importance, scope and functions of Project Management.

**CO2:** Students will be able to illustrate the Life Cycle of any given project.

**CO3:** Students will be able to sketch estimation of Guidelines for Time, Costs and Resources required for Project Management by applying different methods.

**CO4:** Students will be able to examine the Scheduling Resources and Reducing Project Duration.

**CO5:** Students will be able to evaluate Role and Responsibilities of the project Manager, Planning, Organizing, Controlling, Skills of the Project Manager.

**CO6:** Students will be able to formulate strategies for risk reduction.

**Course Contents:**

**UNIT-I**

Project Analysis: Meaning, Overview, Capital Budgeting and Strategic Issues, Generation and Screening of Project Ideas.

**UNIT-II**

Feasibility Reports: Market and Demand Analysis; Technical Analysis; Financial Analysis; Analysis of Project Risk; Risk specific to individual firm and Market Risk; Decision under risk and Risk Analysis in Practice.

### **UNIT-III**

Social Cost and Benefit Analysis: UNIDO approach and L-M Approach; Multiple Projects and Constraints, Financing of Projects, Sources of Risk capital, Recent development in India.

## UNIT-IV

Project Management: Project Planning and Control, Human aspects of Project Management; Project Review and Administrative Aspects; Problem of Time and Cost Overrun.

### **Suggested Readings:**

1. Chandra, Prasanna, Projects: Preparation, Appraisal, Budgeting and Implementation, Tata McGraw Hill.
2. Dhankar, Raj S., Financial Management of Public Sector Undertakings, Westville.
3. Little I.M.D. and J.A. Mirrlees, Project Appraisal and Planning for Developing Countries, Hienemann Educational Book.
4. OCED Manual of Industrial Project Analysis in Developing Countries- Methodology and Case Studies, OCED, Paris.
5. Planning Commission, Guidelines for Preparation of Feasibility reports of Industrial Projects, Controller of Publication.
6. UNIDO Guide to Practical Project Appraisal, United Nations.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM -304**

**MANAGEMENT OF BANKS AND FINANCIAL INSTITUTIONS**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the major concepts, theories and principles of banking and financial institutions in logical and critical manner.*

**Course Outcomes:**

**CO1:** Students will be able to tell about the Indian banking structure and banking reforms in India.

**CO2:** Students will be able to explain the functions of banks and financial institutions.

**CO3:** Students will be able to interpret the role of RBI, NABARD, IFCI, SIDBI, NHB for economic development.

**CO4:** Students will be able to examine the concept of non-performing assets in Indian banking.

**CO5:** Students will be able to evaluate the risk management in bank.

**CO6:** Students will be able to formulate loan policy.

**Course Contents:**

**UNIT -1**

Indian Financial System: Introduction, Evolution and growth of banking system in India, Bank Market structure in India, Banking sector reforms (The Narsimham Committee and The Raghu Ram Rajan Committee), Recent Innovations and development in Indian Banking.



## UNIT -II

**Management of Commercial Banks in India:** Functions of Bank, Sources of Bank Funds, Credit Management-Cardinal principles of sound bank lending, Formulating loan policy, Factors influencing loan policy; Investment Management-Nature and significance of investment management in commercial banks, Fundamental principles of security investment by commercial bank.

## UNIT- III

Capital Adequacy in Indian Banks: Functions of capital funds in commercial banks, Capital adequacy –Basel III norms on capital adequacy in Indian commercial banks; Concept of ALM : Objectives, Functions, Process, Measurement and Management of Risks, Concept of NPAs.

## UNIT – IV

**Management of Financial Institutions:** Financial Institutions, their role in economic development, challenges and opportunities; NABARD, IFCI, SIDBI, NHB– Introduction and their operational policies; Role of RBI; Insurance Industry in India, Mutual Funds, Micro Finance Institutions (MFIs); Current issues and future challenges in Management of Banks and financial Institutions.

### Suggested Readings:

1. Srivastava, R.M. & Nigam, D., *Management of Indian Financial Institutions*, Himalaya Publishing House.
2. Khan, M. Y. *Indian Financial System*, Tata McGraw Hill.

3. Suresh, P. & Paul, J., *Management of Banking and Financial Services*, Pearson
4. Singh, S.P.N., *Management of Banking and Financial Institutions*, Centrum Press
5. *Principles & Practices of Banking by Indian Institute of Banking and Finance*, Macmillan Publications

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM-305**

**FOREIGN EXCHANGE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To acquaint the students with the mechanism of the foreign exchange markets, measurement of the foreign exchange exposure, and hedging against exposure risk. Upon successful completion of this paper, Students should expect to learn the nature and purposes of foreign exchange management under the new financial order evolving higher degree of vulnerability in a highly borderless financial world.*

**Course Outcomes:**

**CO1:** Students will be able to state appropriate formats and technologies to financial communication.

**CO2:** Students will be able to identify market conventions on exchange rate quotation and correctly calculate those quotations.

**CO3:** Students will be able to apply information within the global financial environment of foreign exchange to solve problems and make informed decisions.

**CO4:** Students will be able to appraise forward exchange rates given spot exchanges rates and rationale behind it.

**CO5:** Students will be able to evaluate the problems of dealing in foreign currency and the advantages and disadvantages of overseas funding.

**CO6:** Students will be able to develop an integrative understanding of the foreign exchange market and the relationships between interest rates, spot and forward rates and expected inflation rates.

**Course Contents:**

**UNIT-I**

Foreign Exchange Market: Function and Structure of the FOREX markets, Foreign exchange market participants, Types of transactions and Settlements Dates, Exchange rate quotations, Nominal, Real and Effective exchange rates, and Determination of Exchange rates in Spot

markets. Exchange rates determinations in Forward markets. Exchange rate behavior-Cross Rates Arbitrage profit in foreign exchange markets, Swift Mechanism.

## UNIT-II

International Parity Relationships & Forecasting Foreign Exchange rate:- Measuring exchange rate movements-Exchange rate equilibrium – Factors effecting foreign exchange rate- Forecasting foreign exchange rates .Interest Rate Parity, Purchasing Power Parity & International Fisher effects.

## UNIT-III

Foreign Exchange exposure:-Management of Transaction exposure (Case Study: Airbus Dollar Exposure); Management of Translation exposure- Management of Economic exposure (Case study: Exporter's/Importer's Position: Hedge or Hedge Not).

## UNIT-IV

Foreign exchange risk Management: Hedging against foreign exchange exposure – Forward Market- Futures Market- Options Market- Currency Swaps-Interest Rate Swap. Cross currency Swaps-Hedging through currency of invoicing- Hedging through mixed currency invoicing.

### Suggested Readings:

1. Eun and Resnick, *International Financial Management*, Tata McGraw Hill.
2. Eiteman, Moffett and Stonehill, *Multinational Business Finance* –, 12/e, Pearson.
3. Jeff Madura, *International Corporate Finance*, Cengage Learning.
4. Alan C. Shapiro, *Multinational Financial Management*, 8/e, Wiley India
5. Apte, P. G *International Financial Management*, 6/e, TMH.
6. Maurice Levi *International Finance* –, 5/e, Routledge.
7. Paul Einzip, *A Textbook on Foreign Exchange*
8. Paul Roth, *Mastering Foreign Exchange and Money Markets*, Pitman.

### Important Instructions for the Course Coordinator and the Examiner:

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**FM-306**

**PUBLIC FINANCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the major concepts, theories of public finance in logical and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to relate public expenditure and revenue concepts.
- CO2:** Students will be able to identify the issues involved in public debt management in India
- CO3:** Students will be able to demonstrate integrative understanding of auditing system in India
- CO4:** Students will be able to compare the possible burden, benefits and distribution of various types of taxes and their impact on general welfare
- CO5:** Students will be able to able to appraise and critically evaluate the issues in Government finances
- CO6:** Students will be able to develop analytical skills and judgement in major areas of public finance reforms

**Course Contents:**

**UNIT-I**

Nature and Scope of Public Finance; Principle of maximum social advantage Public revenue-General considerations: Division of tax burden and incidence of taxes, Classification and choice of taxes and effect of taxation. Indian taxation system and its key issues

## UNIT-II

Public Debt and some issues in debt management; Public expenditure- General considerations and effect of public expenditure; Public budget- budget classification, Performance and Programme budgeting system(PPBS) and Zero base budgeting; Balance budget and fiscal policy. Comments on recent central Government budget

## UNIT-III

Introduction to Indian Public Financial System – Historical background, Financial Federalism under Constitution; Indian Federal finance- Recommendations of latest finance commission of India; Public debt in India-Central and states Government debt.

## UNIT-IV

Government of India Finances: expenditure trends expenditure policy, control of public expenditure in India, Suggestions for reforming the budget, trends in receipts. Railway finances, public sector in India and its Financial Autonomy and Accountability of Public sector, states finances and local finances. Investment policy of public sector in India: Financial, economic and social appraisal. Financial control; Legislative and Executive Accounting and Auditing System in India, Role of Comptroller and Auditor General (CAG), Contemporary Issues in Government Finances.

### Suggested Readings:

1. Musgrave, R.A., and P. B. Musgrave, *Public Finance in Theory and Practice*, Tata McGraw Hill.
2. Harvey S. Rosen, Ted Gayer, *Public Finance*, McGraw Hill
3. Tayagi, B.P., *Public Finance*, S. Chand & Co.



4. Lekhi, R.K., *Public Finance*, Kalyani Publishers.
5. Mithani, D.M., *Public Finance and International Trade*, Himalaya Publications.

#### **Important Instructions for the Course Coordinator and the Examiner:**

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM-307**

**BUSINESS TAXATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of the course is to acquaint the participant with the implications of tax structure and corporate tax planning in operational as well as strategic terms.*

**Course Outcomes:**

- CO1:** Students will be able to outline the meaning and scope of tax policy and basic concepts of tax in India
- CO2:** Students will be able to explain constitutional provisions pertaining to taxes in India
- CO3:** Students will be able to illustrate the computation of tax liability
- CO4:** Students will be able to appraise the rationale, benefits and costs of various tax incentives offered by government
- CO5:** Students will be able to evaluate tax implications while taking business decisions
- CO6:** Students will be able to formulate tax planning for individuals or business houses

**Course Contents:**

**UNIT-I**

Basic Concepts of Income Tax; Computation of Income under Different Heads of Income, Clubbing of income, Set off and Carry forward of Losses, Deductions and Exemptions.

**UNIT-II**

Meaning and Scope of Tax Planning, Difference between Tax planning Tax Evasion and Tax Avoidance, Residential status and Tax incidence of a Company; Computation of Corporate Tax Liability.

### **UNIT-III**

Tax Planning with reference to Location of Undertaking, Tax Planning regarding Dividends Policy, Tax Planning relating to specific managerial decisions, Tax planning for employees

## UNIT-IV

Major defects in the structure of indirect taxes prior to GST: rationale for GST; features of GST law in India, structure of GST (SGST, CGST, UTGST and IGST); rates of GST, models of GST, GST Council

### Suggested Reading:

1. Singhania, V., K. & Singhania, Monica, *Students' Guide to Income Tax*, Taxmann
2. Singhania, V., K. & Singhania, Kapil, *Direct Taxes Law and practice*, Taxmann
3. Singhania, V., K. & Singhania, Monica, *Corporate tax Planning and Business Tax Procedures*, Taxmann
4. Narwal, K. P., & Anushuya, *GST in India*, DBH Publishers and Distributers
5. Ahuja, G.& Gupta, R., *Simplified Approach to Corporate Tax Planning and Management*, Bharat Law House private limited
6. Srinivas, E. A., *Handbook of Corporate Tax Planning*, Tata McGraw Hill.
7. Iyengar, A. & C. Sampat, *Law of Income Tax*, Bharat House.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM-308**

**FINANCIAL ECONOMETRICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course aims at enabling the students to understand and analyse financial econometrics and developing their skills for the solution with the help of innovative financial econometrics.*

**Course Outcomes:**

- CO1:** Students will be able to outline the meaning and scope of financial econometrics.
- CO2:** Students will be able to explain various assumptions, concepts and methodologies underlying Time-series modelling.
- CO3:** Students will be able to solve issues in regression modelling.
- CO4:** Students will be able to appraise suitability statistical techniques to business data.
- CO5:** Students will be able to evaluate model outcomes.
- CO6:** Students will be able to assemble the knowledge of financial econometric tools for forecasting financial data.

**Course Contents:**

**UNIT-I**

Nature, scope and methodology of Financial Econometrics Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method; Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression co-efficient,  $R^2$  and adjusted R

## **UNIT-II**

Issues with Classical Regression Model: Multi co linearity, Autocorrelation and Heteroscedasticity; Functional forms; Dummy variables-Nature and uses; Parameter stability tests.

## **UNIT-III**

Univariate Smoothing Methods: Moving average, weighted moving average, Exponential smoothing, Seasonal indexes, Trend-seasonal and Holt-Winters smoothing.

## UNIT-IV

Stationary Time Series Models: Stochastic process, Stationary, Modeling AR, MA, ARMA processes, Deterministic and stochastic trends, unit roots, testing unit roots – Dickey & Fuller, Phillips and Perron tests.

### Suggested Readings:

1. Gujarati, D. N., *Basic Econometrics*. McGraw-Hill
2. Enders Walter., *Applied Econometrics Time Series*. Wiley.
3. Koutsoyiannis, A, *Theory of Econometrics*, Harper & Row.
4. Makridakis S & Wheelwright, *Forecasting Methods & Application*. Willey.
5. Brooks, *Introductory Econometrics for Finance*. Cambridge Press.
6. Johnston, J., *Econometric Methods*. McGraw Hill.
7. Patterson K, *An Introduction to Applied Econometrics*. Palgrave.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**FOURTH**  
**SEMESTER**



**FM-401**

**PORTFOLIO MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart knowledge to students regarding the theory and practice of portfolio management.*

**Course Outcomes:**

- CO1:** Students will be able to define the concepts and terminologies of portfolio management.
- CO2:** Students will be able to summarise the theories underlying portfolio management.
- CO3:** Students will be able to apply the concepts of portfolio management and solve relevant numerical problems.
- CO4:** Students will be able to examine and evaluate portfolio performance.
- CO5:** Students will be able to apprise and judge trends in international financial markets.
- CO6:** Students will be able to construct investment portfolio and defend their choices.

**Course Contents:**

**UNIT-I**

Introduction to Portfolio Management: Meaning, need, and objective of portfolio management, the process of portfolio management, determination of risk & return of a portfolio, risk analysis tools

## **UNIT-II**

Theories of portfolio selection and management- Markowitz portfolio theory: optimal portfolio, meaning and construction of efficient frontier, investors' utility; CAPM: capital asset pricing model, risk-free and risky lending and borrowing, market portfolio; capital market theory: CML, SML and Sharpe Single Index Model; Arbitrage Pricing Theory (APT).

## **UNIT-III**

Bond portfolio management strategies –bond characteristics, fundamentals of bond valuation, bond & equity portfolio management strategies: passive portfolio strategies & active portfolio strategies.

## UNIT-IV

Portfolio evaluation and revision – portfolio performance evaluation, risk adjusted performance measures; meaning, need and constraints of portfolio revision; formula plans: constant-dollar-value plan, constant ratio plan, variable ratio plan, process and intricacies of trading system in Indian stock market.

### Suggested Readings:

1. Reilly, Frank K. And Brown, Keith C., *Investment Analysis and Portfolio Management*, South-Western Cengage Learning India Pvt. Ltd.
2. Fischer, Donald E. and Jordan, Ronald J., *Security Analysis and Portfolio Management*, Prentice Hall of India.
3. Sharpe, William F. et al, *Investment*. New Delhi, Prentice Hall of India.
4. Fuller, Russell J. and Farrell, James L., *Modern Investment and Security Analysis*, New York, McGraw Hill.
5. Alexander, Gordon J. and Bailey, Jeffery V., *Investment Analysis and Portfolio Management*, Dryden Press, Thomson Learning
6. Machiraju, H. R., *Indian Financial System*, Vikas Publishing House.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM-402**

**FINANCIAL MARKETS AND SERVICES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to help students to learn the various concepts of financial markets and services and their role in the overall financial system.*

**Course Outcomes:**

- CO1:** Students will be able to describe financial market operations.
- CO2:** Students will be able to explain the various concepts related to financial markets and services.
- CO3:** Students will be able to solve various investment related issues facing the investors.
- CO4:** Students will be able to examine how the overall financial system works and various aspects associated with it
- CO5:** Students will be able to evaluate the best sources feasible for fulfilling their financial requirements related to the business
- CO6:** Students will be able to formulate different financial plans for the organisations with the help of different services provided by the financial markets

**Course Contents:**

**UNIT-I**

Financial markets- Structure and Participants; Capital market; Money market; Primary and Secondary Market Operations; Listing of securities; functions of stock exchanges; Role of SEBI; Introduction to derivative and commodity markets.

**UNIT-II**

Financial Services: Meaning, Nature and Types; Factoring: Meaning, Characteristics and Types of Factoring arrangements, Factoring in India, Factoring vs. Forfeiting; Credit Rating: Meaning and Types, Benefits of Credit rating to investors and companies; Objectives and Functions of Credit Rating Agencies.

### UNIT-III

Credit Cards: Concept and Significance; Types of credit Cards, Credit Card business in India. Book Building: Concept and Mechanism of Book Building; Significance and Benefits of Book Building; Bought Out Deals: Meaning and Nature; Mechanisms of Bought out Deals.

### UNIT-IV

Securitisation: Concept, Mode, Mechanism and Beneficiaries of Securitisation, Securitisation in India; Venture Capital: Meaning and Modes of Financing; Role and Functions of Merchant Bankers. Leasing: Concept, Classification, Accounting, Legal and Tax Aspects of Leasing

#### Suggested Readings:

1. Clifford, G., *Financial Markets, Institutions and Financial Services*, PHI.
2. Khan, M. Y., *Management of Financial Services*, McGraw-Hill.
3. Gordan, E and K. Natrajan, *Emerging Scenario of Financial Services*. Himalaya Publishing House
4. Meidan, Arthur Brennet, M., *Option Pricing: Theory & Applications*, Lexington Books.
5. Kim, Suk and Kim, Seung, *Global Corporate Finance. Text and Cases*, Miami Florida, Korb
6. Khan, M., Y., *Financial Institutions and Markets*, McGraw Hill
7. Bhole, L.M., *Financial Institutions and Markets*, McGraw Hill

#### Important Instructions for the Course Coordinator and the Examiner:

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**FM-403**

**FUNDS MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to make students learn the various aspects of funds management.*

**Course Outcomes:**

- CO1:** Students will be able to tell different concepts of funds management
- CO2:** Students will be able to explain different types of schemes available in the market
- CO3:** Students will be able to choose the schemes according to their risk profile
- CO4:** Students will be able to compare risk and return of different schemes in which funds have been invested.
- CO5:** Students will be able to evaluate different mutual fund schemes keeping into consideration the risk level.
- CO6:** Students will be able to design different mutual fund schemes taking into consideration the requirements

**Course Contents:**

UNIT-I

Concept and Role of Mutual Funds: Introduction, types of funds, key developments over the years and key constituents of a mutual fund. Legal and Regulatory Environment: Legal structure of mutual funds in India, Role of regulators in India, Investment restrictions for schemes and Investors' rights and obligations.

UNIT-II



Investment Philosophies and Styles: Diversification, growth investing, value investing, momentum style.

### **UNIT-III**

Performance of Funds: Drivers of return and risk in a scheme. Measures of return and risk of a scheme Benchmarking and fund performance Measuring fund managers' performance Introduction to financial planning, financial planning approaches, Risk profiling and asset allocation

## UNIT-IV

Investment strategies of funds managers: Asset class and geographic diversification, active strategies, passive strategies, top down approach, bottom up approach, sector rotation style, momentum style, small capitalization style, comparing fund management styles.

### **Suggested Readings:**

1. Mutual Fund Distributors Module, Workbook from NISM
2. Brentani, C. *Portfolio Management in Practice*, Elsevier
3. Kane and Marcus, *Investments by Bodie*, Tata McGraw Hill.
4. Blake, D., *Financial Market Analysis*, John Wiley & Sons.
5. Fabozzi, F. J., *Bond Markets Analysis & Strategies*, Pearson.
6. Freeman, A.J. and Wiles, R., *How Mutual Funds Work?* Prentice Hall India.

### **Important Instructions for the Course Coordinator and the Examiner:**

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**Course Objective:** *This course is designed to provide an understanding of international financial products, financial markets, and institutional structures necessary to be effective financial managers in modern corporations. Upon successful completion of this paper, Students should expect to learn the nature and purposes of financial management in the international context under the new financial order evolving higher degree of vulnerability in a highly borderless financial world.*

**Course Outcomes:**

- CO1:** Students will be able to define appropriate formats and technologies to financial communication.
- CO2:** Students will be able to explain international capital and foreign exchange market,
- CO3:** Students will be able to demonstrate an integrative understanding of the foreign exchange market and the relationships between interest rates, spot and forward rates and expected inflation rates
- CO4:** Students will be able to appraise investment opportunities in the international environment, identify market conventions on exchange rate quotation and correctly calculate those quotations
- CO5:** Students will be able to evaluate various hedging strategies.
- CO6:** Students will be able to develop strategies for futures and option contracts in hedging foreign exchange exposure.

**Course Contents:****UNIT-I**

International financial Environment- Importance, rewards & risk of international finance  
Goals of MNCs; Globalization & Multinational firm: finance functions in MNCs, structure of international financial Market; Cost and availability of international financial flows; Corporate Governance around the World; International monetary system

## UNIT-II

The markets for foreign exchange (case study: St. Bury Herbal products Ltd) Futures and options on foreign exchange Management of Transaction & Economic exposure (case Study: Airbus Dollar exposure); Management of translation exposure.

## UNIT-III

International Banking & Money market; forward rate Agreements (FRAs) International bond markets; International equity markets and Instruments: ADR, GDR, ECBs etc.

## UNIT-IV

Interest rates and currency swaps, FDI and cross-border acquisitions; Contemporary issues in international financial management.

### Suggested Readings:

1. Aliber, R.Z., *Exchange Risk and Corporate International Finance*, Macmillan.
2. Apte P G, *International Financial Management*.
3. *International Financial Management* - Eun & Resnick, Tata McGraw Hill.
4. Luca Cornelius, *Trading in the Global Currency Markets*, Prentice Hall.
5. Shapiro, A.C., *International Financial Management*.
6. Utton, W.H., *Trading in Currency Options*, New York Institute of Finance.
7. Eiteman, Moffett and Stonehill, *Multinational Business finance*.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM-405**

**FINANCIAL RESTRUCTURING AND VALUATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at providing an in-depth understanding of all aspects affecting and arising out of Corporate & Financial Restructuring and Valuation, stressing upon and dealing exhaustively with key concepts, legislative aspects and procedures.*

**Course Outcomes:**

**CO1:** Students will be able to define the concepts and terminologies of financial restructuring.

**CO2:** Students will be able to summarise the theories underlying corporate restructuring and business valuation.

**CO3:** Students will be able to interpret the regulatory environment governing financial restructuring and valuation.

**CO4:** Students will be able to compare different valuation models.

**CO5:** Students will be able to apprise and evaluate real-world cases in corporate restructuring and valuation.

**CO6:** Students will be able to formulate a plan to successfully liquidate or reorganize a business.

**Course Contents:**

**UNIT - I**

Corporate Restructuring: Meaning, Need, Scope and Modes of Restructuring; Historical Background; Emerging Trends; Planning, Formulation and Execution of Various Corporate Restructuring Strategies - Mergers, Acquisitions, Takeovers, Disinvestments and Strategic Alliances, Demerger.

## **UNIT – II**

Financial Restructuring: concept & need for Financial Restructuring, Reduction of Capital; Reorganization of Share Capital; Buy-Back of Shares – Concept and Necessity; Procedure for Buy-Back of Shares by Listed and Unlisted Companies. Legal, Economic, Taxation and Financial aspects of Mergers and Amalgamation

### UNIT – III

Valuation: Meaning, Objective & Scope of Valuation; Principles of Valuation; Preliminary Work relating to Valuation; Valuation Standards and Valuation Analysis; Valuation Techniques; Historical Earnings Valuation; Asset Based Valuation; Market Based Valuation.

### UNIT – IV

Regulatory Aspects of Valuation: Legal & Regulatory aspects related to Valuation such as SEBI Regulations/ RBI Regulations; Income Tax Implications; Valuations for Different Strategies- Merger & Acquisition, Demerger, Slump Sale, Liquidation and Corporate Insolvency, Internal & External Restructuring, Valuation of Intangibles, Valuation of Securities

#### Suggested Readings:

1. Corporate Restructuring Valuation and Insolvency by The Institute of Company Secretaries of India
2. Ray, *Mergers and Acquisition Strategy, Valuation and Integration*, PHI
3. Ramaiya, A., *Guide to Companies Act*, LexisNexis Butterworths, Wadhwa, Nagpur
4. Sampath, K., R., *Mergers /Amalgamations, Takeovers, Joint Ventures, LLPs and Corporate Restructure*, Snow White Publications
5. *Handbook on Mergers Amalgamations and takeovers* by The Institute of Company Secretaries of India

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from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FM-406**

**FINANCIAL AND COMMODITY DERIVATIVES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to give an in depth knowledge of the functioning of derivative securities market.*

**Course Outcomes:**

**CO1:** Students will be able to describe the concepts and terminologies of financial and commodity derivatives.

**CO2:** Students will be able to explain the models used for pricing/valuation of derivatives

**CO3:** Students will be able to interpret innovations in financial and commodity markets

**CO4:** Students will be able to appraise investment opportunities in derivative market.

**CO5:** Students will be able to evaluate derivative pricing and hedging practices.

**CO6:** Students will be able to formulate basic risk management and trading strategies using derivatives.

**Course Contents:**

**UNIT-I**

Financial Derivatives –Meaning, types, uses and factors driving the growth of derivatives. Forward Contracts v/s Future Contracts. Types of Traders: Futures Markets and the use of Futures for Hedging.

**UNIT-II**

Future Payoffs: long futures and short futures. Pricing stock futures: with dividend and without dividend. Application of futures: Hedging, speculation and arbitrage. Currency Futures: Meaning, uses and contract details. Interest Rate Futures: Meaning, uses and contract details.

**UNIT-III**

Stock Options: meaning, types and uses. General factors affecting stock option price Black-Scholes Option Model and Binomial model. Option based investment strategies-bullish, bearish, straddle, strangle and butterfly, Swaps: meaning& uses, currency swap & interest rate swap

## UNIT-IV

Introduction to Commodity Derivatives: meaning, uses, Cereals, metals and energy products. History and Contemporary issues of Indian derivative market.

### Suggested Readings:

1. Brennet, M., *Option Pricing: Theory & Applications*. Toronto, Lexington Books.
2. Cox, John C and Rubinstein, *Mark Options Markets*. Englewood Cliffs, Prentice Hall Inc.
3. Huang. Stanley S C and Randall, Maury R., *Investment Analysis and Management*, Allyn and Bacon.
4. Hull. John C. Options, *Futures and Other Derivative Securities*, PHI.
5. Sharpe. William F. et al., *Investment*, Prentice Hall of India.

### Important Instructions for the Course Coordinator and the Examiner:

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**FM-407**

**FINANCIAL DECISIONS ANALYSIS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic objective of this course is to impart an intensive knowledge about the use of quantitative techniques in specified financial decision-making areas.*

**Course Outcomes:**

- CO1:** Students will be able to define the terminologies related to financial decision analysis.
- CO2:** Students will be able to explain key elements of financial decision making.
- CO3:** Students will be able to apply techniques used in financial decision analysis.
- CO4:** Students will be able to appraise corporate restructuring eco-system.
- CO5:** Students will be able to evaluate financial decision problems using quantitative and qualitative techniques.
- CO6:** Students will be able to formulate policies for financial decision making.

**Course Contents:**

**UNIT-I**

Application of Linear Programming; Goal Programming; Regression analysis and Simulation Technique in Financial Decision Making Areas; Corporate Debt Capacity Management Decision; Business Failure and Reorganization

## **UNIT-II**

Application of Multiple Discriminant analysis; Decision Tree Analysis; Capital Expenditure Decision Under Conditions of Risk and Uncertainty; Sequencing of Decisions; Replacement Decisions.

## **UNIT-III**

Mergers and Acquisitions; Takeover code; Determination of the Exchange ratio; Legal and Procedural aspects of Merger Decision; Corporate restructuring, Mergers & Acquisitions: value creation through M&A; DCF approach; Merger negotiation: Sign of P/E Ratio and EPS Analysis.

## UNIT-IV

Estimation and Projection of Working Capital Decisions; Financing Decisions: Sources of short and intermediate term financing; long term financing decision; Lease-Buy Decisions; Dividend Valuation Model: Walter`s Model, Gordon`s Model, MM Hypothesis; Dividend and Uncertainty.

### Suggested Readings:

1. Bierman, Harold, *Lease vs. Buy Decision*, Englewood Cliffs, Prentice Hall Ins.
2. Fogler, H. and Ganpathy, *Financial Econometrics*, Englewood Cliffs, Prentice Hall Inc.
3. Hampton, John. J., *Financial Decision Making*, Prentice Hall of India Pvt. Ltd.
4. Levy, H. and Sarnat, H., *Capital Investment and Financial Decision*, Englewood Cliffs, Prentice Hall Inc.
5. Van, Horne, James, C., *Financial Management and Policy*, Englewood Cliffs, Prentice hall of India.
6. Pandey, I.M., *Financial Management*, Vikas Publishing House.

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.





**FM-408**

**BEHAVIOURAL FINANCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic objective of this course is to acquaint the new field of behavioural finance and importance of behavioral traits in financial decision making.*

**Course Outcomes:**

- CO1:** Students will be able to describe the concepts related to behavioural finance.
- CO2:** Students will be able to summarize the theories of behavioural finance.
- CO3:** Students will be able to differentiate between standard financial theories and behavioural finance.
- CO4:** Students will be able to appraise the influence of behavioural biases on financial decision making.
- CO5:** Students will be able to judge investor behaviour.
- CO6:** Students will be able to formulate investment and financial policies with an understanding of behavioural finance.

**Course Contents:**

**UNIT – I**

Introduction: Meaning, nature, scope and history of Behavioral Finance; Comparison between Behavioral Finance and Standard Finance; Are financial markets efficient?; Limits to arbitrage-Fundamental Risk, Noise Trader Risk, Implementation cost.

**UNIT – II**

Behavior and Decision Making: Cognitive Bias, Emotional Bias, Concept of bounded rationality. beliefs and heuristics-Preferences: Prospect Theory, Ambiguity aversion, Loss aversion, Framing, Non-consequentialism: Disjunction Effect, Self-deception, Neuro finance (introduction only); Mental Accounting, Self-control, Regret avoidance and Cognitive dissonance, Representativeness and Availability, Anchoring and Belief perseverance, Overconfidence, Optimism and wishful thinking, Overreaction and Conservatism, Self attribution, Recency bias.

### UNIT – III

Anomalies: Fundamental anomalies, Accounting Based Anomalies, Calendar Anomalies,  
Technical anomalies: Value v/s Growth, size, and equity premium myopia.

### UNIT – IV

Market Bubbles: Identification and causes, investor behavior during bubbles, case study of prominent market bubbles/scams. Introduction to Behavioral Corporate Finance

#### Suggested Readings:

1. William Forbes, *Behavioural Finance*, John Wiley.
2. Mihe Elvin, *An Introduction to the psychology of Trading and Behavioural Finance*, John Wiley.
3. James Montier, *Behavioural Investing: A Practitioners Guide to Applying Behavioural Finance*, John Wiley.
4. Sulphey. M.M., *Behavioural Finance*, PHI.
5. James Montier, *Behavioural Investing: Insights into Irrational minds and markets*, John Wiley.
6. Paragh Parikh, *Value Investing and Behavioural Finance*, Tata McGraw-Hill.

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- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



# **MARKETING AREA**

**THIRD  
SEMESTER**

**MM-301**

**CONSUMER BEHAVIOUR**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic objective of this course is to develop an understanding about the consumer decision making process and its applications in marketing function of firms.*

**Course Outcomes:**

- CO1:** Students will be able to define various terms associated with the field of consumer behaviour.
- CO2:** Students will be able to explain different components of consumer behaviour.
- CO3:** Students will be able to interpret the impact of consumer behaviour while framing marketing strategies.
- CO4:** Students will be able to distinguish the individual and group aspects of consumer behaviour for devising marketing strategy.
- CO5:** Students will be able to select the most suitable consumer behaviour for understanding consumer psyche.
- CO6:** Students will be able to design a comprehensive marketing strategy based on consumer behaviour.

**Course Contents:**

**UNIT – I**

Consumer Behaviour- Introduction to consumer behaviour; Its Roots in Various Disciplines, Interrelationship between Consumer Behaviour and Marketing Strategy, Consumer Research; Process, Research Methods & Tools, Types and its Relevance

## **UNIT – II**

Consumer as an Individual -Consumer Needs and Motivation; Goals, Dynamics of Motivation, Measurement of Motives, Personality and Consumer Behaviour; Nature, Theories of Personality and Self Concept, Consumer Perception and Information Processing; Dynamics of Perception, Consumer Imagery, and Perceived Risk, Learning & Consumer Involvement; Meaning, Behavioural & Cognitive Learning Theories and application to marketing, Consumer Attitude; Meaning, Attitude Formation & Change, Relationship in Behaviour & Attitude Formation, and Structural Models.



### UNIT – III

Group Dynamics and Consumer Behaviour - Reference Groups; Meaning, Types, Affects, Relevance and Applications, The Family; Functions, Decision Making and Family Life Cycle, Social Class; Meaning, Types of Status, Lifestyle Profiles and Mobility in Social Classes, Measurements, Influence of Culture; Characteristics, Measurements & Core Values of Culture, Sub Cultural Aspects on Consumer' Mind Set; Meaning, Types & Understanding of Multiple Sub-cultural Membership Interaction & Influence.

### UNIT – IV

Consumer Decision Making Process- Personal Influence and the Opinion Leadership; Meaning and Dynamics of Opinion Leadership Process, Measurement of Opinion Leadership, Diffusion of Innovations; Process of Diffusion & Adoption, Profile of Consumer Innovator, Consumer Decision Making; Meaning of Decision, Levels of Decision Making. Consumer Behaviour Models, Current trends and ethical issues in Consumer Behavioural Studies.

#### Suggested Readings:

1. Assael, H., *Consumer Behaviour and Marketing Action*, Asian Books Private Limited, New Delhi.
2. Engel, J. F., Kollat, D.T., Roger D. Blackwell, R.D. *'Consumer Behaviour*, Holt McDougal.
3. Hawkins, D., Mothersbaugh D., *Consumer Behavior: Building Marketing Strategy*, McGraw-Hill Education.
4. Schiffman, L. and Kanuk, L., *Consumer Behavior*, Prentice Hall.
5. Schiffman, L., & Wisenblit, J., *Consumer Behaviour*, Prentice Hall PTR.
6. Loudon, *Consumer Behavior: Concepts and Applications*, Tata McGraw-Hill Education Private Limited, Noida, Uttar Pradesh, India.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition,

eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MM-302**

**MARKETING RESEARCH**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to enable students to learn the process, tools and techniques of marketing research.*

**Course Outcomes:**

- CO1:** Students will be able to tell the significance and process of marketing research.
- CO2:** Students will be able to identify skills to conduct professional marketing research.
- CO3:** Students will be able to use appropriate research approaches including sampling, data collection and questionnaire design for specific marketing situations.
- CO4:** Students will be able to appraise a marketing research proposal.
- CO5:** Students will be able to defend a marketing research proposal.
- CO6:** Students will be able to assemble the findings in the form of a report.

**Course Contents:**

**UNIT-I**

Introduction to Marketing Research: Importance, Nature and Scope of Marketing Research, Types of Marketing Research; Introduction to Marketing Research Industry; Marketing Intelligence: Marketing Information Systems, Decision Support Systems

## **UNIT-II**

Marketing Research Process: Problem Identification and Definition; Research Designs; Exploratory: Qualitative Research; Descriptive: Survey and Observation; Data Collection: Primary and Secondary Data; Questionnaire Design.

## **UNIT-III**

Attitude Measurement and Scaling Techniques - Introduction to Measurement Scales, Sampling Plan: Universe, Sample Frame and Sampling Unit, Sampling Techniques, Sampling and Non-sampling errors, Sample size determination.

## UNIT-IV

Data Analysis: Univariate, Bivariate and Multivariate Data Analysis; Report Writing; Market Research Applications: Product Research, Advertising Research, Sales and Market Research; International Marketing Research.

### Suggested Readings:

1. Malhotra N., K. & Dash S., *Marketing Research: An Applied Orientation*, Pearson.
2. Churchill, Lacobucci & Israel, *Marketing Research: A South Asian Perspective*, Cengage Learning
3. Donald S. Tull & Del I. Hawkins, *Marketing Research: Measurement and Method*, Prentice Hall.
4. Boyd. H.W. , Westfall, R.,& Starsh, S.F., *Marketing Research: Text and Cases*, Richard D. Irwin, Boston
5. Chisnall, P. M., *The Essence of Marketing Research*, Prentice Hall, New Delhi.
6. Churchill, Gilbert A., *Basic Marketing Research*, Dryden Press, Boston.
7. Beri, G.,C., *Marketing Research*, Tata McGraw Hill, New Delhi.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**MM-303 INTEGRATED MARKETING COMMUNICATION STRATEGY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this paper is to acquaint the students with the concepts, techniques and developing skills regarding application of effective advertising programmes.*

**Course Outcomes:**

- CO1:** Students will be able to define various terms associated with the field of integrated marketing communication.
- CO2:** Students will be able to explain the components of integrated marketing communication.
- CO3:** Students will be able to interpret the impact of business environmental factors on the marketing communication strategy.
- CO4:** Students will be able to distinguish the utility of various promotional tools.
- CO5:** Students will be able to evaluate the effectiveness of marketing communication strategy.
- CO6:** Students will be able to develop a marketing communication strategy.

**Course Contents:**

**UNIT-I**

The growth of advertising and promotion, the evolution of IMC and a contemporary perspective, Promotional Mix: a tool for IMC, Analysis of the communication process, Role of IMC in the

marketing process, Developing Marketing Planning Programme, Role of Advertising and Promotion.

## **UNIT-II**

Participants in the IMC process: The clients Role, Role of advertising agencies, Types of Ad agencies, Agency compensation, evaluating agencies; An Overview of Consumer Behavior: Consumer decision-making process, Environmental influences on consumer behavior, Alternate approaches to consumer behavior

## **UNIT-III**

Analyzing the communication process: A basic model of Communication, cognitive response approach, elaboration likelihood model; Source message and channel factors; Objectives and budgeting for IMC programmes: Establishing objectives and budgeting for promotional programmes; DAGMAR: An approach to setting objectives, problems in setting objectives, Establishing and allocating the promotional budget; Developing the IMC program: Creative Strategy: Planning & development, Implementation and evaluation.

## UNIT-IV

Media planning and Strategy: Developing the media plan, Establishing media objectives, Developing and implementing media strategies, Evaluation and follow-up; Evaluation of media: television & Radio, Evaluation of Print Media: Support Media, Direct Marketing, Direct Selling, The internet and interactive media, sales promotion, public relation, publicity and corporate advertising. Measure the effectiveness of the promotional programme. International advertising and promotion, regulation of advertising and promotion, evaluating the social, ethical and economic

Aspects of advertising and promotion

### Suggested Readings:

1. Blakeman, R. *Integrated Marketing Communication: Creative Strategy from Idea to Implementation*, Rowman & Littlefield
2. Dutta, K., *Integrated Marketing Communication*, Oxford Higher Education
3. Belch, G. E., Belch, M. A. and Purani, K., *Advertising and Promotion*, McGraw Hill Education.
4. Batra, R., Myers, J. G. and Aaker, A.D. *Advertising Management*, Pearson Education
5. Percy, L. and Elliot, R., *Strategic Advertising Management*, Oxford publishing
6. Sissors, J.Z. and Baron, R.B. *Advertising Media Planning*, McGraw Hill.
7. Jethwaney, J. and Jain, S., *Advertising Management*, Oxford publishing

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**MM-304**

**SALES AND DISTRIBUTION MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To provide an understanding of the concepts, attitudes, techniques and approaches required for effective decision making in the areas of Sales and Distribution Management.*

**Course Outcomes:**

- CO1:** Students will be able to define the concepts of sales management and distribution.
- CO2:** Students will be able to explain the role, functions, and methods of selling and distribution process.
- CO3:** Students will be able to apply the concepts to solve practical sales and distribution problems.
- CO4:** Students will be able to compare different methods used for sales and distribution related decisions.
- CO5:** Students will be able to appraise their sales management skills.
- CO6:** Students will be able to develop the strategies that help in taking strategic decisions.

**Course Contents:**

**UNIT-I**

Sales Management: Role of Sales Management in Marketing, Nature and Responsibilities of Sales Management, Modern Roles and Required Skills for Sales Managers. Theories of Selling.

Sales Planning: Importance, approaches and process of sales planning; Sales forecasting; Sales budgeting. Sales Organization: Purpose, principles and process of setting up a sales organization; Sales organizational structures; Field sales organization; Determining size of sales force.

## **UNIT-II**

Territory Management: Need, procedure for setting up sales territories; Time management; Routing. Sales Quotas: Purpose, types of quotas, administration of sales quotas. Managing the Sales-force: Recruitment, selection, training, compensation, motivating and leading the sales-force; Sales meetings and contests

### UNIT-III

Control Process: Analysis of sales, costs and profitability; Management of sales expenses; Evaluating sales force performance; Ethical issues in sales management.

### UNIT-IV

Distribution Channels: Role of Distribution Channels, Number of Channels, Factors Affecting Choice of Distribution Channel, Channel Behavior and Organization, Channel Design Decision; Channel Management Decisions; Distribution Intensity; Partnering Channel Relationship.

#### Suggested Readings:

1. Still, Cundiff, Govoni, *Sales Management: Decisions, Strategies & Case*,– Prentice Hall, India.
2. Anderson R, *Professional Sales Management*, Englewood Cliff, New Jersey, Prentice Hall, India.
3. Spiro, Rosann L., Gregory A. Rich, and William J. Stanton, *Management of a Sales Force*, McGraw-Hill Irwin, Boston.
4. Dalrymple, Douglas J., and William L., *Sales Management: Concepts and Cases*, New York, NY: John Wiley and Sons.
5. Panda, T. K., Sahadev , S., *Sales And Distribution Management*, Oxford Publishing, India
6. Hughes, G. David, Daryl McKee, Charles H. Singler, *Sales Management: A Career Path Approach*, Cincinnati, OH: South-Western College Publishing
7. Peppers, D. & Rogers, M., ‘*The short way to long-term relationships*’. *Sales and Marketing Management*

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from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MM-305**

**LOGISTICS MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to enable students understand the importance and dynamics of a firm's physical distribution functions and management of its supply chain.*

**Course Outcomes:**

- CO1:** Students will be able to recall the terms used in logistics.
- CO2:** Students will be able to describe the importance of logistics.
- CO3:** Students will be able to apply the concepts of logistics for marketing.
- CO4:** Students will be able to appraise the components related to logistics.
- CO5:** Students will be able to evaluate the dynamics of physical distribution functions.
- CO6:** Students will be able to create an efficient logistics system for an organization.

**Course Contents:**

**UNIT-I**

Introduction to Logistics Management: Nature, Role, Scope and Evolution of Logistics Management, Operational Objectives of Logistics; Concept of Supply Chain Management; Marketing and its Interface with Logistics; Total Cost Analysis and Trade off; Concept of Customer Service: Components of Customer Service, Customer Service Cost, Customer Service Measurement; Major Components/Decisions of Logistics Management; Integrated Logistics System; Distribution related issues and Challenges for Logistics.

## UNIT-II

Transportation Decisions: Role of Transportation in Logistics, Elements of Transportation Cost, Selection of Transportation Mode, Multi-Decision Areas of Transportation: Containerization, Transportation Network and Tariffs; Third Party Logistics; Inventory Management: Role of Inventory Management in Logistics, Elements of Inventory Costs, Decision Areas of Inventory Management, Techniques of Inventory Control, Economic Order Quantity Under Conditions of Certainty and Uncertainty.

## UNIT-III

Modern Concept of Warehousing: Role and Types of Warehouses, Warehouse Functions, Planning Warehousing Operations, Site Selection, Warehouse Layout, Operational Mechanism and Automation in Warehousing; Information and Order Processing: Role of Information System in Logistics Management; Order Processing: Nature and Concept, Functions of Order Processing; Elements of Ordering cost.

## UNIT-IV

Packaging: Role of Packaging in Logistics, New Emerging Packaging Alternatives, Packaging operations, Factors affecting packaging decisions; Material Handling: Objectives of Material Handling, Material Handling considerations; Equipments for Material Handling, Factors affecting Material Handling decisions.

Distribution Control and Performance Evaluation: Integration of Logistics with Distribution System, IT-enabled Distribution and Logistics Management, Distribution Control and Performance Measurement.

### Suggested Readings:

1. Bowersox and Others: *Physical Distribution Management*, Tata McGraw Hill, New Delhi.

2. Stern, Louis W. Adel, I.E.L. – Ansary, Annee T. Coughlan: *Marketing Channels*, Prentice Hall, New Delhi.
3. Ballu, Ronald H, *Business Logistics Management*, Englewood Cliffs, New York, Prentice Hall Inc.
4. Martin, Christopher and Gordon Wills: *Marketing Logistics and Distribution Management*
5. Khanna, K.K. *Physical Distribution Management*, Himalaya Publishing House, New Delhi.
6. Lambert, D. et. al., *Strategic Logistics Management*, Tata McGraw Hill, New Delhi.
7. Chopra, S and Meindl, P, *Supply Chain Management- Strategy, Planning and Operation*, Pearson Education.

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**MM-306**

**MARKETING OF SERVICES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this paper is to explicate the cutting edge service concepts to the students through bridging the gaps between theory and real world by incorporating practical management applications.*

**Course Outcomes:**

- CO1:** Students will be able to relate service and technology.
- CO2:** Students will be able to classify services and recognize service challenges.
- CO3:** Students will be able to use marketing research as a tool to understand customers and to deploy employees for service delivery.
- CO4:** Students will be able to examine the reasons of service failure and implementing strategies to recover it.
- CO5:** Students will be able to evaluate delivery and performance of services.
- CO6:** Students will be able to construct service design and standards.

**Course Contents:**

**UNIT- I**

Introduction to Services: Service and Technology, Goods versus Services, Service Marketing Mix, Gap model of Services, important service industries-Hospitality and Tourism, Transportation, Telecom, Banking and Insurance, Education and Entertainment, Healthcare. Service classification and challenges in Service Business.



## **UNIT- II**

Focus on the Customer: Consumer behaviour in Services, Customer Expectation of Services, and

Customer perception of services Elements in an effective services marketing research programme, Building customer relationship, Relationship development strategies, Reasons of Service failure, Service recovery and strategies.

## **UNIT- III**

Aligning Service design and standards: Challenges of Services Innovation and design, new service development process Service Blueprinting, Customer-defined service standards and its types, Physical evidence and types of servicescape, Strategic roles of servicescape

## UNIT- IV

Delivering and performing services: Employees role in service delivery, Customers role in-service delivery, Delivering services through intermediaries and electronic channels, Strategies

for matching capacity and demand, Key service communication challenges, Approaches to pricing services, Financial and Economic impact of services.

### Suggested Readings:

1. Zeithaml, V., Bitner, M.J., Gremler, D.D.&Pandit, A., *Service Marketing*. McGraw Hill.
2. Lovelock, C., Wirtz, J. & Chatterjee, J., *Services Marketing*. Pearson Education.
3. Srinivasan, *Service marketing: Indian Context*, PHI
4. Swartz, T., Iqobucci, D., *Handbook of Service Marketing and Management*, Sage Publication

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**MM-307**

**PRODUCT AND BRAND MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart in depth knowledge to the students regarding the theory and practices of brand management.*

**Course Outcomes:**

**CO1:** Students will be able to define basic branding concepts and outline major branding issues.

**CO2:** Students will be able to identify branding challenges and opportunities.

**CO3:** Students will be able to apply marketing programme to build brand equity.

**CO4:** Students will be able to examine and implement different branding programmes.

**CO5:** Students will be able to evaluate brand performance and evaluating brand extension opportunities.

**CO6:** Students will be able to design and implement different branding strategies.

**Course Contents:**

**UNIT-I**

Branding terminology, basic branding concepts- brand awareness, brand personality, brand image, brand identity, brand loyalty, brand equity, major branding decisions: selecting a brand name, brand extension decision, family versus individual brand names, multiple branding, private versus national branding, importance of branding

## **UNIT II**

Branding challenges and opportunities, concept of brand equity, sources and benefits of brand equity, customer based Brand equity, designing marketing programme to build brand equity, measurement of brand equity, Strategic brand management process, concept of Brand positioning and repositioning, Identifying and establishing brand positioning and values.

## **UNIT III**

Planning and implementing brand marketing programmes, designing marketing programmes, measuring and interpreting brand performance, Legal aspects of Branding, Copyright, Trademarks and IPR, designing and implementing branding strategies; Brand building and communication, E- Branding, handling brand name changes

## UNIT IV

New products and brand extension, evaluating brand extension opportunities, reinforcing brands, revitalising brands, managing brands over geographic boundaries and market segments, rationale for going international, global marketing programmes- advantage and disadvantage, standardisation versus customisation, global brand strategy. Branding in rural marketing, branding in specific sectors: retail, industrial, service brands

### Suggested Readings:

1. Kevin Lane Keller, *Strategic Brand Management*, Pearson Education.
2. David A Aaker, *Managing Brand Equity*, New York, Free Press.
3. Don Cowley, *Understanding brands*, Kogan page
4. J.N. Kapferer, *Strategic Brand Management*, Free Press.

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- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FOURTH  
SEMESTER**

**MM- 401**

**GLOBAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Objective:** *The basic objective of this course is to acquaint the students with environmental, procedural, institutional and decisional aspects of global marketing.*

**Course Outcomes:**

- CO1:** Students will be able to describe basic global market entry strategies.
- CO2:** Students will be able to identify the emerging issues and developments in global marketing.
- CO3:** Students will be able to interpret the marketing environment at global level.
- CO4:** Students will be able to differentiate the marketing practices at domestic and global level.
- CO5:** Students will be able to evaluate the marketing mix strategy of a company competing at global level.
- CO6:** Students will be able to create global marketing strategies.

**Course Contents:**

**UNIT-I**

Global Marketing- Introduction, Drivers towards globalization, Global marketing objectives; Initial modes of entry; Process of international marketing. Culture and Global Marketing- Cultures across countries, Culture and negotiations

## **UNIT –II**

Country Attractiveness- Environmental research, Entry evaluation procedure, Country data sources, Forecasting country sales and market share. Local Marketing- Understanding local customers, Local marketing in mature markets and growth markets.

## **UNIT-III**

Global Segmentation and Positioning- Global market segment, Targeting segments, Global product positioning. Global products- Standardization versus Adaptation, Developing new global products, Global brand management.



## UNIT-IV

Global Pricing- Pricing policy and strategy, Transfer pricing, Counter trade. Global Distribution-Local channels, Wholesaling and retailing, Global logistics, Effects of parallel distribution. Global Advertising and Promotion- Global advertising decision, Elements of global advertising, Global sales promotion; E-commerce as a tool of global marketing.

### Suggested Readings:

1. Warren, J. Keegan, *Global Marketing Management*, Pearson Edu/PHI, New Delhi
2. Johansson Johny, *Global Marketing: Foreign Entry, Local Marketing and Global Management*, McGraw Hill.
3. Sak Onkvisit and John Shaw, *International Marketing (analysis and Strategy)*, PHI.
4. Phillip R. Cateora, *International Marketing*, Tata McGraw Hill.
5. Vern Terpstra and Ravi Sarathy, *International Marketing*, Thomson
6. R. L. Varshney and B. Bhattacharya, *International Marketing*, Sultan Chand Publications.

### Important Instructions for the Course Coordinator and the Examiner:

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**MM-402**

**INDUSTRIAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to lay a foundation for an understanding of the complex dimensions of Industrial Marketing.*

**Course Outcomes:**

**CO1:** Students will be able to describe terms, concepts, and nature of industrial marketing.

**CO2:** Students will be able to compare industrial marketing with consumer marketing.

**CO3:** Students will be able to interpret the role of each stakeholder in industrial marketing value chain.

**CO4:** Students will be able to appraise competitor marketing strategy.

**CO5:** Students will be able to evaluate marketing mix strategy for industrial products.

**CO6:** Students will be able to develop an effective marketing strategy for industrial products.

**Course Contents:**

**UNIT-I**

Industrial Marketing: concept, nature and scope of industrial marketing; Difference between industrial and consumer marketing; Economics of industrial demand; Understanding industrial markets and environment: Types of industrial customers, Classification of industrial

products, Marketing implications for different customers and different product types, Purchase practices of industrial customers, Environmental analysis in industrial marketing.

## **UNIT-II**

Organisational Buying and Buyer behavior: Buyer motives, Phases in industrial buying decision process, Types of buying situations, Interpersonal Dynamics of industrial buying behavior, Buyer-Seller relationship, Models of industrial buying behavior, Industrial Marketing Research process; Industrial market segmentation, target marketing and positioning.

## **UNIT-III**

Product Strategy: Meaning and Concept of an industrial product, Determinants of product mix, Industrial Product Life Cycle and strategies, New product development process; Marketing strategies for product related services and pure services; Industrial pricing decisions: Factors influencing pricing decisions, Pricing strategies, Pricing methods.

## UNIT-IV

Industrial distribution channels and marketing logistics: Distinctive nature of industrial distribution channels, Factors affecting the nature of industrial channels, Role of intermediaries, Types of industrial intermediaries, Channel design decisions, Role of logistics and customer services in industrial marketing, Major components/Major decision areas of logistics, Total cost approach; Industrial marketing communication: Role of personal selling and direct marketing in industrial marketing, Personal selling process, Importance of advertising, and sales promotion in industrial marketing, Sales force management, Strategic planning, Implementing and Controlling in industrial marketing.

### Suggested Readings:

1. Reeder, Robert R. *Industrial Marketing: Analysis, Planning and Control*. Englewood Cliffs. New Jersey, Prentice Hall Inc.
2. Havalder, Krishna K., *Industrial Marketing*, TMH, New Delhi
3. Havalder, Krishna K: *Text and Cases*, TMH, New Delhi
4. Brennan, R, Canning, L & McDowell, R, *Business to Business Marketing*, Sage Publications Ltd.,
5. Hill, Richard, etc. *Industrial Marketing*, Homewood Illionis, Richard D. Irwin.
6. Webster, F E. *Industrial Marketing Strategy*, New York, John Wiley.
7. Ghosh, P.K, *Industrial Marketing*, Oxford University Press.
8. Mukerjee, *Industrial marketing*, Excel Books India

### Important Instructions for the Course Coordinator and the Examiner:

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**MM-403**

**RURAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the major concepts of rural and agricultural marketing in coherent and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to recite problems in rural marketing and changing focus of corporate towards rural market.
- CO2:** Students will be able to recognize need of agricultural marketing in economic development and constraints of agricultural marketing.
- CO3:** Students will be able to solve the problems of cooperative sector in India.
- CO4:** Students will be able to appraise role of supply chain in agricultural marketing.
- CO5:** Students will be able to evaluate role of government and financial institution in growth of rural and agricultural marketing.
- CO6:** Students will be able to develop model for rural and agricultural marketing.

**Course Contents:**

**UNIT-I**

Features, Significance, Scope and Limitations of rural markets in India; Environmental factors affecting rural markets; Changing focus of corporate towards rural markets; Demographic and psychographic profile of rural consumer; Classification of products and services in Rural marketing, rural demand and problems in rural marketing.

**UNIT-II**

Agriculture Marketing –Definition, Scope, Concept and Objectives; Differences in Agricultural and Consumer Marketing; Constraints in Agricultural marketing; Role of Agriculture in Economic Development of India; Role of Government in Agricultural Development; Agribusiness; Export potential for farm products -Supporting Services.

### **UNIT-III**

Cooperative Marketing –Concept, History, Functions – Reasons for slow progress of cooperative sector, Advantages & Limitations of Organized retailing in Agri Inputs and Outputs, Trends in Agri Marketing. Supply Chain Management in Agri Business i.e. Cold Chains, Organized procurement & warehousing.

## UNIT- IV

Marketing Mix for rural products; Role of financial institutions in rural marketing. Rural marketing strategies: Different models and case studies of corporate vis Tata Kisan Seva Kendra, Commodity market functioning etc. Innovative distribution Channels like ITC E-Choupal, Godrej Adhar, HUL Shakti.

### Suggested Readings:

1. Acharya S. S. and Agarwal N. L., *Agricultural Marketing in India*, Oxford & IBH Publishing Co.
2. Dr. Subhash Bhave, *Agribusiness Management in India –Text & Cases*.
3. Arora, R C., *Integrated Rural Development*, Scharnd.
4. Desao. Vassal. *Rural Development*, Himalaya Publishing House
5. Mishar, S. N., *Politics and Society in Rural India*, Inter India.
6. Porter, Michael, E. *Competitive Strategy*, Free Press.
7. T.P Gopaldaswamy, *Rural marketing- Environment, problems and strategies*

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MM-404**

**CUSTOMER RELATIONSHIP MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this course is to acquaint the students with concepts, techniques and give experience in the application of concepts for developing effective Customer Relationship programme.*

**Course Outcomes:**

- CO1:** Students will be able to describe the customer equity.
- CO2:** Students will be able to identify the benefits of value creation for retaining customers.
- CO3:** Students will be able to interpret the role of appropriate business process and technology management capabilities in managing customer relationship.
- CO4:** Students will be able to compare different processes.
- CO5:** Students will be able to evaluate CRM implementation Strategies.
- CO6:** Students will be able to design the strategies framework for the CRM integration in the existing function of the organisation.

**Course Contents:**

**UNIT-I**

Prerequisites to CRM: Changing face of Indian market, Customer ownership and customer values, Customer life cycle (CLC) and Customer lifetime value (CLV), Customer relationship. Relationship Marketing- From traditional marketing approach to relationship marketing organizational pervasive approach, Service level agreements (SLA)



## **UNIT- II**

Understanding CRM, Technology and CRM, Levels of CRM, Loyalty Management, Loyalty programmes, reasons of failure of loyalty programmes.

Service quality and service capacity planning: service capacity planning process; Customer driven quality and Quality Management System (QMS)

## **UNIT-III**

Planning and implementation of CRM, CRM and Sales Force Automation (SFA): Objectives, Strategic advantage of SFA, Key factor for successful SFA.

eCRM: Benefits, Data handling, eCRM systems/applications in market, specifications of eCRM solutions, Scope and Significance of a CRM project, CRM implementation process.

## UNIT-IV

Making CRM a success: Success factors for CRM, Business Process Reengineering (BPR) for CRM implementation, Data Quality Management (DQM).Securing Customer Data: Information security management system, Ethical issues in CRM, IT solutions of CRM and its Integration, Future of CRM.

### Suggested Readings:

1. Makkar, U. & Makkar, H. K., *Customer Relationship Management*, McGraw Hill Education.
2. Dyche, Jill., *The CRM Handbook-A Business Guide to CRM*, Pearson Education Asia.
3. Anton, J., Petouhoff, N.L. & Kalia, S., *Customer Relationship Management*, Pearson.
4. Kumar, V. & Reinartz, W., *Customer Relationship Management: Concept, Strategy, and Tools*, Springer.
5. Brown, A. Stanly, *Customer Relationship Management*, John Wiley.
6. Gosney, John W. and Thomas P. Boehm, *Customer Relationship Management Essentials*, Prentice Hall.
7. Seth, Jagdish N., *Customer Relationship Management*, Tata McGraw Hill Publishing Co.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MM- 405**

**RETAIL MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to familiarize the students with the basic concepts of retailing and understanding retail business so as to make them ready for future roles as managers*

**Course Outcomes:**

- CO1:** Students will be able to define the different terms used in the retail sector.
- CO2:** Students will be able to identify the current retail structure in India.
- CO3:** Students will be able to demonstrate the insights of retailing and related key activities.
- CO4:** Students will be able to appraise the importance of retailing and its role in the success of modern businesses.
- CO5:** Students will be able to evaluate the current marketing scenario and identify retail opportunities thereof.
- CO6:** Students will be able to develop a retail plan for opening up a retail store.

**Course Contents:**

**UNIT-I**

Introduction to Retail- Evolution of Retail, Organised Vs Unorganised retailing, Retail Mix, theories of retail development, Types of Retailers; Careers in Retailing; Understanding Consumers.

## **UNIT-II**

Retail Locations- Planned and Unplanned, Retail Site Location- Site Characteristics, Trade Area Characteristics, Location and Site Evaluation; Store Layout and Design; Space Management; Visual Merchandising; Atmospheric

## **UNIT-III**

Managing Merchandise - Merchandise Planning, Process, Forecasting Sales, Developing Assortment Plans, National Brands and Private Labels; Retail Pricing- Setting Retail Prices, Price Adjustments, Pricing Strategies; Retail Communication Mix.

## UNIT-IV

Information and Supply Chain Management- Information Flows, Logistics, Distribution Centre. Contemporary issues in Retail-Significance of retail as an industry, Retail scenario at International and National Level, Technology in Retailing, Multi-channel Retailing, E-Retailing: Future of e-retailing, Challenges for traditional retail and e-retail, FDI in Retail.

### Suggested Readings:

1. Pradhan, S., *Retailing Management Textand Cases*, Mc Graw Hill Education, New Delhi
2. Levy, Micheal, Weitz, Barton, A. and Pandit, Ajay, *Retailing Management*, Tata McGraw Hill, New Delhi
3. Berman, Barry and Evans, Joel, R., *Retail Management; A Strategic Approach*; PHI/Pearson Education; New Delhi
4. Newman, Andrew, J. & Cullen, Peter, *Retailing: Environment & Operations*, Vikas Publishing House; New Delhi.
5. Gilber, David, *Retail Marketing Management*, Pearson Education, New Delhi.

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MM-406**

**SOCIAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

Course Objective: *The objective of the course is to familiarize the students to design social campaigns with a view to bring change in the behavior of the public in the fields of public health and environment.*

**Course Outcomes:**

- CO1:** Students will be able to describe the meaning and nature of social marketing.
- CO2:** Students will be able to recognize the range of stakeholders involved in social marketing programmes and their role as target markets
- CO3:** Students will be able to interpret the marketing mix strategies in social marketing.
- CO4:** Students will be able to appraise social marketing problems and suggest ways of solving.
- CO5:** Students will be able to evaluate the social marketing plan.
- CO6:** Students will be able to develop a social marketing plan for achieving behavioral change.

**Course Contents:**

**UNIT-I**

Social Marketing: Concept, Scope, Comparison with Commercial Marketing, Approaches to influence public Behavior; Social Marketing Planning Process; Elements of Campaign.

**UNIT-II**

Social Marketing Environment: Campaign Focus and purpose, Mapping the Internal and External Environments; Establishing Target Audiences: Target Marketing.

### **UNIT-III**

Setting Campaign Objectives and Goals: Behavior Objective, Knowledge Objective, Belief Objective; Social Marketing Strategies: Product in social marketing, Price of a social marketing product.

### **UNIT-IV**

Promotional Strategies: Types of Media Channels, Choosing Media Vehicles, Timings and Factors Influencing media strategies; Plan Evaluation and Monitoring: Outcome measures, Process Measures; Establishing Budgets and finding Funding Sources.

### **Suggested Readings:**

1. Philip, Kotler, Ned Roberto, Nancy Lee, *Social Marketing: Improving the quality of life*, Sage Publication,
2. Nancy, R., Lee, Philip, Kotler, *Social Marketing; Influencing Behavior for Good*, Sage, R., Kraig, Lefebvre, *Social Marketing and Social Change*, Wiley.
3. Hong, Cheng, Philip Kotler, Nancy R. Lee, *Social Marketing for Public Health: Global Trend and Success Stories*, Jones and Bartlett Publishers, LLC

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Course Objective:**     *The aim of this paper is to acquaint the students with the concepts, techniques and developing skills regarding application of effective digital and social media marketing.*

**Course Outcomes:**

- CO1:**     Students will be able to define various terms used in the field of digital and social media marketing.
- CO2:**     Students will be able to explain the procedures used in planning and implementation of digital and social media marketing.
- CO3:**     Students will be able to illustrate existing digital and social media marketing strategies.
- CO4:**     Students will be able to distinguish the utility of various social media platforms for promoting a brand.
- CO5:**     Students will be able to select the most suitable social media platform to market a brand.
- CO6:**     Students will be able to design a social media marketing strategy for a brand.

**Course Contents:**

**UNIT I**

Introduction to digital marketing, advantages of digital medium over other media, Impact of internet on consumer buying behaviour. Domain names; Website hosting; Lead generation; Ethical and Legal Issues in the field of digital marketing.

## **UNIT II**

Search Engine Optimisation (SEO): Introduction to SEO; understanding search engines; basics of keyword research; On-page and off-page Search Engine Optimisation.

## **UNIT III**

Search Engine Marketing (SEM): Introduction to SEM; Google Ad words; keywords; bidding and budget; quality score; creating and optimising campaign. Google Analytics; Content marketing; Affiliate marketing; Email marketing; Mobile marketing

## UNIT IV

*Social media marketing*: meaning; approach to social media; types of social media websites; blogging; social media engagement; social media ROI; using social media for branding and promotion. Marketing on Facebook, LinkedIn, YouTube, Instagram, Pinterest

### Suggested Readings:

1. Parkin Godfrey, *Digital Marketing: Strategies for Online Success*, New Holland Publishers.
2. Charlesworth A., *Internet Marketing: A Practical Approach*, BH Publications.
3. Chaffey Dave, *Internet Marketing: Strategy, Implementation and Practice*, Pearson Education.
4. Trengove Alex, Malczyk Anna and Beneke Justin, *Internet Marketing*, Get Smarter under the Creative Commons BY-NC 3.0.

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

# **INTERNATIONAL BUSINESS AREA**

**THIRD  
SEMESTER**

**IB-301**

**INTERNATIONAL FINANCIAL MARKETS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to give students an in-depth knowledge of the working of international financial markets.*

**Course Outcomes:**

**CO1:** Students will be able to recall the structure and components of International Financial System through currency derivatives, future and option.

**CO2:** Students will be able to describe the concepts of International Financial Markets, their co-existence and mutual global importance.

**CO3:** Students will be able to illustrate the working and contribution of World Bank, IMF and other regional developments banks.

**CO4:** Students will be able to examine the linkages in the International Financial Markets vis-à-vis interaction between leading international currencies and monetary instruments in international financial markets.

**CO5:** Students will be able to evaluate the various procedures relating to international financial markets vis-à-vis bond market, derivatives and international portfolio diversification.

**CO6:** Students will be able to develop necessary competencies expected of an international finance professional who have the ability to analyse the cyclical waves in international financial markets.

**Course Contents:**

## **UNIT-I**

Globalization and the Growth of Derivatives, Euro-currency Market, Euro banking and Euro-currency Centers, Term Structure of Euro-currency Rates, Euro-currency Futures and Options, Syndicated Euro-credits.

## **UNIT-II**

International Bond Markets - Introduction, New Issue Procedures in the Eurobond Markets, Eurobond Valuation and Hedging, Interest Rates and Currency Swaps

### UNIT-III

New Instruments in International Capital Markets, International Banking, International Portfolio Diversification

### UNIT-IV

Multilateral agencies: International Development banks such as World bank, IFC and others, Regional development banks such as Asian Development bank and others, bilateral agencies.

#### Suggested Readings:

1. Buckley, Adrian, *Multinational Finance*, Englewood Cliffs, Prentice Hall Inc.
2. Eiteman, David K. & Stonehill, Arthur 1, *Multinational Business Finance*, Addison-Wesley.
3. Johnson & Giaccott, *Options and Futures*. S1 Paul, West.
4. Kim, Suk & Kim, Seung, *Global Corporate Finance: Text and Cases*, Miami.
5. Shapiro, Alan C., *Multinational Financial Management*, Prentice Hall of India.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**IB-302**

**EXPORT-IMPORT PROCEDURES AND DOCUMENTATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of the course is to acquaint the students with the know export-import procedures and documentation*

**Course Outcomes:**

**CO1:** Students will be able to describe the legal framework and procedure governing international trade.

**CO2:** Students will be able to explain the incorporation of various terms in drafting of an export contract and understand the importance of risk management.

**CO3:** Students will be able to apply the concepts learned in terms of export order, delivery and international trade pricing to actual transactions.

**CO4:** Students will be able to appraise the role and importance of export-import documentation and procedure framework according to commodities and countries.

**CO5:** Students will be able to evaluate the nuances of import and export clearance procedures.

**CO6** Students will be able to develop the skills to export-import various commodities in different countries and avail benefits of various export incentives and promotional schemes given by government.

**Course Contents:**

UNIT I

Export Preliminaries, Documentation in international trade: Aligned Documentation System (ADS); Commercial documents, Regulatory documents, Documents related to goods, shipment, payment, inspection and legal regulated documents, Official machinery for

consultation.

## UNIT II

Export contract: Distinction between domestic sales contract and export sales contract, Major laws for export contracts, Elements in export contracts, Dispute settlement, Role of ICC; INCOTERMS, Containerization.

### UNIT III

Export order processing; shipping and custom clearance of export and import cargo; central excise clearance; Role of clearing and forwarding agents. Types of risks in international trade, Cargo Insurance and claim Procedures

### UNIT IV

Methods of payment in international trade; documentary collection of export bills, UCPDC guideline, Instruments of payments, Pre-shipment and post-shipment finance, Negotiation of documents with banks, Main Provisions of FEMA; Procedure and documentation for availing export incentives

#### **Suggested Readings:**

1. C. Rama Gopal, *Export Import Procedures, Documentation and Logistics*, New Age International Publishers, New Delhi.
2. M. D. Jitendra, *Export Procedures and Documentation*, Rajat Publications.
3. Pervin Wadia, *Export Markets and Foreign Trade Management*, Manishka Publications.
4. Paras Ram, *Export: What, Where and How*, Anupam, Publications.
5. *Government of India, Handbook of Import – Export Procedures*.
6. *Nabhi's Exporters Manual and Documentation*.
7. *Nabhi's New Import-Export Policy Procedures*

#### **Important Instructions for the Course Coordinator and the Examiner:**

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**IB-303**

**INDIA'S FOREIGN TRADE AND POLICY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To acquaint the students with recent trends in India's foreign trade management and policy related issues in the global context.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in India's Foreign Trade Policy.

**CO2:** Students will be able to describe the different concepts of India's Foreign Trade.

**CO3:** Students will be able to apply the terms used in India's Foreign Trade Policy in doing their business.

**CO4:** Students will be able to appraise the overall structure of India's foreign trade.

**CO5:** Students will be able to evaluate the different schemes run by government in promoting India's foreign trade.

**CO6:** Students will be able to create their own business by getting support from government.

**Course Contents:**

**UNIT – I**

India's Foreign Trade Recent Trends, and Directional Pattern in the Global Context, objectives of foreign trade policy, Structure and Equilibrium of India's Balance of Payments, major exports and imports, prohibited and restricted items.

**UNIT – II**

Merchandise Exports from India Scheme (MEIS), Service Exports from India Scheme (SEIS), export promotion capital goods (EPCG) scheme, schemes for exporters of gems and jewellery, Duty exemption / remission schemes: duty free import authorization scheme (DFIA), deemed exports.

### **UNIT – III**

Role of State Trading Organizations, Specific Service Institutions, Quality complaints and other trade Disputes, Role of EXIM Bank of India, Export Promotion Councils, Role of central board of excise and custom, Role of WTO in India's foreign trade policy.

## UNIT – IV

Special Economic Zones, Agriculture Export Zones, Export Oriented Units electronics hardware technology parks (EHTPS), software technology parks (STPS) scheme and bio-technology parks (BTPS), Ministry of Commerce, organization and Role of DGFT in India's trade policy.

### Suggested Readings:

1. Latest Foreign trade policy
2. Datt, Rudder and Sundaram, K.P.M., *Indian Economy*, S.Chand & Co. New Delhi.
3. Mishra and Puri, *Indian economy*, Himalaya Publishing House.
4. *Export-Import Policy*, Nabhi Publications.
5. Paras Ram, *Export, What, Where & How*, Anupam Publications.
6. Bhalla, V.K., *International Business Environment and Management*, Anmol Publications.

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**IB-304**

**GLOBAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic objective of this course is to acquaint the students with environmental, procedural, institutional and decisional aspects of global marketing.*

**Course Outcomes:**

- CO1:** Students will be able to describe basic global market entry strategies.
- CO2:** Students will be able to identify the emerging issues and developments in global marketing.
- CO3:** Students will be able to interpret the marketing environment at global level.
- CO4:** Students will be able to differentiate the marketing practices at domestic and global level.
- CO5:** Students will be able to evaluate the marketing mix strategy of a company competing at global level.
- CO6:** Students will be able to create global marketing strategies.

**Course Contents:**

**UNIT-I**

Global Marketing- Introduction, Drivers towards globalization, Global marketing objectives; Initial modes of entry; Process of international marketing Culture and Global Marketing- Cultures across countries, Culture and negotiations

## **UNIT –II**

Country Attractiveness- Environmental research, Entry evaluation procedure, Country data sources, Forecasting country sales and market share. Local Marketing- Understanding local customers, Local marketing in mature markets and growth markets

## **UNIT-III**

Global Segmentation and Positioning- Global market segment, Targeting segments, Global product positioning. Global products- Standardization versus Adaptation, Developing new global products, Global brand management.



## UNIT-IV

Global Pricing- Pricing policy and strategy, Transfer pricing, Counter trade. Global Distribution-Local channels, Wholesaling and retailing, Global logistics, Effects of parallel distribution. Global Advertising and Promotion- Global advertising decision, Elements of global advertising, Global sales promotion; E-commerce as a tool of global marketing

### Suggested Readings:

1. Warren, J. Keegan, *Global Marketing Management*, Pearson Edu/PHI, New Delhi
2. Johansson Johny, *Global Marketing: Foreign Entry, Local Marketing and Global Management*, McGraw Hill.
3. Sak Onkvisit and John Shaw, *International Marketing (analysis and Strategy)*, PHI.
4. Phillip R. Cateora, *International Marketing*, Tata McGraw Hill.
5. Vern Terpstra and Ravi Sarathy, *International Marketing*, Thomson
6. R. L. Varshney and B. Bhattacharya, *International Marketing*, Sultan Chand Publications.

### Important Instructions for the Course Coordinator and the Examiner:

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**IB-305**

**INTERNATIONAL LOGISTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course exposes students to the fundamentals of logistics as applied to international business.*

**Course Outcomes:**

- CO1:** Students will be able to recall the different terms of international logistics.
- CO2:** Students will be able to differentiate the transportation through different modes, i.e., road, rail, air, and ships.
- CO3:** Students will be able to apply the knowledge to optimize the logistics cost.
- CO4:** Students will be able to compare the role of various agencies involved in the international logistics business.
- CO5:** Students will be able to judge and select the efficient agency involved in international logistics.
- CO6:** Students will be able to create an optimal logistics strategy for a company.

**Course Contents:**

**UNIT – I**

Logistics: Concept, objectives and scope; logistics interface with marketing; Logistics System elements, Relevance of International logistics, logistics as a strategic resource, Principles for logistics excellence.

## **UNIT II**

General Structure of Shipping Industry: Characteristics, liner and tramp operations; Liner conferences; Freight structure and practices; chartering principles; UN convention on shipping.

## **UNIT III**

Developments in Ocean Transportation: Containerization: Inland container depots; Multi-modal transportation and CONCOR; Highlights of the Multi-modal Transport of Goods Act 1993, Role of intermediaries including freight forwarders, Shipping agents, freight brokers and Stevedores.

## UNIT IV

Port organization and management: Responsibilities of Port Trust: Major ports of India; International Maritime Organization (IMO), INCOTERMS, Air Transport Management, Air Cargo Tariff Structure

### Suggested Readings:

1. Annual Reports, INSA.
2. Annual Reports, CONCOR.
3. Bowersox, Dohold J. and Closs David J., *Logistical Management*, Tata McGraw-Hill
4. Coyle, Bard and Langley, *The management of Business Logistics*, Thomson.
5. Pierre Davd, *International Logistics*, Biztantra.
6. Bloomberg David J., Stephan Lemay& Joe B. Hanna., *Logistic*, PHI.
7. Shipping Documents and Reports, UNCTAD.
8. Krishnaveni, M., *Logistice Management and World Seaborne Trade*, Himalaya Publishing House, New Delhi.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**IB-306**

**INTERNATIONAL ACCOUNTING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint the students with the accounting needs of international financial markets and to analyze the accounting measurement and reporting issues unique to multinational business transactions.*

**Course Outcomes:**

**CO1:** Students will be able to describe the basic concepts related to International Accounting, International Audit and International Accounting Standards.

**CO2:** Students will be able to explain in detail International Audit Environment and harmonization of International Accounting Practices.

**CO3:** Students will be able to illustrate the international perspective on Inflation Accounting, International Financial Reporting and Transfer Pricing.

**CO4:** Students will be able to examine the Foreign Financial Statements and international accounting for Environmental Protection.

**CO5:** Students will be able to evaluate the international accounting practices impact on Foreign Currency Translation and International Audit.

**CO6:** Students will be able to assemble international accounting practices.

**Course Contents:**

**UNIT –I**

International dimensions of accounting; conceptual development and comparative development patterns; foreign currency translation; international audit environment

**UNIT – II**

International accounting standards: concept and mechanism of setting international standards, disclosure requirements of international accounting standards.

### **UNIT – III**

Managing international information systems; international perspective on inflation accounting; international dimensions of financial reporting; harmonization of accounting practices

## UNIT – IV

Analyzing foreign financial statements; accounting for environmental protection measures.  
Transfer pricing.

### Suggested Readings:

1. Arpon, Jeffrey S. and Radebaugh, Lee H., *International Accounting and Multinational Enterprises*, John Wiley.
2. Choi, Frederick D. S. and Mueller Gerhard G., *International Accounting*, Englewood Cliffs, Prentice Hall Inc.
3. Evans, Thomas G., *International Accounting & Reporting*, MacMillan.
4. Gray, S 1., *International Accounting and Transnational Decisions*, Butterworth.
5. Holzer, H Peter, *International Accounting*, Harper & Row.
6. Prodhan, Bimal, *Multinational Accounting*, Croom-Helm.
7. Rathore, Shirin, *International Accounting*, Englewood Cliffs, Prentice Hall Inc.

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**IB-307**

**RISK MANAGEMENT IN INTERNATIONAL BUSINESS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of the course is to introduce state of the art tools and necessary for planning, executing and maintain risk management risk management in today's environment*

**Course Outcomes:**

**CO1:** Students will be able to describe the basic concepts of risk management in international management vis-à-vis International Financial Derivatives and Foreign Exchange Risk Management.

**CO2:** Students will be able to explain and illustrate the terminology used in risk management vis-à-vis Financial Risk, Credit Risk and Political Risk.

**CO3:** Students will be able to apply optimum solutions in the cases of risk management especially in international scenario through hedging with currency future and option.

**CO4:** Students will be able to differentiate between Options and Futures pricing in risk management and apply the understanding in the simulated foreign currency derivatives and cultural diversities in risk analysis.

**CO5:** Students will be able to evaluate the various risk management strategies for their application in international business.

**CO6:** Students will be able to develop the analytical ability to apprehend and comprehend the risk management practices and their impact on international business vis-à-vis cultural diversities, currency derivatives and asset liability management.

**Course Contents:**



## **UNIT-I**

The concept of risk, Benefit of risk management, Country risk analysis, Cultural diversity and Multi-National Corporations.

## **UNIT-II**

Financial risk management, Management of credit risk, Political risk and its management. Foreign Exchange Risk Management

### UNIT-III

Risk management through derivative: Swaps Forwards, Futures, Options, Option prices models, interest rate derivatives, foreign currency derivatives.

### UNIT-IV

Concept of value at risk, Approaches for calculating value at risk, introduction to assets liability management. Organizational and Accounting issues in Risk Management, Case studies in risk management

#### Suggested Readings:

1. Milind S., *International Financial Management*, John Wiley and Sons.
2. Chance, D.M., *An introduction to Derivatives and Risk Management*, Harcourt College Publishers.
3. Marrison, C, *Fundamentals of Risk management*, TMH Publications.

#### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FOURTH  
SEMESTER**



**IB-401**

**FOREIGN EXCHANGE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To acquaint the students with the mechanism of the foreign exchange markets, measurement of the foreign exchange exposure, and hedging against exposure risk. Upon successful completion of this paper, Students should expect to learn the nature and purposes of foreign exchange management under the new financial order evolving higher degree of vulnerability in a highly borderless financial world.*

**Course Outcomes:**

**CO1:** Students will be able to state appropriate formats and technologies to financial communication.

**CO2:** Students will be able to identify market conventions on exchange rate quotation and correctly calculate those quotations.

**CO3:** Students will be able to apply information within the global financial environment of foreign exchange to solve problems and make informed decisions.

**CO4:** Students will be able to appraise forward exchange rates given spot exchanges rates and rationale behind it.

**CO5:** Students will be able to evaluate the problems of dealing in foreign currency and the advantages and disadvantages of overseas funding.

**CO6:** Students will be able to develop an integrative understanding of the foreign exchange market and the relationships between interest rates, spot and forward rates and expected inflation rates.

**Course Contents:**

**UNIT-I**

Foreign Exchange Market: Function and Structure of the Forex markets, Foreign exchange market participants, Types of transactions and Settlements Dates, Exchange rate quotations, Nominal, Real and Effective exchange rates, and Determination of Exchange rates in Spot

markets. Exchange rates determinations in Forward markets. Exchange rate behavior-Cross Rates Arbitrage profit in foreign exchange markets, Swift Mechanism.

## UNIT-II

International Parity Relationships & Forecasting Foreign Exchange rate:- Measuring exchange rate movements-Exchange rate equilibrium – Factors effecting foreign exchange rate- Forecasting foreign exchange rates .Interest Rate Parity, Purchasing Power Parity & International Fisher effects.

## UNIT-III

Foreign Exchange Exposure:- Management of Transaction exposure (Case Study: Airbus Dollar Exposure); Management of Translation exposure- Management of Economic exposure (Case study: Exporter's/Importer's Position: Hedge or Hedge Not).

## UNIT-IV

Foreign exchange risk Management: Hedging against foreign exchange exposure – Forward Market- Futures Market- Options Market- Currency Swaps-Interest Rate Swap. Cross currency Swaps-Hedging through currency of invoicing- Hedging through mixed currency invoicing.

### Suggested Readings:

1. Eun and Resnick, *International Financial Management*, Tata McGraw Hill.
2. Eiteman, Moffett and Stonehill, *Multinational Business Finance*, Pearson.
3. Jeff Madura, *International Corporate Finance*, Cengage Learning.
4. Alan C. Shapiro, *Multinational Financial Management*, Wiley India
5. Apte, P. G *International Financial Management*, TMH.
6. Maurice Levi *International Finance*, Routledge.
7. Paul Einzip, *A Textbook on Foreign Exchange*
8. Paul Roth, *Mastering Foreign Exchange and Money Markets*, Pitman.

### Important Instructions for the Course Coordinator and the Examiner:

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**IB-402**

**REGIONAL ECONOMIC BLOCKS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of the course to familiarize the students with the theoretical framework of the theory of economic integration, and its impact on trade and investment flows among the region and on the global economy.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms related to regional blocks.

**CO2:** Students will be able to describe the various functions of regional blocks.

**CO3:** Students will be able to interpret the various economic issues among the regional blocks vis-à-vis world trade.

**CO4:** Students will be able to appraise and distinguish between the strong and weak regional blocks and their reasons.

**CO5:** Students will be able to distinguish the role of regional economic blocks as building blocks in the world trade.

**CO6:** Students will be able to construct and develop a link between regional blocks, WTO and world trade partners.

**Course Contents:**

**UNIT-I**

Regionalism in the World Economy, Theory of Economic Integration, Levels of economic integration

**UNIT-II**

Selected Regional Blocks - NAFTA, EU, ASEAN, SAARC

**UNIT-III**

Globalization Vs. Regionalization; Building Blocks or Stumbling Blocks, Benefits and cost of economic integration, Economic integration schemes



## UNIT-IV

Ongoing challenges - Environment Volatility, Rise of Global Mania; Regional Alternatives; India's Free Trade Agreements

### Suggested Readings:

1. Gerber James, International Economics, Pearson Education.
2. Balassa, Bela., Theory of Economic Integration, George Allen & Unwin Ltd..
3. Bhalla, V.K., World Economy in 90s: A Portfolio Approach, Anmol Pub. Pvt. Ltd.
4. Dreze, Jean & Sen, Aamrtya, Indian, Development: Selected Regional Perspective, Oxford University Press
5. Jackson, J., The World Trading System, Mass: MIT Press.
6. Krugman, Paul R. & Obstfeld, M., International Economics, Harper Collins Pub.
7. Machlup, F. A., History of Thought on Economic Integration, Macmillan.
8. Trivedi, Sonu, Regional Economic Cooperation and Integration, New Century Publications.
9. Chhibber, Bharti, Regional Security and Regional Cooperation', New Century Publications
10. Publications
11. Publications
12. Publications

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**IB-403**

**MANAGEMENT OF INTERNATIONAL FINANCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this paper is to give students an overall view of the international financial system and how multinational corporations operate.*

**Course Outcomes:**

- CO1:** Students will be able to describe the environment of international finance.
- CO2:** Students will be able to compare domestic financial management with international financial management
- CO3:** Students will be able to apply various mathematical formulas in financial decisions.
- CO4:** Students will be able to examine issues related to various finance functions of MNCs.
- CO5:** Students will be able to evaluate issues related to financial management in different MNCs.
- CO6:** Students will be able to create financial management guidelines for organizations operating at international level.

**Course Contents:**

**UNIT-I**

Finance function in multinational firm; Institutional structure of international financial markets; cost and availability of international financial flows; international financial instruments.

**UNIT-II**

International Working Capital Management: Aspects of international cash management; Investment criteria and borrowing decisions; centralized versus decentralized cash management; international receivables management; securitization of receivables.

### UNIT-III

International investment factors and benefit; direct portfolio investment; international CAPM; capital budgeting for foreign direct investment; assessing and management political risk.

### UNIT-IV

International aspects of raising capital; determining financial structure of foreign subsidiaries of MNCs; financial choices for an MNC and its foreign affiliates; costs and risks of financing

#### Suggested Readings:

1. Maurice D. Levi, International Finance, McGraw-Hill.
2. Buckley, Multinational Finance, Prentice-Hall of India.
3. Shapiro, A.C., Multinational Financial Management, Prentice-Hall.
4. Apte, P. G., *International Financial Management*, Tata McGraw-Hill.

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**IB-404**

**GLOBAL STRATEGIC MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at imparting knowledge of Formulation, Implementation and evaluation of Strategies in International Business.*

**Course Outcomes:**

**CO1:** Students will be able to define various concepts, terms related to global strategic management.

**CO2:** Students will be able to explain the various problem areas of global strategic management.

**CO3:** Students will be able to apply the acquired knowledge to understand global environment, emerging issues in the world trade.

**CO4:** Students will be able to compare the economies of the countries, their strengths & weaknesses and strategic issues.

**CO5:** Students will be able to select and defend the different strategies which they adopt in the given situations.

**CO6:** Students will be able to construct and design the strategies independently according the environmental factors and strength of company as a part of global strategic management.

**Course Contents:**

**UNIT – I**

Introduction: Definition, Phases of global strategy, Difference between international strategy and global strategy, Drivers of global strategy, CSR Strategies.

**UNIT – II**

Global Strategic Analysis: External macro environment – PEST analysis, Diamond model, Industry environment – Five force model, phases of international product life cycle, Analysis of internal environment – analyzing firm resources and capabilities, global value chains and value systems, comparative analysis.

### **UNIT – III**

Global strategic Development: Managing the internationalization process, international strategic alliances through partnership and cooperation, strategy at subsidiary level, headquarter level strategy.



## UNIT - IV

Global strategic Implementation: Global structures and designs, managing change in global context, global management of innovation and knowledge, Global R&D Networks.

### Suggested Readings:

1. Dunning, J.H., Explaining *International Production*, Harper Collins.
2. Garpand. J. and Farmer, R. N., *International Permissions of Business Policy and Strategy*, Kent Publishing Co.
3. Ansoff, H. I. *Corporate Strategy*, McGraw Hill.
4. Porter, M. E., *Competitive Strategy*, Free Press.
5. Frynas, J.G. and Mellahi, K., *Global Strategic Management*, Oxford University Press.

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**IB-405**

**CROSS CULTURAL AND GLOBAL MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop a diagnostic and conceptual understanding of the cultural and related behavioral variables in the management of global organizations.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in cross-cultural management.
- CO2:** Students will be able to explain conceptual framework of cross-cultural management.
- CO3:** Students will be able to demonstrate the process of global management.
- CO4:** Students will be able to examine cultural aspects in global management.
- CO5:** Students will be able to evaluate practical solutions of problems in cross-cultural management.
- CO6:** Students will be able to develop his own model of cross cultural and global management.

**Course Contents:**

**UNIT – I**

Human and Cultural Variables in Global Organizations; Cross Cultural Differences and Managerial Implications, Complexities of international firms, staffing policy, Process of recruitment and training.

**UNIT – II**

Cross Cultural Research Methodologies and Hofstede's Study, Structural evolution of Global Organizations; Cross Cultural Leadership and Decision Making.

### **UNIT – III**

Cross Cultural Communication and Negotiation, Human Resource Management in Global Organizations, Management of industrial relations.

### **UNIT – IV**

Ethics and social responsibility in international business, Western and Eastern Management thoughts in the Indian Context, Management of cultural diversity

### Suggested Readings:

1. Adler, N J., *International Dimensions of Organizational Behaviour*, Kent Publishing.
2. Bartlett, C and Ghoshal, S., *Transnational Management: Text, Cases and Readings in Cross Border Management*, Irwin.
3. Dowling. P J., *International Dimensions of Human Resource Management*, Wadsworth.
4. Hofstede, G., *Cultures Consequence: International Differences in Work Related Values*, Sage.
5. Marcie, D and Puffer, M., *Management International: Cases, Exercises and Readings*, West Publishing.
6. Mead, R., *International Management: Cross Cultural Dimensions*, Blackwell, Camb., Mass.
7. Mendenhall, M., *Global Management*, Massachusetts, Blackwell.

### Important Instructions for the Course Coordinator and the Examiner:

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**IB-406**

**INTERNATIONAL TRADE LAWS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop a diagnostic and conceptual understanding and implications of legal framework of international business.*

**Course Outcomes:**

- CO1:** Students will be able to describe the regulatory framework of International Trade Laws vis-à-vis WTO and International Business Treaties
- CO2:** Students will be able to discuss basic legal knowledge to International Trade Laws, International Sales Agreement and International Trade Enforcement
- CO3:** Students will be able to interpret the international regulatory framework relating to business and commerce.
- CO4:** Students will be able to examine the Indian laws and regulations governing international business and international taxation assessment.
- CO5:** Students will be able to judge the international commercial arbitrations and settlements relating to international trade laws.
- CO6:** Students will be able to develop the analytical ability to comprehend the international trade laws relating to WTO and Foreign Investment Practices.

**Course Contents:**

**UNIT-I**

Legal Framework of International Business: Nature and complexities; Major laws and their implications to business; International business contract- legal provisions; Payment terms; International sales agreements; Rights and duties of agents and distributors; Contract of Affreightment (carriage of goods by sea, air and overland).

## UNIT-II

Enforcement and Settlement: Enforcement of contracts and dispute settlement; International commercial arbitration. Regulatory Framework of WTO: Basic principles and charter of WTO; Provisions of WTO relating to preferential treatment of developing countries, custom valuation and dispute settlement; Implications of GATS, TRIPs and TRIMs.

## UNIT-III

Regulations and Treaties relating to Technology Transfer: Licensing; Franchising, joint ventures, patents and trademarks; Regulatory framework relating to commerce.

## UNIT-IV

Indian laws and regulations governing international transactions; Taxation of foreign income; Foreign investments; setting up offices and branches abroad.

### Suggested Readings:

1. Daniels, John, Ernest W. Ogram and Lee H. Redebungh: *International Business. Environments and operations*
2. GATT/WTO, various publications.
3. Journal of World Trade Law.
4. Kapoor ND; *Commercial Law*; Sultan Chand & Co., New Delhi.
5. Lew, Julton D. M. and Clive Standbrook: (eds.), *International Trade Law and Practice*, Euromoney Publications, London.
6. *Ministry of Commerce, (Govt. of India) Handbook of Import- Export Procedures.*
7. Motiwal OP, Awasthi HIC: *International Trade –the law and practice*; Bhowmik and Company, New Delhi.
8. Patrick, H., *International Business Agreements*, Gower Publishing Co. Pvt.
9. Rao, S., *Joint Ventures*, Vikas Publication, New Delhi
10. Schmothoff C.R., *Export Trade- The Law and Practice of International Trade*

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**IB-407 INTEGRATED MARKETING COMMUNICATION STRATEGY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this paper is to acquaint the students with the concepts, techniques and developing skills regarding application of effective advertising programmes.*

**Course Outcomes:**

- CO1:** Students will be able to define various terms associated with the field of integrated marketing communication.
- CO2:** Students will be able to explain the components of integrated marketing communication.
- CO3:** Students will be able to interpret the impact of business environmental factors on the marketing communication strategy.
- CO4:** Students will be able to distinguish the utility of various promotional tools.
- CO5:** Students will be able to evaluate the effectiveness of marketing communication strategy.
- CO6:** Students will be able to develop a marketing communication strategy.

**Course Contents:**

**UNIT-I**

The growth of advertising and promotion, the evolution of IMC and a contemporary perspective, Promotional Mix: a tool for IMC, Analysis of the communication process, Role of



IMC in the marketing process, Developing Marketing Planning Programme, Role of Advertising and Promotion.

## **UNIT-II**

Participants in the IMC process: The clients Role, Role of advertising agencies, Types of Ad agencies, Agency compensation, evaluating agencies; An Overview of Consumer Behavior: Consumer decision-making process, Environmental influences on consumer behavior, Alternate approaches to consumer behavior

## **UNIT-III**

Analyzing the communication process: A basic model of Communication, cognitive response approach, elaboration likelihood model; Source message and channel factors; Objectives and budgeting for IMC programmes: Establishing objectives and budgeting for promotional programmes; DAGMAR: An approach to setting objectives, problems in setting objectives, Establishing and allocating the promotional budget; Developing the IMC programme: Creative Strategy: Planning & development, Implementation and evaluation.

## **UNIT-IV**

Media planning and Strategy: Developing the media plan, Establishing media objectives, Developing and implementing media strategies, Evaluation and follow-up; Evaluation of media: television & Radio, Evaluation of Print Media: Support Media, Direct Marketing, Direct Selling, The internet and interactive media, sales promotion, public relation, publicity and corporate advertising. Measure the effectiveness of the promotional programme. International advertising and promotion, regulation of advertising and promotion, evaluating the social, ethical and economic aspects of advertising and promotion

### **Suggested Readings:**

1. Blakeman, R. *Integrated Marketing Communication: Creative Strategy from Idea to Implementation*, Rowman & Littlefield
2. Dutta, K., *Integrated Marketing Communication*, Oxford Higher Education
3. Belch, G. E., Belch, M. A. and Purani, K., *Advertising and Promotion*, McGraw Hill Education.
4. Batra, R., Myers, J. G. and Aaker, A.D. *Advertising Management*, Pearson Education
5. Percy, L. and Elliot, R., *Strategic Advertising Management*, Oxford publishing
6. Sissors, J. Z. and Baron, R.B. *Advertising Media Planning*, McGraw Hill.
7. Jethwaney, J. and Jain, S., *Advertising Management*, Oxford publishing

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# **BUSINESS ANALYTICS AREA**

**THIRD SEMESTER**

**BA-301**

**FUNDAMENTAL OF BUSINESS ANALYTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *Analytics is the scientific process of deriving business insights from raw data to support decision making. This course aims to provide a basic introduction to the use of **analytical techniques to solve business problems, and how a business organization can create a competitive advantage by leveraging on data** derived from its multiple business processes.*

**Course Outcomes:**

- CO1:** Students will be able to recall various terms, tools, techniques and models used in business analytics.
- CO2:** Students will be able to illustrate the tools, techniques and models used in business analytics
- CO3:** Students will be able to interpret the different techniques used in different area such as finance, Human resource, marketing etc.
- CO4:** Students will be able to differentiate the role of statistician, data scientist, data engineers and different techniques.
- CO5:** Students will be able to select the techniques and models required to analyze a particular data type.

**CO6:** Students will be able to develop necessary competencies expected from an analyst professional who have the ability of synthesis the model forecasting in business analytics

## **Course Contents:**

### **UNIT-I**

Business analytics: introduction, types of analytics, characteristics of analytics, business analytics, and business intelligence; business analytics process and its relationship with decision making process; Advantage of business analytics: informed decisions, developing distinct capability, creating competitive advantage, key attributes of analytical competitors.

### **UNIT-II**

Analytical methods and models: Descriptive analytics-overview of its tools and techniques, role in business analytics process and its importance in business decision making; Predictive analytics-nature and type of modeling, basics of data mining and machine learning environment, role in business analytics process and its importance in strategic decision making; Prescriptive analytics: basics of its tools and modeling, role in business analytics process.

### **UNIT-III**

Business analytics in action: applicability and importance of business analytics in different areas- financial analytics, human resource analytics, marketing analytics, health care analytics, supply chain analytics, sport analytics and analytics for Government and non profit organization.

### **UNIT-IV**

Developing analytics: statistician, data scientist and data engineer and their key features, skills required for analytics, big data and its analyst, important analytics softwares, major companies providing analytical solutions, job opportunities in business analytics.

### **Suggested Readings:**

1. Davenport, H., Harris J.G., *Competing on Analytics: The New Science of Winning*, Harvard Business Review Press.
2. Davenport H., Harris J.G. and Morison R., *Analytics at Work: Smarter Decisions, Better Results*, Harvard Business Review Press .
3. Schniederjans M.J., Schniederjans D.G. and Starkey C.M. *Business Analytics Principles, Concepts, and Applications with SAS: What, Why, and How*, FT Press Analytics.
4. Provost F., Fawcett T. *Data Science for Business: What you need to know about data mining and data-analytic thinking*, O'Reilly Media.
5. Siegel E. *Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die*, Wiley.

### **Important Instructions for the Course Coordinator and the Examiner:**

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**BA-302**

**MAKING SENSE OF DATA**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The information technology enabled organizations today to record more data from multiple business processes than ever before. Now this data is seen as an asset for decision making to create advantage in this competitive and dynamic business world. This course intends to provide the students to get insight of basic characteristics of data.*

**Course Outcomes:**

- CO1:** Students will be able to define the characteristics of data.
- CO2:** Students will be able to explain the type of data and able to convert the data in useful table format.
- CO3:** Students will be able to employ the suitable technique on the data set.
- CO4:** Students will be able to examine the results obtain by employing different techniques.
- CO5:** Students will be able to judge importance and relationship between variables undertaken for analysis.
- CO6:** Students will be able to develop necessary competencies expected from an analyst professional who have the ability of synthesis the model forecasting in data sensing.

**Course Contents:**

**UNIT-I**



Data-overview, sources of data, process for making sense of data; describing data-observations and variables, types of variables, central tendency, distribution of the data confidence intervals, hypothesis tests.

## UNIT-II

Preparing data tables- cleaning the data, removing observations and variables, generating consistent scales across variables, new frequency distribution, converting text to numbers, converting continuous data to categories, combining variables, generating groups, preparing unstructured data.

### UNIT-III

Data visualization: design principles; tables-simple tables, summary tables, two-way contingency tables, supertables; Univariate data visualization; Bivariate data visualization; Multivariate data visualization; Dynamic techniques.

### UNIT-IV

Understanding the relationships-visualizing relationships between variables, calculating metrics about relationships; Contemporary issues in making sense of data with reference to Indian context.

#### Suggested Readings:

1. Tukey J.W. *Exploratory Data Analysis*. Pearson.
2. Myatt G.J.& Johnson W.P. *Making Sense of Data II: A Practical Guide to Data Visualization, Advanced Data Mining Methods, and Applications*, Wiley Publication.
3. Myatt G.J.& Johnson W.P., *Making Sense Of Data III A Practical Guide to Designing Interactive Data Visualizations*. Wiley Publication
4. Myatt G.J.& Johnson W.P., *Making Sense of Data I: A Practical Guide to Exploratory Data Analysis and Data Mining*. Wiley Publication
5. Foreman J.W., *Data Smart: Using Data Science to Transform Information into Insight*, Wiley Publication.
6. Spicer J. *Making Sense of Multivariate Data Analysis: An Intuitive Approach*, SAGE Publications.
7. Katy B. K. and Polley D. E. *Visual Insights: A Practical Guide to Making Sense of Data*. The MIT Press.

#### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**BA-303**

**MATHEMATICAL STATISTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course aims to provide students with the necessary background for advanced study in market based system and econometrics. It should also enable them to use basic statistical techniques for business analysis.*

**Course Outcomes:**

**CO1:** Students will be able to define the various terms and basic concepts of probabilities.

**CO2:** Students will be able to understand probability distributions, estimation, and hypothesis testing and statistical analysis.

**CO3:** Students will be able to apply the statistical analytical techniques used for analysis of variance.

**CO4:** Students will be able to distinguish between various statistical analyses techniques.

**CO5:** Students will be able to evaluate results obtained from hypothesis testing and statistical analysis techniques.

**CO6:** Students will be able to develop the competencies expected from an analyst professional who have the ability of synthesis the model forecasting in mathematical statistics.

**Course Contents:**

## UNIT-I

Probability and Measure: Sigma fields & measures; measurable functions and distributions, integration of Borel function. Random Variables & Distributions: General properties – Distribution and probability densities, moments, moment generating and characteristic functions.

## UNIT-II

Probability Distribution: Discrete random variables & their distributors- Binomial probability distribution, Geometric probability distribution and Poisson probability distribution and, their moments and moments generating functions; Continuous random variables and their probability distributors- Uniform probability distribution, Normal probability distribution, Gamma probability distribution, Beta probability distribution; Basic idea about multivariate probability distributors; sampling distributors and Central limit theorem.

### UNIT-III

Estimation & Hypothesis Testing: Point estimators, confidence intervals, properties of point estimators; Hypothesis testing, elements of statistical test large sample test, small sample hypothesis testing for  $\mu$  and  $\mu_1 - \mu_2$ , Power of test, Likelihood ratio tests

### UNIT-IV

Statistical Analysis: Analysis of variance; Analysis of Categorical Data-Chi-square test, Non-parametric statistic-Sign test, Wilcoxon, Signed Rank test, Mann – Whitney U test, Kruskal Wallis test.

#### Suggested Readings:

1. Cramer, Harald, *Mathematical Methods of Statistics*, Princeton University Press.
2. Wackerly, Mendenhall & Scheaffer, *Mathematical Statistics with Applications*, Duxbury, Thomson Learning.
3. Ross, S.M. Introduction to Probability Models, Academic Press.
4. Kyburg Henry, *Probability Theory*, Prentice Hall.
5. Mittelhammer, R.C. *Mathematical Statistics for Economics and Business*. Springer.
6. Shao Jun, *Mathematical Statistics*, Springer.
7. Capinski M. and KOPP E., *Measure Integral and Probability*, Springer.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**BA-304**

**MARKET MICROSTRUCTURE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The firm is treated as a black box in economics. However, the paper treats the firm as a micro market and applies the theory and tools of economics to solve the problem of allocation of resources within the firms. It is expected that scientific understanding developed in this connection shall provide managers a powerful tool to take more informed decisions.*

**Course Outcomes:**

- CO1:** Students will be able to define the various terms, basic concepts and functioning of market microstructure.
- CO2:** Students will be able to understand the basic theories and tools used to solve the problems of market microstructure.
- CO3:** Students will be able to apply the basic theories and tools to solve the problem of resource allocation within and between the firms.
- CO4:** Students will be able to do critical appraisal of labour market, job assignment and theories of market microstructure.
- CO5:** Students will be able to argue in evaluation of employment policy of market microstructure.
- CO6:** Students will be able to design their own policy for allocating the available resources within the firms and between the firms.

**Course Contents:**



## **UNIT-I**

Economic Organization and Efficiency: Concept and rationale of organization, Organization and Efficiency, The problem of Economic Organization, Organizational Objectives, Transaction cost analysis.

## **UNIT-II**

Use of Price for coordination and Motivation, Neoclassical Model and theories of Organization, Market failure and Organization; Coordination: Market and Management, Price and coordination, management, Decentralization and the means of coordination.

## **UNIT-III**

Bounded Rationality and Private Information, Motivation: Contracts, Information, and Incentives, Moral Hazard and Performance Incentives, Moral hazard in Organization, Controlling Moral Hazard.

## **UNIT-IV**

Employment Policy and Human Resource Management, Internal Labour Market, Critique of Classical Theories of Employment, Job Assignments and Promotions, Compensation and Motivation: Implicit Incentive Pay, Performance Evaluation, Job Design, Incentive Pay for Groups.

**Suggested Readings:**

1. Paul Milgrom & John Roberts, *Economics, Organization & Management*, Prentice Hall.
2. Luis M.B. Cabral, *Industrial Organization*, Jaico Publishing House.
3. Sengupta, D.N. & Anadiya Sen, *Economics of Business Policy*, Oxford University Press.
4. Luis M.B. Cabral, *Introduction to Industrial Organization*, Cambridge Mass: The MIT Press.
5. Carlton, D. W. & J.M. Perloff, *Modern Industrial Organization*, Warper Collins.
6. Caves, R.E., *Multinational Enterprise and Economic Analysis*, Cambridge University Press.

#### **Important Instructions for the Course Coordinator and the Examiner:**

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**Course Objective:** *The introduction of IT at different level in business organizations led to compile up huge amount of data. Such data stored in data warehouses and data marts is providing decision support for taking informed decision. Data mining is concerned with set of techniques to assist managers to make intelligent use of data repositories.*

**Course Outcomes:**

- CO1:** Students will be able to describe basic data mining algorithms, methods and tools.
- CO2:** Students will be able to identify business applications of data mining.
- CO3:** Students will be able to sketch developing area such as web mining, text mining and ethical aspects of data mining.
- CO4:** Students will be able to examine to adopt new data mining tools.
- CO5:** Students will be able to value the most appropriate data mining technique.
- CO6:** Students will be able to develop a quantitative analysis report.

**Course Contents:****UNIT-I**

Introduction to Data Mining: basic concepts in data mining, machine learning, scientific methods, theoretical basis of data mining process, data measurement, exploratory data analysis, data visualization, measurement of data similarity and dissimilarity.

## UNIT-II

Data Preprocessing: overview, data cleaning, data integration, data reduction, data transformation and data discretization; Data Warehouse and Online Analytics Processing: data warehouse, data cube and OLAP, data warehouse design and usage; Data Cube Technology- data cube computation, and its methods.

## UNIT-III

Principles of Data Mining: predictive modeling- classification and regression, model fitting as optimization, evaluation of predictive performance, over fitting, regularization; clustering and pattern detection.

## UNIT-IV

Text Mining: information retrieval and search, text classification, unsupervised learning; Web Data Analysis: Web data- collection and interpretation, analyzing user browsing behavior, learning from click through data, predictive modeling and online advertising, link analysis and the Page Rank algorithm. Social Network Analysis: descriptive analysis of social networks, network embedding and latent space models, network data over time: dynamics and event-based networks link prediction.

### Suggested Readings:

1. Han J., Kamber M. , Pei J. *Data Mining: Concepts and Techniques*, The Morgan Kaufmann Series in Data Management Systems.
2. Provost F. *Data Science for Business: What you need to know about data mining and data-analytic thinking*. O'Reilly Media.

3. Miner G. and Nisbet R. *Handbook of Statistical Analysis and Data Mining Applications*. Academic Press.
4. Ledolter J. *Data Mining and Business Analytics with R*. Wiley.
5. Witten I.H. and Frank E. *Data Mining: Practical Machine Learning Tools and Techniques*, The Morgan Kaufmann Series in Data Management Systems.
6. Dean J. *Big Data, Data Mining, and Machine Learning: Value Creation for Business Leaders and Practitioners*. Wiley and SAS Business Series.
7. Abu-Mostafa Y.S. and Magdon-Ismail M. *Learning From Data*.

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**Course Objective:** *Econometrics is concerned with quantifying economic relations, with the provision of numerical estimates of the parameters involved and testing hypotheses embodied in economic relationships. This course aims to provide a basic introduction to econometric analysis, to enable students to examine existing theories with empirical data. In doing so, it examines the difficulties inherent in confronting theory with business data in order to quantify relationships, in dealing with errors and problems in variables which can be only observed but not controlled, and the means of compensating for uncertainty in data.*

**Course Outcomes:**

- CO1:** Students will be able to define and memorize the various fundamental terms and concepts of econometrics.
- CO2:** Students will be able to understand the basic assumptions, procedures and properties of various estimators.
- CO3:** Students will be able to apply the OLS method, Maximum likelihood method, Linear probability model (LPM), Probit & Logit model and simultaneous equation models etc.
- CO4:** Students will be able to compare the results obtained from various models.
- CO5:** Students will be able to evaluate the results and test their statistical significance.
- CO6:** Students will be able to develop a good quality research paper in finance and economics using the econometric methods.

## **Course Contents:**

### **UNIT-I**

Nature, scope and methodology of econometrics; Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method

### **UNIT-II**

Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression co-efficients,  $R^2$  and adjusted  $R^2$ ; Econometric Problems: Multicollinearity, Autocorrelation and Heteroscedasticity.

### UNIT-III

Dummy variables-Nature and uses, Regression on dummy variables, Regression on Dummy Dependent Variable-The basic idea of the Linear Probability Model (LPM), Probit and Logit Models. Dynamic Econometric Models: Koyck distributed lag model, the adaptive expectation model, and the partial adjustment model.

### UNIT-IV

Simultaneous Equation Models: Structural, Reduced and final forms, Identification-Order and rank conditions, Methods for estimating the simultaneous models-Basic idea of Indirect Least Square (ILS) and Two Stage Least Square (2SLS) methods. Seemingly Unrelated Regressions (SUR), SUR versus OLS.

#### Suggested Readings:

1. Greene, William H., *Econometric Analysis*, Macmillan.
2. Johnston, J., *Econometric Methods*, McGraw -Hill.
3. Gujarati, Damodor N., *Basic Econometrics*, McGraw-Hill.
4. Stock J. H. and Watson M.W. *Introduction to Econometrics*, Addison-Wesley Series in Economics.
5. Koutsoyiannis, A., *Theory of Econometrics*, Harper & Row.
6. Kmenta, J., *Theory of Econometrics*, Macmilan.
7. Maddala, G.S., *Introduction to Econometrics*, Macmillan.

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**FOURTH  
SEMESTER**

**BA-401**

**PREDICTIVE BUSINESS ANALYTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *Predictive analytics encompasses a variety of statistical techniques from modeling, machine learning, and data mining that analyze current and historical facts to make predictions about future, or otherwise unknown, events. In business, predictive models exploit patterns found in historical and transactional data to identify risks and opportunities.*

**Course Outcomes:**

- CO1:** Students will be able to define the various terms and basic concepts related to statistical techniques, machine learning and data mining.
- CO2:** Students will be able to classify the basic statistical techniques, machine learning and data mining techniques that are used to predict about the future.
- CO3:** Students will be able to apply the predictive techniques.
- CO4:** Students will be able to do experiments by applying various predictive techniques.
- CO5:** Students will be able to evaluate the results as they will be able to summarize and visualize datasets in a meaningful way using different plots.
- CO6:** Students will be able to formulate the solid foundation of predictive analytics.

**Course Contents:**

**UNIT-I**

Introduction to Predictive Analytics: overview, business intelligence, predictive analytics in relation to business intelligence, statistics, data mining; Big data, importance in decision making; Setting up problem-CRISP-DM, business understanding, Defining data, target variable and measures of success for predictive modeling; Methodology of predictive modeling.

## **UNIT-II**

Prediction Methods: Linear Regression- best subset selection, forward selection, backward selection, step-wise regression, Cp mallows and adjusted R-square criteria; k-Nearest Neighbors (k-NN); Regression Trees- CART,CHAID; Neural Nets- architecture of neural nets, neurons, input layer, hidden layers, output layer.

### UNIT-III

Classification Methods: the naïve rule, Naïve-Bayes classifier, K-Nearest neighbors, Classification Trees, Neural Nets, Logistic Regression.

### UNIT-IV

Non-supervised Learning: Association Rules- support and confidence, the apriori algorithm, the selection of strong rules; Cluster Analysis- hierarchical methods, optimization and the k-means algorithm, similarity measures, other distance measures. Ensemble Methods: Nelson and Granger-Ramanathan methods for continuous targets, Majority voting for categorical targets, Bagging, Boosting.

#### Suggested Readings:

1. Maisel L. and Cokins G. *Predictive Business Analytics: Forward Looking Capabilities to Improve Business Performance*. Wiley.
2. Miller Thomas W. *Modeling Techniques in Predictive Analytics with Python and R: A Guide to Data Science* .FT Press Analytics.
3. Siegel E. *Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die*. Wiley.
4. Bartlett R. *A Practitioner's Guide to Business Analytics: Using Data Analysis Tools to Improve Your Organization's Decision Making and Strategy*. McGraw-Hill Education.
5. Fitz-enz J. and Mattox II J. *Predictive Analytics for Human Resources*. Wiley.
6. Abbot D. *Applied Predictive Analytics: Principles and Techniques for the Professional Data Analyst*; Wiley.
7. Dean J. *Big Data, Data Mining, and Machine Learning: Value Creation for Business Leaders and Practitioners* .Wiley and SAS Business Series.

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possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**BA-402**

**ECONOMETRIC MODELING FOR BUSINESS ANALYSIS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This objective of this paper is to train the students in empirical modeling of the business system and quantification of economic and business phenomenon.*

**Course Outcomes:**

- CO1:** Students will be able to define the terms and concepts related to demand analysis, production analysis, technical analysis and financial analysis.
- CO2:** Students will be able to derive the demand function, estimate the cost and production function.
- CO3:** Students will be able to employ the suitable technical and financial analytical techniques on the data set.
- CO4:** Students will be able to do experiments with the data sets to analyze the data in different way.
- CO5:** Students will be able to evaluate the application of the various technical and financial techniques.
- CO6:** Students will be able to develop the competencies expected from an analyst professional who have the ability of synthesis the forecasting in econometrics modeling.

**Course Contents:**

**UNIT-I**

Demand Analysis: Derivation of demand function, Conditions for the specification of demand function, Different forms of demand functions, Estimation of single equation and multiple equations demand function.

## **UNIT-II**

Production Analysis: Specification and Estimation of production function (Cobb-Douglas, CES and Translog production functions); Specification and estimation of cost functions.



### UNIT-III

Technical Analysis: Concept of Production frontier Cost frontier, Revenue frontier and Profit frontiers, Measurement and Estimation of total productivity, Technical efficiency and economic efficiency, Stochastic Frontier Analysis; Data Envelopment analysis.

### UNIT-IV

Financial Analysis: Estimation of security prices, security beta, security market line, APT model, Black-Schole model.

#### Suggested Readings:

1. Greene, William H., *Econometric Analysis*, Macmillan.
2. Desai Meghna, *Applied Econometric*, Tata McGraw Hill.
3. Kumbhakar Subal, *Stochastic Frontier Analysis*, Cambridge & Lovell Knox CA
4. Michael D Intriligator, *Econometric Models, Techniques and Applications*, Prentice Hall.
5. Bridge J. I., *Applied Econometrics*, North Holland.
6. Cramer, J. S., *Empirical Econometrics*, North Holland

#### Important Instructions for the Course Coordinator and the Examiner:

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possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The objective of this paper is to make the student to understand the tools and techniques for modeling the stochastic processes. These techniques are considered as vital tools of quantitative business analysis.*

**Course Outcomes:**

- CO1:** Students will be able to define the concepts and notations that are frequently used in time series analysis.
- CO2:** Students will be able to describe Univariate smoothing methods, stationary time series methods and Multivariate methods.
- CO3:** Students will be able to choose and apply an appropriate model and estimation method for a given time series.
- CO4:** Students will be able to compare the results of stationary time series methods and multivariate models.
- CO5:** Students will be able to evaluate the results of fitted model and test their statistical significance.
- CO6:** Students will be to develop a quality manuscript based on the analysis of data-results.

**Course Contents:****UNIT-I**

Business Forecasting: Business forecasting and planning, Common time series patterns, Types of forecasting methods, Statistical fundamentals for evaluating forecasting.

## **UNIT-II**

Univariate Smoothing Methods: Moving average, Weighted moving average, Exponential smoothing, Seasonal indexes, Trend-seasonal and Holt-Winters smoothing.

## **UNIT-III**

Stationary Time Series Models: Stochastic process, Stationarity, Modelling AR, MA, ARM processes, Deterministic and stochastic trends, unit roots, Testing unit roots – Dickey & Fuller, Phillips and Perron tests.

## UNIT-IV

Multivariate Models: Intervention analysis, Transfer function models, VAR analysis – Estimation, Identification and the Impulse response function. Long run Models: Cointegration – Eagle-Granger Methodology, Johanson approach, Error correction models, Granger Causality, Exogeneity, Modelling Volatility: ARCH, GARCH, and ARCH-M and EGARCH models.

### Suggested Readings:

1. Delurgio Stephen A., *Forecasting Principles and Applications*, McGraw-Hill.
2. Patterson K., *An Introduction to Applied Econometrics*, Palgrave.
3. Enders Walter, *Applied Econometrics Time Series*, John Wiley.
4. Diehold Francis X., *Elements of Forecasting*, South Western, Thomson.
5. Spyros G. Makridakis, Steven C. Wheelwright & Rob J. Hyndman, *Forecasting Methods & Application*, John Wiley.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The paper explores the internal dynamics of a firm and equips the student to identify the right kind of input for informed decision making. The understanding of the concepts learnt in this paper shall also help seek superior alternate solutions in managerial decisions.*

**Course Outcomes:**

- CO1:** Students will be able to define the terms and concepts related to economics of business strategy.
- CO2:** Students will be able to describe the scope of economics of business strategy.
- CO3:** Students will be able to illustrate the internal dynamics of a firm which will be helpful in choosing right kind of inputs for informed decisions.
- CO4:** Students will be able to analyze the public policy regarding privatization, completion law and completion commission of India.
- CO5:** Students will be able to evaluate available alternate solutions regarding inputs allocation within the firm.
- CO6:** Students will be able to develop the competencies expected from an analyst professional who have the ability of synthesis the forecasting in business strategy.

**Course Contents:****UNIT-I**

Theory of the Firm: Its rationale, Objectives, Boundary, Change in boundary (Mergers and acquisitions), Resource Based view of Firm, Firm as the source of Profit, Vertical Integration and Conglomerate diversification, Internationalization.

## **UNIT-II**

Architecture: Internal and external architecture, designing and management of architecture, Evaluation of performance, corporate Governance, Reputation, Knowledge, Rent Generation and Management.

### UNIT-III

Competitive Sustainability: Origin of Competitive Advantage, Creative Destruction, Innovation, Growth, Changing Product Portfolio, entrepreneurship etc.

### UNIT-IV

Public Policy: Regulation and Privatization, Competition law, Competition Commission of India.

#### Suggested Readings:

1. Andreu Mas- Colell, Michael D. Whinston & Jerry R. Green, *Microeconomic Theory*, Oxford University Press.
2. Trimorthy C. G. Fisher & Robert G. Waschik, *Managerial Economics: A Game Theoretic Approach*, Routedledge.
3. Paul Milgram & John Roberts, *Economics, Organization & Management*, Prentice Hall.
4. D.N. Sengupta & Anandya Sen., *Economics of Business Policy*, Oxford University Press.
5. Steven E Landsberg, *Price Theory & Application*, Dryden.
6. Walter Nicholson, *Microeconomic Theory*, Thomson.

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possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**BA- 405**

**APPLIED MULTIVARIATE ANALYSIS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This paper includes some of the advance tools and techniques of statistical analysis and also considered as important tools for empirical research in marketing, finance and management.*

**Course Outcomes:**

**CO1:** Students will be able to define the terms and concepts related to multivariate analysis.

**CO2:** Students will be able to explain the various multivariate techniques such as analysis of variance, principle component analysis, discriminant analysis, cluster analysis and SEM.

**CO3:** Students will be able to choose and apply the best method from the available range of multivariate techniques.

**CO4:** Students will be able to compare different forms of hypotheses to analyze the data.

**CO5:** Students will be able to evaluate the results of various multivariate techniques.

**CO6:** Students will be able to develop the good manuscript and conclusion based on results.

**Course Contents:**

**UNIT-I**

Multivariate Analysis: Concept, the variate, Measurement scales, Measurement error, Methodology of Model Building. Multivariate Analysis of Variance: One independent variable at two levels and one dependent variable, two-group MANOVA, Multiple-group MANOVA, MANOVA for two independent variables or factors. Repeated Measure Analysis of Variance: Between-subject and within-subject factors and designs, univariate & multivariate approaches to repeated measure analysis.

## **UNIT-II**

Principal Components Analysis: Geometry of principal components analysis, analytical approach, issues relating to the use of principal components analysis, use of principal components scores. Factor Analysis: Basic concepts and terminology of factor, objectives of factor analysis, geometric view of factor analysis, factor analysis techniques-principal components factoring (PCF), principal axis factoring, factor analysis versus principal components analysis, factor rotation, factor scores.

## **UNIT-III**

Discriminant Analysis: Geometric view, analytical approach, classification methods, Fisher's linear discriminant, Mahalanobis distance. Canonical Correlation: Geometry of canonical correlation, analytical approach, canonical variates and the canonical correlation, statistical significance tests for the canonical correlations, interpretation of the canonical variates, practical significance of the canonical correlation.

Cluster Analysis: Hierarchical clustering, Nonhierarchical Clustering.

## **UNIT-IV**

Structural Equation Modeling: Path Analysis, Confirmatory Factor Analysis, Structured Means Models.

**Suggested Readings:**

1. Tinsley, Harward E and Brown Stered D., *Handbook of Applied Multivariate Statistical and Mathematical Modeling*, Academic Press.
2. Morrison D F., *Multivariate Statistical Analysis*, McGraw Hill.
3. Overall J E and Klett C., *Applied Multivariate Analysis*, McGraw Hill.
4. Hair, Anderson, Tatham and Black. *Multivariate Data Analysis*, Pearson.
5. Nargundlar, R., *Marketing Research*, Tata McGraw Hill.
6. Johnson Richard A and Wichern Dean W., *Applied Multivariate Statistical Analysis*, PHI.

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *Information economics is the study of situations in which different economic agents have access to different information. The purpose of the course is to introduce students to the effect of asymmetric information on the efficiency properties of market outcomes and the kind of institutions and patterns of behavior develop in response to informational asymmetries. It has varied applications in the auctions, finance, economics, HRM and almost in all the functional areas of management.*

**Course Outcomes:**

- CO1:** Students will be able to define the terms and concepts that are used in the information economics.
- CO2:** Students will be able to understand the principal agent of information, adverse selection, signaling and screening etc.
- CO3:** Students will be able to apply the revelation principle, mechanism designed to bargaining and auctions, bidding behavior in different standard auctions..
- CO4:** Students will be able to compare different application of information economics in all the functional area of management.
- CO5:** Students will be able to judge the model forecasting in information economics.
- CO6:** Students will be able to develop the competencies expected from an analyst professional who have the ability of synthesis the model forecasting in information economics.

**Course Contents:**

## **UNIT-I**

Introduction to Information Economics; The Principal Agent: Hidden actions (Moral hazard) problem, hidden information problems, monopolistic screening.

## **UNIT-II**

Adverse Selection: Concept, lemons problem, probable solutions. Signaling: Separating and Pooling equilibrium, Insurance market, cheap talk.

### UNIT-III

Screening: Second degree price discrimination, Screening in Competitive Insurance Market, Monopoly screening in insurance Market

### UNIT-IV

Introduction to Mechanism design: Basic concepts, revelation principle, truthful implementation. Applications of mechanism design to bargaining and auctions: Bidding behavior in the four standard auctions: First price sealed bid, second price sealed bid, Dutch auction, English auction. Revenue equivalence theorem; Applications to Finance: Credit market rationing.

#### Suggested Readings:

1. Mas Coller Whinston and Green, *Microeconomic Theory (MWG)*, Oxford University Press.
2. Hart, O., and Holmstrom, B., "The Theory of Contracts." In T. Bewley (ed.), *Advances in Economic Theory Fifth World Congress*, Cambridge University Press.
3. Varian, *Microeconomic Analysis*. W. W. Norton & Company.
4. Akerlof, G. "The market for lemons: Qualitative uncertainty and the market mechanism" *Quarterly Journal of Economics* 84, 3, 488 – 500.
5. Spence, A. M. "Job Market Signaling." *Quarterly Journal of Economics*.
6. Grossman, S. , "The Informational Role of Warranties and Private Disclosure about Product Quality" *Journal of Law and Economics*, Vol. 24, No. 3.
7. Freixas and Rochet,, *Microeconomics of Banking*. The MIT Press; second edition (2008).

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- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**PRODUCTION AND  
OPERATIONS  
MANAGEMENT AREA**

**THIRD SEMESTER**



**POM-301**

**PURCHASE AND MATERIALS MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The key objective of this course is to acquaint students with Decision-making for effective and efficient purchase, storage and flow of materials in manufacturing and service organizations: Cost-reduction techniques in Pre-Purchase, Purchase and Post-Purchase systems: Modern material planning and delivery systems like MRP and JIT and Material handling and logistics systems.*

**Course Outcomes:**

- CO1:** Students will be able to describe various concepts of Purchasing and Materials Management.
- CO2:** Students will be able to explain the purchase procedure for placing purchase orders for different categories of the materials.
- CO3:** Students will be able to use the tools and techniques for addressing the cost related aspects of purchase and materials management.
- CO4:** Students will be able to examine the overall utility of purchase and material management techniques in relation to the overall objectives of the manufacturing organisations.
- CO5:** Students will be able to argue various factors influencing Make or Buy decisions.
- CO6:** Students will be able to formulate the problems based on his understanding on purchase and material management

**Course Contents:**

## **UNIT-I**

Role of Purchasing and Materials Management - Objectives, Organization and Interrelationships, Determination and Description of Material Quantity, MRP and JIT

## **UNIT-II**

Determination and Description of Material Quality - Receiving and Incoming Quality Inspection, Acceptance Sampling Plans, Vendor-Process Capability

### UNIT-III

Cost-Reduction Techniques - Standardization, Simplification & Variety Reduction; Value Analysis and Engineering, Make or Buy Decisions, Source of Supply, Price Determination and Negotiation, Vendor Rating, Selection and Development, Legal Aspects of Purchasing, Public Purchasing and Tendering; International Purchasing - Procedures and Documentation.

### UNIT-IV

Purchasing of Capital Equipment - Appraisal Methods, Evaluating Suppliers' Efficiency, Stores Layout, Classification and Codification; Material Logistics Warehousing Management, Material Handling, disposal of Scrap, Surplus and Obsolete Materials.

#### Suggested Readings:

1. Ansari A & Murderess B., *JIT Purchasing*, Free Press.
2. Baily P. et al, *Purchasing Principles and Management*. Pitman.
3. Burt, David N., *Proactive Procurement*, Englewood Cliffs, Prentice Hall Inc.
4. Dobler, D W. et al, *Purchasing and Materials Management*,. McGraw Hill.
5. Dutta, A K., *Integrated Materials Management*, PHI Learning.
6. Farrington B and Waters, Derek W., *Managing Purchasing*, Chapman & Hall.
7. Gopalakrishnan P & Sunderashan M., *Handbook of Materials Management*, Prentice Hall of India.

#### Important Instructions for the Course Coordinator and the Examiner:

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from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**POM-302**

**TOTAL QUALITY MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint students with the basic concept of Total Quality (TQ) from design assurance to service assurance; to give emphasis on International Quality Certification Systems - ISO 9000 and other standards and their applicability in design manufacturing quality control and services.*

**Course Outcomes:**

- CO1:** Students will be able to state the tools and techniques of Total Quality Management.
- CO2:** Students will be able to describe the philosophy and significance of TQM for organisations in their endeavour for continuous improvement.
- CO3:** Students will be able to choose the quality related problems of the organisations.
- CO4:** Students will be able to examine the importance of continuous improvement in process for maximising customer's satisfaction and employees' involvement.
- CO5:** Students will be able to evaluate various factors influencing total quality management.
- CO6:** Students will be able to formulate the real-life problems based on his understanding on total quality management.

**Course Contents:**

**UNIT-I**



Introduction to TQM : History, Aims, Objectives, Benefits, Gurus and their principles, TQM process and phases of a typical implementation of TQM; Reasons for use of TQM, proven examples and benefits, methods to assist the progress of TQM; Introduction to Tools and Techniques : Brainstorming, Affinity Diagram, Benchmarking, Fishbone Diagram, Check Sheet, Flow Chart, Line Graph, Run Chart, Histogram, Pareto Diagram, FMEA, Scatter Diagram, Control Chart, QFD, Tree Diagram, Force Field Analysis, Seven W and is/is-not questions, Why-Why diagrams; Total Quality Control, Quality Assurance : Practices and Techniques, TQM and Management : New Management challenges, trends and contribution of TQM.

## **UNIT-II**

Customer Focus : Defining external and internal customers, steps in customer analysis, methods of getting customer inputs, methods of measuring customer satisfaction; Continuous Improvement Process : What is continuous improvement, the importance of continuous improvement, and principles of continuous improvement, processes, how to manage processes, role of TQM's control and improvement process; Designing for Quality : Opportunities for improvement in product design, early warning, concept and design assurance, designing for basic functional requirements, reliability, availability, safety, manufacturability, cost and product performance; Workforce Teams : Team work for quality, types of teams and tasks involved, characteristics of successful and unsuccessful teams, barriers to team work; Benchmarking : Definition, importance and benefits, types, basic steps, pitfalls; JIT : Definitions, benefits, JIT cause and effects, JIT implementation in manufacturing.

## **UNIT-III**

TQM for Marketing Function: Quality in marketing and sales, Factors for excellence; BPR and IT: Business Process Management; Quality Control SQC/SPC: Statistical Process Control; Change Management; Technology and Product Quality: Quality of after Sales Services: Quality measurement in customer service.

## **UNIT-IV**

Organization for Quality : Quality Circles, Self managing teams, Quality Director, Reliability of Quality Characteristics; Quality Leadership : Developing a quality culture, Technology and

Culture, Motivation Quality Linked Productivity; Total Employee Involvement : Awareness of quality, Recognition and rewards, Empowerment and self-development, Education and training; Cost of Quality : Cost of poor quality, Categories of quality cost, Analysis of quality costs, benefits of costs of quality control; Supporting Technologies : Overview of Supplier Quality Assurance System.

### **Suggested Readings:**

1. Bharat Wakhlu, *Total Quality-Excellence through Organisation wide Transformation'* Wheeler Publishing.
2. Bagchit, T.I.P. ISO, ISO 9000 Concepts, Methods and Implementation, Wheeler Publishing. .
3. Samuel, KIIO. TQM Integrated Approach, Kogan Page Limited

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**POM-303**

**SUPPLY CHAIN MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course is designed to explain basic theory and techniques of Supply Chain Management to examine the issues and problems associated with Supply Chain in changing business environment and to show how Supply Chain can improve an enterprises effectiveness and competitiveness.*

**Course Outcomes:**

- CO1:** Students will be able to state the key concepts of Supply Chain Management.
- CO2:** Students will be able to describe the activities and functions of elements of supply chain.
- CO3:** Students will be able to apply the integration among Supply Chain Partners.
- CO4:** Students will be able to determine the role of technology in Supply Chain Management
- CO5:** Students will be able to evaluate the effectiveness of Supply Chain
- CO6:** Students will be able to formulate the real-life problems based on his understanding on supply chain management.

**Course Contents:**

**UNIT-I**

Logistics Management: Origin and Definition – Types of Logistics – Logistics Management – Ware House Management – Automation and Outsourcing - Customer Service and Logistics Management – A Perspective - Concepts in Logistics and Physical Distribution - Distribution and Inventory

## UNIT-II

Types of Inventory Control - Demand Forecasting - Warehousing and Stores Management – Routing - Transportation Management - Some Commercial Aspects in Distribution Management – Codification - Distribution Channel Management - Distribution Resource Planning (DRP) - Logistics in 21st Century

## UNIT-III

Supply Chain Management: Introduction and Development- Nature and Concept - Importance of Supply Chain - Value Chain - Components of Supply Chain - The Need for Supply Chain - Understanding the Supply Chain Management - Participants in Supply Chain – Global Applications

## UNIT-IV

Role of a Manager in Supply Chain - Supply Chain Performance Drivers - Key Enablers in Supply Chain Improvement - Inter-relation between Enablers and Levels of Supply Chain Improvement-Systems and Values of Supply Chain

### Suggested Readings:

1. Jeremy F. Shapiro, *Modeling the Supply Chain*, Duxbury Thomson Learning.
2. David Simchi Levi, Philip Kaminsky, and Edith Simchi Levi., *Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies*, Irwin McGraw Hill.
3. Sridhar Tayur, Ram Ganeshan & Michael Magazine (editors), *Quantitative Models for Supply Chain Management*, Kluwer Academic Publishers.

4. Handfield R.B. & Nochols, Jr. E. L., *Introduction to Supply Chain Management*, Prentice Hall.
5. BaHu, Renaid H., *Business Logistics Management*, Englewood Cliffs, Prentice Hall Inc.
6. Chrispopher, M., *Logistics and Supply Chain Management: Strategies for Reducing Costs and Improving Services*, Pitsman.
7. Coyle, Bardi, Longley, *The management of Business Logistics – A supply Chain Perspective*, Thomson Press.

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**POM-304**

**SERVICE OPERATIONS MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The key objective of this course is to acquaint the students with decision making in planning, design, delivery, quality and scheduling of service operations. The candidates are also expected to appreciate the role of service quality and operations in emerging services economy of India.*

**Course Outcomes:**

- CO1:** Students will be able to state the Nature and Characteristics of Services.
- CO2:** Students will be able to describe the elements of services design.
- CO3:** Students will be able to illustrate the service blueprinting for mapping variety of real life service processes
- CO4:** Students will be able to appraise the role of alternate locations and sites for variety of services.
- CO5:** Students will be able to judge the service orientation at variety of service facilities/ organizations.
- CO6:** Students will be able to develop the real-life problems based on his understanding on service operations management.

**Course Contents:**

**UNIT-I**

Matrix of Service Characteristics: Challenges in Operations Management of Services:

Aggregate Capacity Planning for Services; Facility Location and layout for Services

## **UNIT-II**

Job Design – Safety and Physical Environment; Effect of Automation; Operations Standards and Work Measurement;

## **UNIT-III**

Measurement and Control of Quality of Services; Dynamics of Service Deliver) System; Scheduling for Services Personnel and Vehicles; Waiting - Line analysis;

## UNIT-IV

Distribution of Services; Product-Support Services; Maintenance of Services; Inventory Control for Services: Case Studies on Professional Services.

### Suggested Readings:

1. Bowman David E. et al., *Service Management Effectiveness: Balancing Strategy, Organization and Human Resources, Operations and Marketing*, Jossey Bass.
2. Collier David A., *Service Management Operating Decisions*. Englewood Cliffs, Prentice Hall Inc.
3. Fitzsimmons, James A and Sullivan, Robert S., *Service Operations Management...* McGraw Hill.
4. Heskett, James L. et al., *Service Breakthroughs - Changing the Rules of the Game*, Free Press.
5. Murdiek, R G. et al., *Service Operations Management*, Allyn and Bacon.
6. Sharma, J K., *Service Operations Management*, Anmol Publications.
7. Voss, C. et al., *Operations Management in Service Industries and the Public Sector*, Chichester, Wiley.

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**POM-305**

**TECHNOLOGY MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objectives:** *The course focuses on different matters of significance related to Technology Management. It aims to make students understand various aspects of technological innovation and subsequent diffusion. It also analyses the Technology Management scenario in India.*

**Course Outcomes:**

- CO1:** Students will be able to indicate the concepts of Technology Management.
- CO2:** Students will be able to explain the strategic nature of Technology Management.
- CO3:** Students will be able to illustrate the tools and techniques for forecasting the technology needs of the business organisations.
- CO4:** Students will be able to examine the dynamic nature of management of technology and its related issues.
- CO5:** Students will be able to appraise various factors influencing technology management.
- CO6:** Students will be able to develop the real-life problems based on his understanding on technology management.

**Course Contents:**

**UNIT I**

Introduction: Definition and Characteristics of Technology, Market Based and Resource Based view, Concept and significance of management of technology, Dynamics of Technological Change: Forms of technological change, Process of Technological Change; Innovation: Components of Innovation, Innovation Dynamics at the Firm Level, recent developments in Technological environment - Globalization, Time Compression, Technology integration, Induced & Autonomous changes in the Technological environment, Competitive advantages through new technologies.

## **UNIT II**

Technology supply and Research & Development Management: Sources of technology, Process of new product development; managing hi-tech products: Strategy to avoid product failure in market. Principles and Process of Product Development; Managing R& D Organization –issues and recent trends, Linkage between technology, development and competition, management of Intellectual Property Rights in context of technology management, strategic issues in managing IPR

## **UNIT III**

Technological Forecasting: Meaning, significance of Technology forecasting, techniques of Technology forecasting: Exploratory and normative technique; Process and application of techniques like Delphi, Growth Curves, S- curve, Pearl Curve, Gompertz curve : Relevance Tree, Morphological Analysis, Mission Flow Diagram

## **UNIT IV**

Meaning and Importance of Technology Intelligence; Technology Strategy: Meaning and Key Principles Underlying Technology Strategy, framework for formulating technology strategy Technology Strategy Types; Linkage of technology strategy with business strategy, Issues in technology strategy

**Suggested Readings:**

1. Narayanan, V. K., *Managing Technology and Innovation for Competitive Advantage*, Pearson Education.
2. Khalli, T., *Management of Technology*, McGraw-Hill
3. Betz. F., *Strategic Technology Management*, McGraw-Hill
4. Lowell W. S., *Managing Technology – The Strategic View*, McGraw Hill.
5. Schilling *Strategic Management of Technological Innovation*, McGraw-Hill

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**FOURTH  
SEMESTER**

**POM-401**

**OPERATIONS RESEARCH**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The Course is designed to introduce the students to the principles of operations research techniques and their applications in decision making. Students will also be required to use computer packages for data processing purposes.*

**Course Outcomes:**

- CO1:** Students will be able to define the basic concepts of Operations Research.
- CO2:** Students will be able to explain the usefulness of its tools and techniques in solving the business problems related to allocation of the scarce resources.
- CO3:** Students will be able to solve the problems of optimising the given objectives subject to constraints.
- CO4:** Students will be able to examine the alternatives in a decision-making environment.
- CO5:** Students will be able to appraise the models describing the industry related problems
- CO6:** Students will be able to formulate the real-life problems based on his understanding on operations research.

**Course Contents:**

**UNIT –I**

Introduction to Operations Research and Modeling Linear Programming: Formulation, Solution Methodologies, Simplex Method, Two Phase Method, Dual Simplex Method and

Modified Simplex Method. Duality Theory Post Optimal Analysis of LP models, Parametric Linear programming

## **UNIT –II**

Transportation models, Transshipment models and Assignment Models; Integer Programming: formulations, Cutting Plane method, Branch and Bound Algorithm, Additive algorithm for Zero one programming

### UNIT –III

Dynamic Programming: Stages, states, Principle of Optimality, recursive relationship. Capital Allocation model, Knap sack Model, Traveling salesmen's model and other related model  
Decision Theory: Decision under Certainty, Risk and Uncertainty,

### UNIT –IV

Game Theory: Two-Person Zero Sum Game, graphical method, Linear-programming formulation of Game Queuing theory: characteristics, Single server and multi-server models, Self-service system, Finite Population Network models: Minimum spanning tree, shortest path model, Maximal Flow Introduction to Goal Programming.

#### Suggested Readings:

1. Ahuja A K. et al., *Network Flows*, Englewood Cliffs, Prentice Hall Inc.
2. Gould, F J. et al., *Introduction to Management Science*, Englewood Cliffs, Prentice Hall Inc.
3. Gupta, M P. & Sharma J K., *Operations Research for Management*, National Publishing House
4. Taha Hamby A., *Operations Research: An Introduction*, Macmillian.
5. Mathur, K & Solow D., *Management Science*, Englewood Cliffs, Prentice Hall Inc.
6. Sham1a, S. J K., *Operations Research: Theory and Applications*, Macmillian
7. Srinath, L S., *Operations Research for Executive*, East West Press.
6. Paneerselvan, R. *Operations Research*, , Prentice Hall of India.
7. Hamdy A. Taha, *Operations Research - an Introduction*, Prentice Hall of India.

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**POM-402**

**GOAL PROGRAMMING IN MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint the students with the concepts, solution methods and applications of goal programming to real-world problems.*

**Course Outcomes:**

- CO1:** Students will be able to describe the basic concepts of Goal Programming.
- CO2:** Students will be able to discuss the optimization techniques.
- CO3:** Students will be able to solve the problems of goal programming using various methods.
- CO4:** Students will be able to examine the sensitivity of a linear programming model.
- CO5:** Students will be able to evaluate the various factors influencing goal programming in the business organizations.
- CO6:** Students will be able to design the real-life problems based on his understanding on goal programming.

**Course Contents:**

**UNIT-I**

System characterization: Identification of objectives, design variables, constraints, subsystems System-level coupling and interactions Examples of MSDO in practice Visualization techniques in design optimization Subsystem model development: Model

partitioning and decomposition, interface control Collaborative Optimization, Bi-Level Formulations Subsystem model selection: fidelity versus expense Model and simulation development and validation

## **UNIT-II**

Optimization and exploration techniques: Review of linear and nonlinear programming, Heuristic techniques: genetic algorithms simulated annealing, Tabu search Design Space Exploration: Design of Experiments (DOE): Full factorial search, parameter study, Taguchi/orthogonal arrays, latin hypercubes, Mixed integer programming (application to hub spoke / network problems) Sensitivity and post-optimality analysis

### UNIT-III

Multi objective optimization: Weighted sum optimization Weak and strong dominance Pareto front computation, Goal programming and ISO performance, Physical Programming, Multi attribute Utility Theory, Introduction to robust design Monte-Carlo Sampling Design under uncertainty Reliability analysis, Taguchi methods

### UNIT-IV

System assessment and extensions: What is optimality? Design for value: including lifecycle costing Optimizing product families and platforms Implementation issues: Model reduction Approximation techniques: response surfaces, kriging, neural networks, Concurrent design

#### Suggested Readings:

1. Cook, Thomas M & Rursell, Robert A., *Introduction to management Science*, Englewood Cliffs, Prentice Hall Inc.
2. Eppen, G D. et al, *Quantitative Concepts for Management Englewood Cliffs*, Prentice Hall Inc.
3. Ignizio, J P., *Goal Programming and Extensions*, Lexington Books
4. Liier, Y., *Management Goals and Accounting for Control*. Amsterdam, North Holland
5. Lee S M., *Goal Programming for Decision Analysis*. Philadelphia. Auerbach

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**POM-403**

**TRANSPORTATION MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of the course is to acquaint the students with the problem faced in planning policy and executing the transportation system.*

**Course Outcomes:**

- CO1:** Students will be able to state the basic concepts of Transportation Management.
- CO2:** Students will be able to discuss the Elements of Transportation Management.
- CO3:** Students will be able to explain the significance of transport in global economy
- CO4:** Students will be able to appraise the forecasting models to estimate the transport infrastructure.
- CO5:** Students will be able to argue different modes of transport.
- CO6:** Students will be able to design the real-life problems based on his understanding on transport management.

**Course Contents:**

**UNIT-I**

Growth of Urbanization and Problems of Transportation: Transport- Challenges and Limitations; Government Activities in Transportation; Functions of Transport Accessibility/Connectivity, Mobility Inter relations of Transport Economic cost and trade, Geography and technology, Social, cultural and recreational development of Information & Communication Technology

## UNIT-II

Transportation Systems - Planning, Operation and Management Trip Generation and Distribution: Load Planning: Transportation Modes and their Selection; Land Use theory; Physical Theories, Economic Theories Utility Maximization; Choice Theory, Logit Model, Gravity Model, Generalized Cost; Elements of Traffic Flow, Generalized Car Following Theory, Green shields Theory

## UNIT-III

Early transport & trade, Development of Sea ports, canal transport and the railways, Road building and motorization, Development of airports and air transport; Transport Networks, Features of networks – nodes and links, Multimodalism and choice in transport, Supply chain, Inter modalism, Transport Infrastructure

## UNIT-IV

Sequential Travel Demand Forecasting Models: Future Developments in Transportation; Motor Vehicle Act 1988 and its Impact on Urban Transport System: Emission Norms.

### Suggested Readings:

1. Baerwal, J E., *Transportation and Traffic engineering Handbook*. Englewood Cliffs, Prentice Hall Inc
2. Bell, G. et al., *The Business of Transport*. Plymouth, McDonald and Evans.
3. Dickey, J W., *Metropolitan Transportation Planning*, Tata McGraw Hill.
4. Grey, G E. and Hole, L A., *Public Transportation Planning: Operations and Management*; Englewood Cliffs, Prentice Hall Inc
5. Gupta, M P., *Metropolitan Transportation System*, National.
6. Papacostas. C S., *Fundamentals of Transportation Engineering*. Englewood Cliffs, Prentice Hall Inc

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**POM-404**

**WORLD CLASS MANUFACTURING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To acquaint the students with the world class manufacturing environment and optimized production principles.*

**Course Outcomes:**

- CO1:** Students will be able to describe the basic concepts of World Class Manufacturing.
- CO2:** Students will be able to discuss the technological issues of World Class Manufacturing.
- CO3:** Students will be able to explain the techniques of Total Quality Management.
- CO4:** Students will be able to compare the manufacturing practices and quality management systems of World Class Manufacturing companies.
- CO5:** Students will be able to value various factors influencing world-class manufacturing in the business organizations.
- CO6:** Students will be able to develop the real-life problems based on his understanding on world-class manufacturing.

**Course Contents:**

**UNIT-I**

World Class Manufacturing Environment: Imperatives for success - Technology, Systems approach and change in the mindset: Strategic decisions in Manufacturing Management:



## **UNIT-II**

Choice of Technology, Capacity Layout / Automation in Material handling systems; Implementation Problems/Indian experience; Optimized Production; Just - in - Time System: JIT Manufacturing System, JIT Pull system Chain Management/Bench Marketing;

## **UNIT-III**

Total Quality Management - TQM Philosophy, TQM Principles, TQM tools including Circles, SQC / Acceptance Samplings, Quality through design, QFD - Quality House, Failure Mode effect analysis, Fault - tree analysis, Concurrent Engineering Principles Taguchis quality loss function, and Robust Design concept, Designing products through 'Fuzzy' Logic,

## UNIT-IV

Quality Management Systems and ISO Standards; Total Productive Maintenance, Objective of TPM - Total System effectiveness, Role of IT in World Class Manufacturing, Flexible Manufacturing Systems (FMS), Six Sigma.

### Suggested Readings:

1. Buffa, Elwood et. al, Programmed learning at for Production and Operations
2. Management Illinois, Learning System Co.
3. Dervitsiotis, Kostas N, Operations Management, McGraw Hill.
4. Hughes, Chris, Productions and Operations Management, Pan Books.
5. Schonberger, Richard J., *Japanese Manufacturing Techniques*.

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**POM-405      WAREHOUSE MANAGEMENT AND INVENTORY CONTROL**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objectives:** *This course aims to make students understand the prerequisites for decision making regarding warehouse management and inventory control and to analyze the implications of these decisions*

**Course Outcomes:**

- CO1:** Students will be able to state the activities of warehousing management.
- CO2:** Students will be able to discuss the related aspects of warehousing management and decisions.
- CO3:** Students will be able to illustrate the inventory control systems.
- CO4:** Students will be able to examine the concepts of JIT.
- CO5:** Students will be able to evaluate various factors influencing warehousing and inventory control in the business organizations.
- CO6:** Students will be able to design the real-life problems based on his understanding on warehousing and inventory control.

**Course Contents:**

**UNIT I**

Warehouse management: Meaning and significance; Warehouse Organization: Requisitions and Replenishment of Materials, Receipt and Inspection of Materials, Issue of Materials,

Stocktaking, Discrepancies and Their Resolution, Control of Tools, Surplus, and Scrap Materials, Storage and Handling Practices of Materials

## **UNIT II**

Computerization of Warehouse Activities, Performance Evaluation of Stores Activities, ISO Standards and Warehouse Activities, Warehouse Location, Layout, and Facilities Planning, Warehouse Security, Safety, and Maintenance

### UNIT III

Inventory Management: Inventory concepts, Pressures for Low Inventory, Pressures for High Inventory, Types of inventory – seasonal, decoupling, cyclic, pipeline, Safety stock; Inventory costs; Inventory Control systems: Issues in the P and Q systems of inventory control; The Basic Economic Order Quantity Model, Production Quantity Model, Quantity Discounts, Reorder Point, Safety Stocks, Service Level, Order quantity for periodic inventory system, Order quantity with variable demand

### UNIT IV

Just-In-Time: Principles of just-in-time, Core logic of JIT, Main features for stocks, Achieving just-in-time operations, and other effects of JIT, Benefits and disadvantages of JIT, Comparison with other methods of inventory management. KANBAN as a control tool. Vendor managed inventory; Make or Buy Decisions: Factors influencing Make Or Buy Decisions-cost, quality, capacity core v/s noncore, management strategy. Evaluation of performance of Materials function: cost, delivery, quality, inventory turnover ratio methodology of evaluation, Use of ratios and analysis like FSN: Fast slow, Nonmoving, HML-High Medium, Low, XYZ. Materials Management in JIT Environment

#### Suggested Readings:

1. Saxena, J.P., *Warehouse Management and Inventory Control*, Vikas Publication
2. Bose, C., *Inventory Management*, PHI
3. Mahadevan, B., *Operations Management: Theory and Practice*, Pearson

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eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**POM-406**

**PROJECT MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To train the scientist and managers in the practical application and modern tools and techniques of planning, scheduling, monitoring and control of multiple projects.*

**Course Outcomes:**

- CO1:** Students will be able to define the concepts of Project Management.
- CO2:** Students will be able to explain the feasibility issues of the large scale projects.
- CO3:** Students will be able to illustrate the types of arrangement in managing the projects.
- CO4:** Students will be able to examine the financial aspects of the project management.
- CO5:** Students will be able to evaluate various factors influencing project management in the business organizations.
- CO6:** Students will be able to develop the real-life problems based on his understanding on project management.

**Course Contents:**

**UNIT-I**

Structuring Projects: Project Finance vis-à-vis Corporate Finance; Designing new hybrid financing structure incorporating elements of both project and corporate finance in an

attempt to solve disadvantages associated with each structure, Project entity as special purpose vehicle with contractual bundling.

## **UNIT-II**

Valuing Projects: Large Scale Projects: Basic economics; complexity in estimating demand; Marketing feasibility study; role of government, both as investor and as a customer. Project Evaluation in Emerging Markets: Developing Project Cash Flows & Multiple Discount Rates- Estimation of Cost of Capital and Complexities of valuation in emerging markets, Financial Modeling,



### UNIT-III

Managing Risky Projects: Build, Operate and Transfer (BOT) Arrangements: Deal structuring and major risks identification, assessment and mitigation in such a way that senior lenders are adequately protected without further equity support. BOOT, BOT, BOLT and BOO framework, Contract design and negotiation. Project Evaluation in Emerging Markets: Political risk management through project selection, structuring & insurance & contrast this approach with the older financial style of political risk management

### UNIT-IV

Financing Projects: Process, Participants and Economics of Syndicated Lending: Key issues in designing the Syndication strategy; the lending process from a bank's perspective, and the difference between making a loan and arranging/underwriting/distributing a loan (syndication). Credit Enhancements Instruments to improve access to international bond markets, such as bank guarantee instruments, Export Credit Agency programme and political risk insurance.

#### Suggested Readings:

1. Chaoudhury, Sadhan, *Project Scheduling and Monitoring in Practice*, South Asian Pub.
2. Harriossn, F L., *Advanced Project Management*, Gower.
3. Lockyer, K.G., *An Introduction to Critical Path Analysis*, Ptiman Books.
4. Martino, R.L., *Project Management and Control; Finding the Critical Path; Applied Operational Planning: Allocating and Scheduling Resources*, American Management Association.
5. Meredith, Jaek R. and Mantel, Samuel J., *Project Management: A Manageria*

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compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**INFORMATION TECHNOLOGY  
MANAGEMENT AREA**

**THIRD  
SEMESTER**

**ITM-301**

**E-COMMERCE APPLICATIONS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course exposes students to environment for E-commerce and developing application skills for the same.*

**Course Outcomes:**

- CO1:** Students will be able to describe the foundation and importance of E -Commerce
- CO2:** Students will be able to explain retailing in E-Commerce b analysing customer assets management and determining the effectiveness of market research
- CO3:** Students will be able to illustrate the feature of internet, intranet, extranet and explain how they relate to each other.
- CO4:** Students will be able to compare the different electronic payment system
- CO5:** Students will be able to select the infrastructure for E-Commerce.
- CO6:** Students will be able to create business model and strategy for online business

**Course Contents:**

**UNIT- I**

Technology and Infrastructure for E-Commerce: Framework of E-commerce; Network Infrastructure for E-Commerce – Market Forces Influencing I-way, Network Access Equipment, Public Policy Issues Shaping the I-way; EDI - Applications in Business, Legal, Security and Privacy Issues of EDI; Components of EDI Standards, ASC X12 and EDIFACT.

## UNIT-II

E-Commerce and Retailing: Changing Retail Industry Dynamics, Mercantile Models from the Consumer's Perspective, Management Challenges in Online Retailing. Intranets and Customer Asset Management: Basics of Customer Asset Management, Online Sales Force, Online Customer Service and Support, Technology and Marketing Strategy.

## UNIT-III

Intranets and Manufacturing: Integrated Logistics, Agile Manufacturing, Emerging Business Requirements, Manufacturing Information Systems, Intranet-based Manufacturing, Logistics Management. E-Commerce and Online Publishing: Why Online Publishing, Online Publishing approaches, Advertising and Online Publishing E-Commerce and Banking: Changing Dynamics in the Banking Industry, Home Banking Implementation Approaches, Management Issues in Online Banking.

## UNIT-IV

Intranets and Corporate Finance: An Introduction, Financial Systems, Financial Intranets, Software Modules in Financial Information Systems, Human Resource Management Systems, Size/Structure of Financial Software Market.

**Lab:** Each student is required to develop at least one application of e-commerce.

### Suggested Readings:

1. Kalakota & Whinston, *Electronic Commerce: A Manager's Guide*, Pearson Education.
2. Greenstien & Vasarhelyi, *Electronic Commerce: Security, Risk Management and Control*, Tata McGraw Hill.
3. Joseph, *E-Commerce: An Indian Perspective*, Prentice Hall of India.

4. Turbon, et. al., *Electronic Commerce: A Managerial Perspective*, Pearson Education.

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**Course Objective:** *This course exposes students to environment for web-publishing and developing programming skills for the same.*

**Course Outcomes:**

**CO1:** Students will be able to describe the web, internet technologies and internet applications.

**CO2:** Students will be able to identify various security hazards on the internet and need of security measures.

**CO3:** Students will be able to choose the fundamental tools and technology for the web design.

**CO4:** Students will be able to compare different web designing languages.

**CO5:** Students will be able to evaluate designing rules in constructing web sites and web pages.

**CO6:** Students will be able to create a web page and identify its elements and attributes.

**Course Contents:**

**UNIT-I**

Introduction to WWW: Evolution and basic features of WWW, the concept of web-site and browsers, introduction to WWW servers.

File Transfer Protocol: Introduction to FTP, Business Applications of FTP, public domain



software, types of FTP servers (including anonymous) FTP clients, common FTP commands, Telnet.

## **UNIT-II**

Web-Browsers: Basic features, bookmarks, history progress indicators, customizing browsers, saving and printing web-pages and forms, saving web pages; Searching and downloading information from web-sites; Netscape communicator; Internet Explorer.

## **UNIT-III**

Introduction to Web-Publishing technologies, Components of a web-site, applications of each components in business, features of a smart web site, process of planning for development of an effective web-site, Domain name selection; selecting host for web-site, maintaining a web-site, web-publishing tools.

## UNIT-IV

Internet: ISP, Search Engine, URL, DNS, Security, E-Mail, HTTP, HTML, Building a simple HTML document, Cookies, Tables, Frames, Links, XML adding Multi Media documents, Home Page.

**Lab:** Each student is required to develop at least one homepage.

### Suggested Readings:

1. Douglas E. Comer, *Computer Network and Internet*, Pearson Education.
2. Corner, Douglas: *The Internet Book*, Prentice Hall.
3. Leon, Alexis and Mathews Leon: *Internet for Everyone-Leon*, TECH World.
4. Xavier: *World Wide Web Design with HTML*, Prentice Hall.
5. Molly, *Using HTML* PHI Learning.

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**ITM-303**

**RELATIONAL DATA BASE MANAGEMENT SYSTEMS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The students are to be provided basic understanding of the RDBMS and SQL and the skills to make use of these in business organizations.*

**Course Outcomes:**

- CO1: Students will be able to describe the elementary and advanced features of DBMS and RDBMS
- CO2: Students will be able to explain the conceptual frame works and definitions of specific terms that are integral to the RDBMS
- CO3: Students will be able to demonstrate clear concept about relational model of R-DBMS.
- CO4: Students will be able to examine techniques pertaining to database design practices.
- CO5: Students will be able to evaluate options to make informed decisions that meet data storage, processing and retrievals needs
- CO6: Students will be able to develop SQL queries to create, read update and delete relational database data

**Course Contents:**

**UNIT-I**

RDBMS: Introduction – Database and DBMS Software, Three Layered Architecture, Advantages and Disadvantages of a Database, History Data Modeling-Object Oriented and Record Based models, E-R Model and E-R diagram Examples and Exercises.

## UNIT-II

Hierarchical Model, Network Model and Relational Model; Normalisation techniques-First Normal Form Second Normal Form and the Third normal Form, Examples and Exercises,

## UNIT-III

SQL:SQL Language-DML commands-Selection, Insert, Update, Delete retrieving data, summarizing data, adding data to the database, updating data to the database and deleting data. Simple queries-Use of WHERE, Arithmetic comparison and logical operators, ORDER BY, GROUP BY and Group Functions. Multi table queries, Sub-queries. Views DDL Commands-Table and View, Create, Alter, Drop Integrity Constraints; Transaction Processing-Commit, Rollback, Savepoint, LAB: SQL and MS Access.

## UNIT-IV

E.F. Codd's 12 Rules for a relational Database; Database concepts-Transaction Management, Properties of a Transaction, Commit and Rollback, Concurrency, Locking, Access Control, Data Integrity, Integrity Constraints, Auditing, Backup and Recovery; Data Dictionary-System Catalogue Distributed Database and Distributed Data Access, Introduction to Client-Server and ODBC connectivity,

**Lab:** Each student is required to develop at least one Data Base System using Oracle.

### Suggested Readings:

1. Elmasai & Narathe, *Fundamentals of Database Systems*, Addison-Wesley
2. Abraham Silberschatz, Henry F. Korth, S. Sudarshan, *Database System Concepts*, McGraw Hill
3. Bibin C. Desai, *An Introduction to Database systems*, Galgotia Publications.
4. C.J. Date, A. Kannan, S. Swamynathan, *An Introduction to Database Systems*, Pearson

Education.

5. Loney Kevin, *Oracle: The Complete Reference*, McGraw Hill
6. Schneider Robert D& J. R. Garbus, *Optimizing SQL Server 7*, Prentice-Hall.

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**ITM-304**

**E-BUSINESS INFORMATION SYSTEMS MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course exposes students to environment for E-business information and developing systems skills for the same.*

**Course Outcomes:**

- CO1:** Students will be able to describe the types of information systems supporting the major functional area of the business.
- CO2:** Students will be able to identify the major management challenges to building and using information systems in organisation.
- CO3:** Students will be able to illustrate types of information systems supporting the major functional areas of the business
- CO4:** Students will be able to compare how enterprise systems and industrial network create new efficiency for business
- CO5:** Students will be able to evaluate the role of information systems in today's competitive business environment.
- CO6:** Students will be able to create model for determining the business value of information system

**Course Contents:**

**UNIT-I**

System Development Environment: Types of Information Systems; System Development Life Cycle; System Analyst – Role, Responsibility, Analytical Skills; Managing Information systems Project

## **UNIT-II**

Information Systems Planning: Identifying and Selecting Systems Development Projects; Initiating and Planning Systems Development Projects.

## **UNIT-III**

Information Systems Analysis: Determining System Requirements; Structuring System Process Requirements; Structuring System Logic Requirements; Structuring System Data Requirements.

## UNIT-IV

Information Systems Implementation and Maintenance: System Implementation, Software Application Testing, Installation, Documenting the System, Training and Supporting Users, Organizational Issues in Systems Implementation; Maintaining Information Systems.

**Lab:** Each student is required to develop at least one information system.

### Suggested Readings:

1. Hoffer, Jeffrey A., et al., *Modern Systems Analysis and Design*, Pearson Education.
2. Laudon Kenneth and Laudon Jane, *MIS-A Contemporary Perspective*, Prentice Hall.
3. O'Brien James A., *Management Information Systems*, Tata McGraw Hill.
4. Alter, Steven, *Information Systems: The Foundation of E-Business*, Pearson Education.
5. Kumar Muneesh, *Business Information Systems*, Vikas Publishing House.
6. Dewitz, Sandra D., *System Analysis and Design and the Transition to Objects*, McGraw-Hill.
7. Robertson James & Suzanne, *Complete System Analysis, Volume I & II*, Dorset House Publishing

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**ITM-305**

**ENTERPRISE RESOURCE PLANNING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course exposes students to environment for ERP and its requisite applications.*

**Course Outcomes:**

- CO1:** Students will be able to describe the basic concept of ERP system for manufacturing or service companies.
- CO2:** Students will be able to classify different processes of the organisation and relationship among all processes.
- CO3:** Students will be able to demonstrate knowledge of CAD/CAM and ERP modules.
- CO4:** Students will be able to examine systematically the planning mechanism in an enterprise and identify all components in an ERP system and relationship between among the components.
- CO5:** Students will be able to judge the generic model of ERP and general ERP implementation methodology.
- CO6:** Students will be able to develop skills necessary for building and managing relationship with customer and stake holder

**Course Contents:**

**UNIT-I**

Introduction: Basic issues, evolution of ERP, advantages, pitfalls, overview of an enterprise; ERP and related technologies: Business process reengineering, management information system, decision support system, executive information system, data warehousing, data mining, supply chain management.

## **UNIT-II**

Manufacturing perspective: CAD/CAM, material requirement planning (MRP-I), bill of material, manufacturing resource planning (MRP-II), distribution requirement planning, JIT approach.

### UNIT-III

ERP Modules: Introduction to ERP modules in Finance, Plant maintenance, quality management, materials management.

### UNIT-IV

ERP Implementation: ERP lifecycle, vendors, consultants and users, ERP market, future directions in ERP.

**Lab:** Each student is required to develop at least one ERP-project.

#### Suggested Readings:

1. Leon A., *Enterprise Resource Planning*, Tata McGraw Hill.
2. Ellen Monk, Bret Wagner, *Concepts in Enterprise Resource Planning*, Cengage Learning.
3. Motiwalla, Thompson, *Enterprise Systems for Management*, Pearson Education.
4. Wallace and Kremzar, *ERP: Making it Happen – The Implementers' Guide to Success with Enterprise Resource Planning*, John Wiley & Sons, Inc.
5. Sadagopan, S., *ERP: A Managerial perspective*. Tata McGraw Hill.
6. Garg, V. K. & Venket Krishna N. K., *ERP Concepts and Practice*, PHI Publication.

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**FOURTH  
SEMESTER**

**ITM-401**

**DATA WARE HOUSING AND DATA MINING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *Helps in making business decisions, and to this end, it provides business intelligence to the decision maker. And it is this analysis, which when performed on the warehouse database, helps companies get that edge over its competitors.*

**Course Outcomes:**

**CO1:** Students will be able to describe different mythologies used in data mining and data warehousing.

**CO2:** Students will be able to explain the analyzing techniques of various data.

**CO3:** Students will be able to apply the association rules for mining the data.

**CO4:** Students will be able to compare different approaches of data warehousing and data mining with various technologies.

**CO5:** Students will be able to select appropriate classification techniques for data mining.

**CO6:** Students will be able to develop the data houses and data warehouses.

**Course Contents:**

**UNIT-I**

Introduction: The Evolution of Data Warehousing the Data Warehouse A Brief History, Today's Development Environment; Principles of Data; Warehousing (Architecture and Design Techniques): Types of Data and their uses conceptual Data, Architecture, Design Techniques, Introduction to the Logical Architecture; Creating the Data Asset: Business Data Warehouse

Design, Populating the Data Warehouse, Unlocking the Data Asset for End Users (The Use of Business Information).

## **UNIT-II**

Designing Business Information Warehouse; Populating Business Information Warehouse, User Access to Information, Information, Data in Context. Data Mining Introduction: Motivation, Importance, data mining, kind of data, Functionalities, Interesting Patterns, Classification of data mining systems, Major issues; Data Warehouse and OLAP Technology for Data Mining: Data warehouse, operational database systems and data warehouses, Architecture, Implementation, development of data cube technology, data warehousing to data mining, Data warehouse usage.

### UNIT-III

Data Preparation: Preprocess, Data cleaning, Data integration and transformation, Data reduction, Discrete and concept hierarchy generation; Data Mining Primitives: Languages, and System Architecture, graphical user interfaces; Concept Description: Characterization and Comparison, Data generalization and summarization based characterization, Analytical characterization: analysis of attribute relevance, mining class comparisons, Mining descriptive statistical measures in large database.

### UNIT-IV

Mining Association Rules in Large Database: Mining single dimensional Boolean association rules from transaction database, Mining multidimensional association rules from database and data warehouses, from associating mining to correlation analysis, Constraint based association mining; Classification and Prediction: Issues, classification by decision tree induction, Bayesian classification, Classification by back propagation; Classification based on concepts from association rule mining; Other classification methods.

**Lab:** Each student is required to develop at least one data-house.

#### Suggested Readings:

1. Barry Devlin: *Data Ware House: From Architecture to Implementation*, Addison Wesley.
2. Alex Berson, Stephen Smith, Kurt Threaring; *Building Data Mining Applications for CRM* TMH
3. Alex Berson, Stephen Smith; *Data Warehousing, Data Mining and OLAP*, TMH
4. Michael J. A. Berry, *Data Mining Techniques: for marketing sales and Customer Support*, Gordon Linoff.

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**ITM-402**

**E-CRM**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *Customer Relationship Management (CRM), Generates competency in transforming organizations into customer-centric enterprises. This course is intended to educate, at a high level, about CRM, and eliminate some of the mystery around CRM.*

**Course Outcomes:**

- CO1:** Students will be able to outline the benefits of creation for the customers
- CO2:** Students will be able to identify the benefits of value creation for the customers.
- CO3:** Students will be able to illustrate the key concepts, technologies and best practise of CRM
- CO4:** Students will be able to compare the different processes and design the strategic framework of CRM integration in the existing functions of the organisations.
- CO5:** Students will be able to evaluate the customer equity and the importance of customers' relations to the organisation.
- CO6:** Students will be able to develop E-CRM methods

**Course Contents:**

**UNIT-I**

Introduction: Knowledge Management, e-Business and CRM; The New Economy's New Face, How We Got Here. The Long-Winded Road; The New-New Imperatives; Understanding E-

Business: CRM and KM, The New Digital Landscape, Getting Down to e-Business, Customer Relationship Management, Knowledge Management, Knowledge-Enabled Customer Relationship Management.

## **UNIT-II**

A Roadmap for Success: The Knowledge-Enabled Customer Relationship Management Roadmap Phase I: Evaluation and Strategic Alignment Phase II: Infrastructural Development and Development Phase III: Leadership, Change Management, Measurement and Refinement Aligning Strategy and Technology Choices: Getting Past the Innovator's Dilemma; The KCRM Strategic Framework; Analyzing the Business Environment; Understanding the Context Strategic Technology.

### UNIT-III

Audit and Analysis: Why Audit Customer Knowledge? Initiating the Audit; Reference Measures and Methodological Choices; The Audit Method; Documenting Customer Knowledge Assets Using the Audit Results to Drive KCRM; Building an Implementation Team: Tasks and Expertise, Team Composition, Leadership

### UNIT-IV

Risk Assessment and Common Pitfalls; Blueprinting the Technology Infrastructure: Design Challenges; The Customer Lifecycle Customer Knowledge Management: Technology Framework; The KCRM Architecture, Integration, Long-Term Considerations; Results-Driven Development and Deployment: Hidden Costs and other Surprises; An overview of Big-Bang, Systems Development Methods; Looking Beyond the Waterfall; Results driven Incremental.

**Lab:** Each student is required to develop at least one e-CRM method.

#### Suggested Readings:

1. Alex Berson, Stephen Smith, Kurt Threarling; *Building Data Mining Applications for CRM*, Tata McGraw Hill
2. Michael J.A . Berry, *Data Mining Techniques: For Marketing, Sales and Customer Support* Gordon Linoff, John Wiley.
3. Michael J. A. Berry and Gordon Linoff, *Mastering Data Mining: The Art and Science of Customer Relationship Management*, John Wiley

#### Important Instructions for the Course Coordinator and the Examiner:

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**ITM-403**

**SYSTEMS ANALYSIS AND DESIGN**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course exposes students to environment for system analysis and design information and developing system-design skills for the same.*

**Course Outcomes:**

- CO1:** Students will be able to define the life cycle of a systems development project.
- CO2:** Students will be able to explain the required component and environment for system design
- CO3:** Students will be able to illustrate system components and environment for projects.
- CO4:** Students will be able to compare the different information system model for projects.
- CO5:** Students will be able to evaluate project documentation in developing systems.
- CO6:** Students will be able to develop LAN/WAN structure for the organisation

**Course Contents:**

**UNIT-I**

Concept of system, Business Information System, types of business information systems, overview of system development methodologies, role of systems analyst, CASE tools for systems analyst; feasibility study - economic, organizational and cultural, technological, schedule and resource.

**UNIT-II**

System Development Life Cycle : Preliminary investigation - Information System Projects, evaluation of system requests, major steps in preliminary investigation; Systems Analysis - fact finding techniques, documentation, data flow diagrams, data dictionary; cost benefit analysis.

### **UNIT-III**

Systems Design : User interface design, input and output design, data design; Systems Implementation: Application development, quality assurance, structured application development - structure charts, cohesion, coupling, testing, programme, system, operations, user documentation; Installation - Training, system changeover.

## UNIT-IV

Designing Distributed and Internet Systems: designing distributed systems - designing systems for LANs, for client / server architecture; designing internet systems - internet design fundamentals, design issues related to site management, managing online data.

**Lab:** Each student is required to develop at least one LAN/WAN structure.

### Suggested Readings:

1. Hoffer et. al., *Modern System Analysis and Design*, Cengage Learning.
2. Shelly, Cashman, Rosenblatt, *System Analysis and Design*, Cengage Learning.
3. Satzinger, *System Analysis and Design*, Cengage Learning.
4. Hawryskiewycz, I T. *Introduction to Systems Analysis and Design*, PHI.
5. Whitten, J L. *System Analysis and Design Methods*, Galgotia.
6. Awad, Elias M., *Systems Analysis and Design*, Prentice Hall of India.

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



Time Allowed: 3 Hours

M.M:60

**Course Objective:** *This course exposes students to environment for system analysis and design information and developing system-design skills for the same.*

**Course Outcomes:**

- CO1:** Students will be able to describe language features used in the current programming language.
- CO2:** Students will be able to compare features of different programming language.
- CO3:** Students will be able to solve problem using a range of programming paradigms and assess the effectiveness of each paradigm for a particular problem.
- CO4:** Students will be able to examine semantic issue in programming language by studying implications in an interpreter.
- CO5:** Students will be able to evaluate the effectiveness of each paradigm for a particular problem.
- CO6:** Students will be able to develop system design skills.

**Course Contents:****UNIT-I**

Preliminaries: Programming Domain, Language Evaluation Criteria, Language Design, Language Categories, Language Design Trade-offs, Influences on language design, Implementation Methods

## **UNIT-II**

Evolution of Major Procedural and Object Oriented Programming Languages; Names, Variables, Scope and Lifetime, Variable Initialization, Data Types: Primitive Data Types, User Defined Data Types, Derived Data Type; Expressions and Assignment Statements: Arithmetic Expressions, Type Conversions,

## **UNIT-III**

Relational Expressions, Assignment Statements, Operators Precedence; Control Structure: Compound Statement, Selection Statements, Iterative Statements, Unconditional Statements

## UNIT-IV

Subprograms: Fundamentals, Design Issues, Local Referencing, Parameter Passing; Object Oriented Programming: Object and Class, Abstraction, Encapsulation, Inheritance and Polymorphism, Exception Handling

**Lab:** Each student is required to develop at least one language.

### Suggested Readings:

1. Sebesta W. Robert, *Concepts of Programming Languages*, Pearson Education.
2. Doris & Vandekopple J. Julius, *Programming Languages - Paradigm and Practices*, McGraw-Hill.
3. Kenneth C. Louden, *Programming Languages: Principles and Practice*, Cengage Learning.
4. Sethi Ravi, *Programming Languages*, Pearson Education.
5. Friedman, Wand & Haynes, *Essentials of Programming Languages*, Prentice Hall of India.
6. T.W. Pratt, *Programming Languages Design & Implementation*, Prentice Hall

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**ITM-405**

**MULTIMEDIA AND WEB DEVELOPMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course exposes students to environment for multimedia and web development and its requisite applications.*

**Course Outcomes:**

**CO1:** Students will be able to describe the basic concept of multimedia and web developments.

**CO2:** Students will be able to discuss the concepts of data compression, speech recognition, data and file formats standard, web design and cyber security.

**CO3:** Students will be able to use basic instructional design principals in the development of multimedia and web designing.

**CO4:** Students will be able to compare various audio, video and image file formats and examine various web-designing tools.

**CO5:** Students will be able to evaluate various solutions for multimedia and web designing problems.

**CO6:** Students will be able to develop web pages including multimedia features

**Course Contents:**

**UNIT-I**

Introduction to Multimedia: Multimedia devices, components of multimedia systems, authoring tools, creating multimedia, video-capturing, video on demand.

Data compression : Need for data compression, non-lossy and lossy compressions for images, color, gray scale and still-video image, video image, and audio compression JPEG standard, MPEG standard, DVI Technology, MIDI, brief survey of speech recognition and generation.

## **UNIT-II**

Data and file format standards, Multimedia applications design: Application classes, types of multimedia systems; Distributed multimedia systems: Components, distributed multimedia databases.

### UNIT-III

Introduction to Web design: Web development process, site types and architectures, navigation theory and practice.

Introduction to Page: Page sizes, page types, web design tools; introduction to text: Fonts and text layout, formatting tags, text design issues for the web.

### UNIT-IV

Cyber Crime; Introduction to Information Technology Act 2000: Digital Signature and its Certification, Duties of Subscribers, Offences.

**Lab:** Each student is required to develop at least one website.

#### Suggested Readings:

1. Buford, *Multimedia Systems*, Pearson Education,
2. Vaughan, *Multimedia Making IT Work*, Tata McGraw Hill,
3. Villamil and Molina, *Multimedia: An Introduction*, PHI
4. Shuman, *Multimedia in Action*, Vikas Publishing House
5. Senclair, *Multimedia on the PC*, BPB Publications
6. Rosch, *Multimedia Bible*, SAMS Publishing
7. Powell, *Web Design: The Complete Reference*, Tata McGraw Hill

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.

The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**ENTREPRENEURSHIP  
DEVELOPMENT  
AREA**

**THIRD  
SEMESTER**

**ED- 301          FINANCING SCHEMES FOR ENTREPRENEURSHIP DEVELOPMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:**    *To understand and to help the budding entrepreneurs (students) appreciate the financial aid made accessible to them through various agencies*

**Course Outcomes:**

- CO1:** Students will be able to outline about the promotional and financing institutions for promoting entrepreneurship.
- CO2:** Students will be able to illustrate the tremendous government support for innovation and entrepreneurship.
- CO3:** Student will be able to apply and use the various funding scheme available to them for becoming a successful entrepreneur
- CO4:** Students will be able to compare all the funding schemes according to where they are investing in for entrepreneurship
- CO5:** Students will be able to evaluate how they can make the best use of the financial assistance for making their ideas sprout
- CO6:** Students will be able to design the modules for entrepreneurship

**Course Contents:**

**UNIT I**

Promotional Institutions for entrepreneurship development: Governmental Agencies at State Level; Governmental Agencies at National Level; Non-Government Organizations (NGOs); Directorate of Industries and Commerce, District Industries Centre, Centre for Entrepreneurship Development (CED)

## **UNIT II**

Financing Institutions for entrepreneurship development: Financing by commercial banks, Assistance by other agencies NSIC; IDBI - Refinance assistance, SIDBI, NABARD etc., Bills rediscounting scheme, Special Capital/Seed Capital Scheme, Export Finance; Non-traditional methods of financing, common problems in raising finances

### UNIT III

Government's Support for Innovation and Entrepreneurship in India: Startup India Make in India Atal Innovation Mission (AIM), Atal Incubation Centers (AIC) Support to Training and Employment Programme for Women (STEP), Jan Dhan- Aadhaar- Mobile (JAM), Digital India, Biotechnology Industry Research Assistance Council (BIRAC), TREAD, PMKVY, National Skill Development Mission, SEED, SANKALP, M-SIPS

### UNIT IV

Schemes for rural entrepreneurs: Prime Minister Employment Generation Programme, Janashree Bima Yojana for Khadi Artisans, Market Development Assistance, Rejuvenation, Modernisation and Technology Upgradation of Coir Industry (REMOT), Skill Upgradation & Quality Improvement and Mahila Coir Yojana, Dairy Entrepreneurship Development Scheme

Schemes For Women Entrepreneurs In India: Annapurna Scheme, Stree Shakti Package For Women Entrepreneurs, Bharatiya Mahila Bank Business Loan, Dena Shakti Scheme, **Udyogini Scheme**, Cent Kalyani Scheme, Mahila Udyam Nidhi Scheme, **Mudra Yojana Scheme For Women**, **Orient Mahila Vikas Yojana Scheme**

#### Suggested Readings:

1. Blackburn, R.A. & Schaper, M.T., *Government, SMEs and Entrepreneurship Development: Policy, Practice and Challenges*, Routledge
2. Charantimath, P.M., *Entrepreneurship Development and Small Business Enterprises*, Pearson Education India
3. Minniti, M., Zacharakis, A., Spinelli, S., Rice, M.P., Habbershon, T.M., *Entrepreneurship: The Engine of Growth*, Greenwood Publishing Group

#### Internet Sources:

1. [www.skilldevelopment.gov.in](http://www.skilldevelopment.gov.in)
2. <https://www.india.gov.in/people-groups/community/entrepreneu>
3. <https://www.dcmsme.gov.in/edpDetail.htm>

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ED- 302

**BUSINESS PLAN**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objective:** *To help students understand the composition and content of a business plan which will provide as a guide in preparing a first draft of their own business plan and critically evaluate it*

**Course Outcomes:**

- CO1:** Students will be able to define and outline the requirements for developing a business plan.
- CO2:** Students will be able to report and generate the key elements of a business plan.
- CO3:** Students will be able to apply the learning and be able to convert their findings into a written proposal (business plan).
- CO4:** Students will be able to appraise the risks associated with their business plan.
- CO5:** Students will be able to evaluate all the factors which are important in preparing a business plan.
- CO6:** Students will be able to develop the business plan.

**Course Contents:**

**UNIT I**

Introduction to Business Plan: Concept, need, use; Business planning overview: Idea brainstorming session; Understanding your motivations for preparing a plan; Clarifying the

company's future, launching a new venture, searching for partners, Plotting against the competition, Recruiting.

## **UNIT II**

Key elements of a Business Plan: Industry analysis and trends: Competitive analysis, Market strategies, Design and development plan: Technology plan, management and organization; Financial Factors; Financial requirements: loan, equity source of collateral; Current business position; Major achievements.

## **UNIT III**

Writing a Business plan: Research other business plans, Collect Information; Evaluating data: benefits of market study, coverage of market study; Preparing a rough draft; Evaluating a Business Plan in terms of opportunity, idea, target market, present value, acceptance, competition, time to enter, speed of implementation.



## UNIT IV

Risk Assessment: Possible uncertainties: Market size, Customer acceptance, Customer approach, Competition, Management team, Potential real options, Team Evaluation; Strategy assessment for opportunity, uncertainty, team, and exiting; Investment requirements or cash flows: Forecasting, top-down or Bottom up approach, Practical intellectual property issues in developing a business plan

### Suggested Readings:

1. Katz, J. A. & Green II, R. P., *Entrepreneurial Small Business*, McGraw Hill/Irwin, New York, NY,
2. Mullins, J.& Komisar, R. *Getting to Plan B*, Harvard Business Press, Boston, Massachusetts,
3. Butler, D., *Business Planning: A guide to Business Start-up*, Thompson.
4. Abrams, R., *The Successful business Plan Secret Strategies*, PH
5. Entrepreneurship Development Institute of India, *Business plan preparation*

### Important Instructions for the Course Coordinator and the Examiner:

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ED- 303

**INNOVATION AND INTELLECTUAL PROPERTY RIGHTS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course aims to make students understand how innovation and Intellectual property are related and to know its implications for budding entrepreneurs*

**Course Outcomes:**

- CO1:** Students will be able to understand about innovation and intellectual property rights.
- CO2:** Students will be able to classify different types of innovations and intellectual property rights issues.
- CO3:** Students will be able to interpret the intricacies associated with innovation and intellectual property rights.
- CO4:** Students will be able to evaluate the importance of innovation and intellectual property rights issues.
- CO5:** Students will be able to argue on innovation and intellectual property rights.
- CO6:** Students will be able to develop the concepts of intellectual property rights.

**Course Contents:**

**UNIT I**

Innovation: Meaning; Types of innovation: incremental, modular, architectural and radical; Models of Innovation: Static Models & Dynamic Models; Sources of Innovation; the link between practicing innovation and creating intellectual property, characteristics of innovative organization

## **UNIT II**

Fundamentals of IPR: History of IP law; Agreement on TRIPS , Legislations on IPR in India, Agreement on TRIPS, World Intellectual Property Organization (WIPO), IPR strategies in developing countries, Range of intellectual property services, Principles and guidelines of Intellectual property management

### UNIT III

Fundamentals of Patents: Meaning, Patent grant procedure in India, Conditions for grant of Patents, E-filing of Patent application, temporal and spatial aspect of patent, Milestones in Indian Patent Law; Trademarks: Indian Trademarks Act, Trade names, Guidelines for registration of Trademarks, Madrid System, Infringement of trademarks, Copyrights: meaning, copyright office & copy right board; Copy Right registration in India; Rights of the owner; Terms of copyrights; The Copy Rights Act.

### UNIT IV

Industrial Designs: Meaning, Need for protection of Design, Design Act; Geographical Indications: Meaning, Potential benefits of GI, The geographical indication of Goods Act; Trade Secrets: Concepts, Legal developments for protecting trade secrets; IP management; Emerging issues in IPR.

#### Suggested Readings:

1. Pandey, N. & Dharni, K. *Intellectual Property Rights*, PHI
2. Radhakrishnan , R. & Balasubramanium, S. *Intellectual Property Rights: Texts and Cases*, Excel Books
3. Afuah, A. *Innovation Management*, Oxford Indian Edition.
4. Maital, & Seshadri, D.V.R. *Innovation Management*, Response Books, Sage Publications, New Delhi.
5. Foster, R. N. *Innovation: the attacker's advantage*, London, Macmillan,

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FOURTH  
SEMESTER**

**ED-401**

**SOCIAL ENTREPRENEURSHIP**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objective:** *To introduce students to the broad spectrum of emerging global social ventures, thus laying the ground work for students own potential career paths in social entrepreneurship*

**Course Outcomes:**

**CO1:** Students will be able to define the idea of social entrepreneurship and how it is an emerging aspect of entrepreneurship

**CO2:** Students will be able to explain the diversity of social entrepreneurship

**CO3:** Students will be able to apply the gained knowledge in social ventures and their management

**CO4:** Students will be able to experiment and test the relevance of social entrepreneurship in present scenario

**CO5:** Students will be able to evaluate the implementation aspects of social entrepreneurship

**CO6:** Students will be able to formulate the implementation aspects of social entrepreneurship

**Course Contents:**

**UNIT I**

Social Entrepreneurship & Social Enterprises: Nature, Meaning and importance, The Idea of Social innovation, Social enterprises as hybrid organizations, Characteristics of social

enterprises, Emergence of social enterprises, Influence of policy on emergence of social enterprises, Market influence on the development of social enterprises, Future & sustainability of social enterprises.

## UNIT II

Social Ventures and its management: Identifying and Defining Community need, Skills required for Identifying and Defining Community need, Stakeholder participation and involvement – Social policy context, Where do social enterprises fit within the changing landscape;

## UNIT III

Financing the social enterprise: Income forecast, income statement, cash flow forecast, Managing financial risk, Venture capital, venture valuation angel funds, venture in-house corporate funding mechanism; Micro finance and social ventures

## UNIT IV

Bottom of the pyramid markets and social entrepreneurship: Meaning and importance, business models at the Bottom of the pyramid, providing access to credit, providing access to information and financial services through technology, evaluating the social impact of Bottom of the pyramid ventures.

### Suggested Readings:

1. Bornstein, D., *How to Change the World: Social Entrepreneurs and the Power of New Ideas*, Oxford University Press
2. Reddy Kummitha, R., *Social Entrepreneurship: Working towards Greater Inclusiveness*, Sage
3. Paramasivan, *Social Entrepreneurship*, New Century Publications
4. F. Perrini *The New Social Entrepreneurship: What Awaits Social Entrepreneurship Ventures?* Cheltenham and Northampton, MA: Edward Elgar
5. Borzaga, C. & Defourny, J., *The Emergence of Social Enterprise*, Routledge, London

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**ED - 402**

**LEGAL FRAMEWORK FOR ENTREPRENEURSHIP**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objective:** *The course aims to provide an understanding, application and interpretation of the various laws and their implications for establishing new ventures.*

**Course Outcomes:**

**CO1:** Students will be able to state and relate to the legal aspects pertaining to entrepreneurship

**CO2:** Students will be able to classify how the legal dimension is important in order to integrate the resources for a project

**CO3:** Students will be able to demonstrate a complete understanding of adhering to the legalities of entrepreneurship

**CO4:** Students will be able to examine the discrepancies if any exists in the framework of any proposed project keeping in mind the present legal framework.

**CO5:** Students will be able to evaluate the legal aspects pertaining to entrepreneurship

**CO6:** Students will be able to develop the legal aspects pertaining to entrepreneurship

**Course Contents:**

**UNIT-I**

Financial Services: Meaning, Nature and Types; Leasing: Concept, Classification, Accounting,

Legal and Tax Aspects of Leasing, Financial Evaluation of Leasing. Factoring: Meaning, Characteristics and Types of Factoring arrangements, Factoring in India, Factoring vs. Forfeiting; Credit Rating: Meaning and Types, Benefits of Credit rating to investors and companies; Objectives and Functions of Credit Rating Agencies.

## **UNIT-II**

Credit Cards: Concept and Significance; Types of credit Cards, Credit Card business in India. Book Building: Concept and Mechanism of Book Building; Significance and Benefits of Book Building; Bought Out Deals: Meaning and Nature; Mechanisms of Bought out Deals; Advantages; The Present Scenario.

### UNIT-III

Securitisation: Concept, Mode, Mechanism and Beneficiaries of Securitisation, Securitisation in India; Venture Capital: Meaning and Modes of Financing; Role and Functions of Merchant Bankers.

### UNIT-IV

Tax Laws: Goods & Services Tax & other tax legislations; Labour Laws: The Industrial Disputes Act, The Trade Union Act, Building and Other Construction Workers' (Regulation of Employment and Conditions of Service) Act, The Industrial Employment (Standing Orders) Act, The Inter-State Migrant Workmen (Regulation of Employment and Conditions of Service) Act, The Payment of Gratuity Act and other related legislations.

#### Suggested Readings:

1. Clifford, G., *Financial Markets, Institutions and Financial Services*, PHI.
2. Khan, M. Y., *Management of Financial Services*, McGraw-Hill.
3. Gordan, E and K. Natrajan, *Emerging Scenario of Financial Services*. Himalaya Publishing House.
4. Mamoria & Manoria, *Dynamics of Industrial Relations*; Himalaya Publishing House.
5. Singh, B.D., *Labour Laws for Managers*, Excel Books

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**The Board of Studies and Research, in its Meeting held on 14-05-2020 has recommended and approved in-principle that the following super specialization areas in MBA Programme may be offered at HSB only:**

- 1. MBA Finance**
- 2. MBA Marketing**
- 3. MBA International Business**
- 4. MBA Rural and Agricultural Management**
- 5. MBA Banking and Insurance**
- 6. MBA Health Care Administration**
- 7. MBA Retail Management**
- 8. MBA Digital Marketing**

**The detailed Schemes and Syllabus for the super-specialization at Sr. No. 4 to 8 will be framed in due course of time and will be placed before the BOS&R, however, the detailed Schemes and Syllabus for Sr. No. 1 to 3 is given hereunder...**

# **MBA FINANCE**

**TWO YEARS (FOUR SEMESTERS) PROGRAMME**  
**Choice Based Credit System on Outcome Based Education**  
**(Effective from Session 2020-21)**



**HARYANA SCHOOL OF BUSINESS**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE  
AND TECHNOLOGY HISAR-125001, HARYANA**

**(YEAR-2020)**

# THE CURRICULUM BOOK

## OF

### MBA FINANCE

#### 1.1. Vision and Mission of the Haryana School of Business

##### **1.1.1** Vision

The school shall strive to achieve the vision of a globally respected institution engaged in generation of knowledge and dissemination of the same through teaching, research and collaboration with leading business schools, the industry, government and society in the fields of business management studies for the benefits of the economy, nation and the world.

##### **1.1.2** Mission

- i)** Striving to contribute its best in transforming raw brains into effective business leaders ready to contribute towards the emerging frontiers of economic and societal growth.
- ii)** Imparting state-of-the-art knowledge in the field of business and management keeping into the changing requirements of the industry.
- iii)** Ensuring that our students graduate with a sound theoretical basis and wide-ranging practical business cases and problem solving experience.
- iv)** Fostering linkages between the academics, business and industry.
- v)** Promoting ethical research of high quality in the field of business and management.
- vi)** Adopting the best pedagogical methods in order to maximize knowledge transfer to ensure outcome based education in business and management.
- vii)** Inculcating a culture of free and open discussions in the School thereby engaging students in evolving original business ideas and applying them to solve complex business problems.
- viii)** Inspiring an enthusiasm into students for lifelong learning thereby infusing scientific temper, enthusiasm, professionalism, team spirit and business leadership qualities in the students.



- ix) Sensitizing students to look for environmentally sustainable vis-à-vis globally acceptable business solutions.
- x) Upholding democratic values and an environment of equal opportunity for everyone vis-à-vis preparing the students as global humane citizens.

## 1.2. Vision Programme Educational Objectives (PEOs) of the MBA FINANCE Programme

The Programme Educational Objectives of the MBA FINANCE Programme are:

- PEO1.** To prepare responsible and ethical management professionals to be successfully employed in public and private sector especially in the corporate sectors at national and global levels, who will be able to apply the principles of business and management to evolve, develop and deploy best possible solutions for real world business and financial problems after assessing their economic, environmental, cultural and societal implications.
- PEO2.** To groom the budding professionals for analyzing, evaluating and designing complex business and management solutions individually or in teams by doing a methodical and in-depth research and analysis in financial domains, by using embryonic modern tools and by communicating effectively among the various stakeholders about due awareness of such business and management solutions.
- PEO3.** To mentor the budding professionals and entrepreneurs of tomorrow with global business leadership qualities and deep economic and societal concerns who can move up in their business professional career or start their own ventures as well.
- PEO4.** To guide the management graduates to develop a positive attitude towards ethical and value based learning and motivate them to take up higher studies and research in the field of business and management.
- PEO5.** To groom budding professional to make them sensitive human beings who can keep due emotions towards humanity and global diversities.

### 1.3 Programme Outcomes (POs) of MBA FINANCE Programme

MBA FINANCE is a highly prestigious management course of modern times and prepares the participants for taking up middle and top level challenging executive assignments in private and public sectors. Accordingly, they are imparted adequate conceptual knowledge and practical training in various fields of Finance. MBA FINANCE at HSB is a two years programme divided into four semesters. The programme is aimed at following outcomes:

- PO1. Business Management Knowledge:** Apply knowledge of business management and financial theories and practices to solve business problems.
- PO2. Critical Thinking and Problem Analysis:** Foster Analytical and critical thinking abilities for databased decision-making.
- PO3. Leadership and Business Solutions:** Ability to develop Value based Leadership ability that offers business solutions.
- PO4. Communication and Other Skills:** Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
- PO5. Team Dynamics and Management:** Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

### Programme Specific Outcomes (PSOs) of MBA FINANCE Programme

- PSO1. Environmental Awareness for Sustainability:** Understand the impact of the professional business solutions in economic, societal and environmental contexts, and demonstrate the business knowledge for sustainable global business development.
- PSO2. Business Ethics and Values:** Apply ethical principles and commit to business professional ethics and values for discharging all responsibilities within the laid norms of the business and management practices.
- PSO3. Social Responsibility and Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of global business environment dynamics.



**1.4 Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA FINANCE Programme**

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1								
CO2								
CO3								
CO4								
CO5								
CO6								
	<b>Overall Mapping Result: .....</b>							

**Note :** The Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA FINANCE Programme will be done every year independently by the Committee constituted by the Board of Studies and Research by making 360 degree feedback including auditing of previous years question-papers and answer-sheets as well. It will be part of the annual Academic Audit of the Haryana School of Business.

**1.5 Important Instructions-cum-Ordinance for Implementing the Outcome based Education Scheme and Syllabus of MBA FINANCE Programme**

- i) The MBA FINANCE programme will be divided into four semesters (two semesters in the first year and two semesters in the second year). Every semester, generally, shall be of 21 weeks of duration inclusive of teaching and examination. Since, University is in five-days a week functioning mode, hence, allotted credits to each and every course of the programme would be duly compensated with extra hours to essentially fulfill the objective of minimum

working days, per semester, as prescribed by the UGC/AICTE for the Universities and Colleges in this connection.

- ii) The course of 05 (five) credits shall be of 100 marks in the ratio of 60% external and 40% internal. If otherwise not specifically mentioned against each course, each course of study, ordinarily, consists of five hours lectures per week per semester and one-hour tutorial per week, per group, per semester.
- iii) Unless and otherwise specified at appropriate places, the division and distribution of marks is as under:

Final/Major Test (External) : 60 Marks

Internal Assessment (Internal) : 40 Marks

Distribution of weightage of 40 marks of Internal Assessment will be as per following details:

**Minor Tests** : 15 Marks

**Attendance & Co-curricular Activities** : 25 Marks (Attendance: 05)

(To be announced by the teacher or course coordinator, in the light of expected Course Outcomes of the concerned course, in the beginning of the semester, which may include Attendance, Home-Assignment, Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc. However, a teacher or course coordinator will choose any five components and announce to the class in the beginning of the semester)

- iv) Each individual course will consist of Maximum Marks as 100 Marks and Passing Marks will be 40 Marks only. However, the aggregate passing marks in a semester will be 50 per cent of the total marks per semester.
- v) A wide range of assessment types for evaluating students is available for the teachers/ institutions to use for internal assessment. Each assessment type has its distinct utility, advantages and limitations. A suitable compendium of such

types needs to be carefully chosen for a particular course depending on its nature, objectives and available resources.

- vi)** The Internal Assessment awarded to a student in any particular course will be based on performance of the students in Two Minor Tests, Attendance and Co-Curricular Activities (which may include Attendance, Home-Assignment, Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc.)
  
- vii)** The internal assessment should be designed with learner attributes in mind. These attributes, which have clear linkages to Programme Education Objectives and Course Outcomes, stem from the taxonomy, should be clearly told to the students in the beginning of the semester.
  
- viii)** At least, one or two activities of the internal assessment should focus to achieve the 5<sup>th</sup> or 6<sup>th</sup> Course Outcome in each course of study in every semester.
  
- ix)** The students who fail in internal assessment as well as in aggregate will have the option to improve their score in the internal assessment giving a special chance to such students. However, no student will be allowed to improve his/her score of internal assessment, if he/she has already scored 50% marks in aggregate as well as in external examination.
  
- x)** A student who could not secure 40% marks in external examination of the particular course will have to reappear in the external examination of the respective paper as per university rules in this connection.
  
- xi)** Unless and otherwise specified at appropriate place for specific course, the instructions to the examiners and students for the External Exam/Major Test of 60 marks will be given as under:
  - a)** The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus.
  - b)** In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.
  - c)** The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the External Exam/Major Test is 03 (three) hours.

- xii)** All courses in 1<sup>st</sup> and 2<sup>nd</sup> semesters will be compulsory, whereas, the courses in 3<sup>rd</sup> and 4<sup>th</sup> semesters will be compulsory, optional-elective, project-work-report and open-elective as well.
- xiii)** The specific instructions have been given at appropriate places regarding compulsory, optional-elective, project-work-report and open-elective courses depending upon the specializations opted by the students.
- xiv)** At the end of the second semester, all the students will have to undergo online/offline summer summer training of 6-8 weeks with an industrial, business or service or academic organization, either through offline or online modes, under the supervision of Training and Placement Office (TPO) in case of Haryana School of Business (HSB) and Director/Principal in case of affiliated institutes.
- xv)** Each student will be required to submit a training report, on a prescribed proforma, in the beginning of third semester along with a certificate issued by the concern where he/she has undertaken the summer training either with an industrial, business or service or academic organization to the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes up to 31st August without late fees, for the purpose of evaluation in the third semester. However, the guidelines along with prescribed proforma for the purpose will be notified at the end of second semester.
- xvi)** Each student shall present a seminar on the summer training, during third semester, before a committee of teachers constituted by the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes.
- xvii)** The distribution of marks of Summer Training Report would be 25 marks for the seminar on training report and 25 marks for the written training report.
- xviii)** The Committee of Examiners to be appointed by the Director/Principal will evaluate this written training report; the Committee will be coordinated by the Programme Coordinator.
- xix)** If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the university.
- xx)** This new Scheme and Syllabus of MBA FINANCE Programme shall be effective from the academic session 2020-21.

- xxi) In case of any slip-up in above instructions, the general rules of university ordinance will be applicable if the same is in the interest of students.

## 1.6 General Course Structure and Credit Distribution in Various Components of Teaching-Learning in the MBA FINANCE Programme

### 1.6.1 Definition of a Credit may be further classified as under:

Type of Teaching Learning Activity and Workload	o. of Credits
5 Hours Lecture (L) per week per semester	4 Credit
1 Hour Tutorial (T) per week per semester but maximum two groups irrespective of number of students in the classes	1 Credit
2 Hours Practical (Lab) per week per semester	1 Credit
1 Hour Seminar per week per semester	1 Credit
1 Hour Training Seminar per week per semester	1 Credit
1 Student Guidance for In-Company-Work-Project	2 Credit
2 Hours per week per semester if a teacher is asked to act as Programme Coordinator	2 Credit
1 Hour per week per semester if a teacher is asked to act as Convener of any Standing Committee for discharge of Departmental work during the semester	1 Credit
6 Hours per week for Preparing Students for Training and Placement Activities through mock assessment, group discussion, personal interviews and workshops/seminars per Semester, if officially assigned to a teacher by the Director during the particular semester.	5 Credit

### 1.6.2 Credits for Different Curriculum Components

Semester-Wise Credit Distribution of MBA Programme			
Sr No	Semester-Wise	Number of Courses	Total No. of Credits
1.	1 <sup>st</sup> Semester	7 Courses	33 Credits
2.	2 <sup>nd</sup> Semester	7 Courses	35 Credits



3.	3 <sup>rd</sup> Semester	8 Courses	38 Credits
4.	4 <sup>th</sup> Semester	4 Courses	20 Credits
		<b>Total</b>	<b>126 Credits</b>
<b>Core and Elective Courses Wise Credit Distribution</b>			
<b>Sr No</b>	<b>Core Courses-Wise</b>	<b>Elective and Open-Elective Courses Wise</b>	<b>Total No. of Credits</b>
1.	96	30	126 Credits
		<b>Total</b>	<b>126 Credits</b>

**1.7 For the purpose of enhancing the current knowledge base, students can also access various online resources (supported by MHRD, Government of India) for their respective courses. These resources are available at:**

- <http://nptel.ac.in/courses>
- [www.mooc.org](http://www.mooc.org)
- <https://epgp.inflibnet.ac.in>

## 1.8 : Scheme and Syllabus of MBA FINANCE Programme

The MBA FINANCE is a two-year full time programme, which is divided into four semesters. The course structure, viz, the scheme and syllabus of this Programme are given as under:

<b>SEMESTER-I</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAF-101	Management Process and Organisational Behaviour	5-----0-----1	05 Credits
MBAF -102	Business Statistics	5-----0-----1	05 Credits
MBAF -103	Managerial Economics	5-----0-----1	05 Credits
MBAF -104	Accounting for Managers	5-----0-----1	05 Credits
MBAF -105	Business Environment	5-----0-----1	05 Credits
MBAF -106	Corporate Finance	5-----0-----1	05 Credits
MBAF -107	Seminar (On Indian Ethos, Computer Applications in Business, Contemporary Issues in Cyber Security and Modern Business)* (Internal)		03 Credits
		<b>Total</b>	<b>33 Credits</b>

\* Seminar (MBAF - 108) will be organized by a committee of not less than three teachers.

<b>SEMESTER-II</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAF -201	Marketing Management	5-----0-----1	05 Credits
MBAF -202	Human Resource Management	5-----0-----1	05 Credits

MBAF -203	Business Communication	5-----0-----1	05 Credits
MBAF -204	Indian Financial System and Markets	5-----0-----1	05 Credits
MBAF -205	Financial Services	5-----0-----1	05 Credits
MBAF -206	Management Science	5-----0-----1	05 Credits
MBAF -207	Business Research Methods	5-----0-----1	05 Credits
		<b>Total</b>	<b>35 Credits</b>

<b>SEMESTER-III</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAF -301	Strategic Management	5-----0-----1	05 Credits
MBAF -302	Business Legislation	5-----0-----1	05 Credits
MBAF -303	Entrepreneurship Development	5-----0-----1	05 Credits
MBAF -304	Summer Internship and Seminar (Internal)		03 Credits
	Elective-I*	5-----0-----1	05 Credits
	Elective-II*	5-----0-----1	05 Credits
	Elective-III*	5-----0-----1	05 Credits
	Elective-IV*	5-----0-----1	05 Credits
	Open Elective-I**	5-----0-----1	05 Credits
		<b>Total</b>	<b>38 Credits</b>

\* The students are required to choose 04 (four) Elective Courses offered in Semester III.

\*\* In addition to above 04 (four) Elective Courses, the students are also required to choose one

course from the list of Open Elective Courses offered in Semester III.

<b>SEMESTER-IV</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAF - 401	Comprehensive Viva- Voce (External)		05 Credits
MBAF - 402	Research Project (optional in lieu of one Elective Course)**	05-----0-----1	05 Credits
	Elective-I*	5-----0-----1	05 Credits
	Elective-II*	5-----0-----1	05 Credits
	Elective-III*	5-----0-----1	05 Credits
	Or		
MBAF -410	In-Company Project Work***		15 Credits
		<b>Total</b>	<b>20 Credits</b>

\* The students are required to choose any 3 (three) Elective Courses offered in Semester IV. In any case, if the nomenclature of the paper is same/similar as opted by the student in any semester that cannot be opted again.

\*\* Instructions for Research Project (MBAF -402): The following instructions will be followed:

1. Research project, which is optional, should be from major or core area of specialization (Finance) of the student and shall be in lieu of one elective course.
2. Students opting for Research Project in Semester IV will have to register for the project in Semester III itself by submitting a synopsis along with consent of the supervisor in the Office of HSB and to the office of Director, HSB by 30th November.
3. Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in

a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, HSB.

4. External examiner will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the internal awards out of 40 marks separately on the basis of overall performance of the student in the project.
5. The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva-voce will be appointed by the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes.

\*\*\* Instructions for In-Company Project Work (MBAF- 410): The following instructions will be followed:

1. If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4<sup>th</sup> semester and is willing to join immediately, he or she may opt for In-Company Project Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the University.
2. However, such In-Company Project Work will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB and Industry Guide (to be appointed by the competent authority of the concerned organization, who has offered appointment letter to the student and requires the student to join immediately). The Academic Guide will get two hours per week credit per student subject to a maximum of ten credits in his or her teaching workload during the semester.

3.

<b>List of Elective Courses for Semester III</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAF -305	Security Analysis	5 0 1	5 Credits
MBAF -306	Risk Management and Insurance	5 0 1	5 Credits
MBAF -307	Management of Banks & Financial Institutions	5 0 1	5 Credits
MBAF -308	Foreign Exchange Management	5 0 1	5 Credits
MBAF -309	Project Management	5 0 1	5 Credits
MBAF -310	Business Taxation	5 0 1	5 Credits
MBAF -311	Corporate Financial Reporting	5 0 1	5 Credits
MBAF -312	Treasury Management	5 0 1	5 Credits
MBAF -313	Financial Econometrics	5 0 1	5 Credits
MBAF -314	Personal Finance	5 0 1	5 Credits

<b>List of Open Elective Courses for Semester III</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
OE-301	Counseling Skills for Managers	5 0 1	5 Credits
OE-302	Fundamentals of Econometrics	5 0 1	5 Credits
OE-304	Applications of Marketing	5 0 1	5 Credits
OE-305	Export Import Procedures and Documentation	5 0 1	5 Credits
OE-306	Corporate Governance and Business Ethics	5 0 1	5 Credits
OE-307	Indian Ethos and Values	5 0 1	5 Credits
OE-308	Computer Application in Business and Cyber Security	5 0 1	5 Credits
OE-309	Disaster Management	5 0 1	5 Credits



### List of Elective Courses for Semester IV

Course Code	Course Title	Workload			Number of Credits
		L	P	T	
MBAF-403	Portfolio Management	5	0	1	5 Credits
MBAF-404	Financial and Commodity Derivatives	5	0	1	5 Credits
MBAF-405	International Financial Management	5	0	1	5 Credits
MBAF-406	Funds Management	5	0	1	5 Credits
MBAF-407	Financial Restructuring and Valuation	5	0	1	5 Credits
MBAF-408	Working Capital Management	5	0	1	5 Credits
MBAF-409	Behavioural Finance	5	0	1	5 Credits



**Detailed Syllabus of MBA FINANCE Programme is as follows...**

**FIRST  
SEMESTER**

**MBAF-101**

**MANAGEMENT PROCESS AND ORGANISATIONAL BEHAVIOUR**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this paper is to familiarize the students with basic management concepts and behavioral processes in the organization.*

**Course Outcomes:**

- CO1:** Students will be able to recall the concepts of management process and organizational behavior.
- CO2:** Students will be able to understand individual and group behavior, and understand the implications of organizational behavior on the process of management.
- CO3:** Students will be able to employ different motivational theories and evaluate motivational strategies used in a variety of organizational settings.
- CO4:** Students will be able to appraise the basic design elements of organizational structure and evaluate their impact on employees.
- CO5:** Students will be able to evaluate how organizational change and culture affect working relationships within organizations.
- CO6:** Students will be able to design strategies to manage individual, group and organizational behaviour.

**Course Contents:**

**UNIT-I**

Introduction to management: Meaning, nature and scope of management; Evolution of management thoughts: School of management thoughts, Approaches to management; Managerial skills; Managerial functions; Social Responsibility of managers and business; Challenges before modern managers

## **UNIT-II**

Managerial functions: Planning, Decision Making, Management by Objectives; Organizing, Organizational Design, Organizational Structure, Authority and Responsibility, Power, Decentralization; Staffing; Directing, Leading, Motivating, Communicating; Controlling; Co-ordinating.

## **UNIT-III**

Organizational Behavior: concepts, determinants, challenges and opportunities of OB; contributing disciplines to the OB; Organizational culture and climate, Impact of organizational structure on OB; Understanding and managing individual behavior: Personality; Perception; Values; Attitudes; Learning.

## UNIT-IV

Understanding and managing group processes: Interpersonal and Group Dynamics; Understanding Self: Transactional Analysis; Applications of Emotional Intelligence in organizations; Conflict Management; Stress Management.

### Suggested Readings:

1. Chandan, J.S., *Organizational Behaviour*, Vikas Publications
2. Koontz, H & Wehrich, H., *Management*, Tata McGraw Hill.
3. Luthans, F., *Organizational Behaviour*, Tata McGraw Hill.
4. Robbins, S.P., *Management*, Prentice Hall Ins.
5. Robbins, S., Judge, T. & Sanghi, S., *Organizational Behaviour*, Prentice Hall of India.
6. Stoner, J., *Management*, Prentice Hall of India.
7. Davis, K., *Organisational Behaviour*, Tata McGraw Hill.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-102**

**BUSINESS STATISTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to make students learn about the applications of statistical tools and techniques for decision making.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in statistics.
- CO2:** Students will be able to understand the different methods used in statistics.
- CO3:** Students will be able to apply the knowledge of statistics in their future studies as well as in corporate sector also.
- CO4:** Students will be able to analyze the importance of statistics in business.
- CO5:** Students will be able to evaluate the proficiency of statistical methods in an industry or business.
- CO6:** Students will be able to assemble the different methods of statistics for the well being of business

**Course Contents:**

**UNIT-I**

Univariate analysis: central tendency, dispersion (theoretical concept); Probability: Introduction, addition theorem, multiplication theorem, conditional probability, Bayes Theorem. Theoretical probability distributions: Binomial, Poisson, Normal Distribution; their characteristics and applications.

**UNIT-II**

Sampling: probability and non probability sampling methods; Sampling distribution and its characteristics; Hypothesis testing: hypothesis formulation, and testing; Statistical Tests: z-test, t-test, F-test, Analysis of variance, Chi-square test, Wilcoxon Signed-Rank test, Kruskal-Wallis test.

**UNIT-III**

Correlation analysis: simple, partial and multiple correlations; Regression analysis: simple linear regression model, ordinary least square method. Time series analysis: components of a time series and their measurements and uses.

#### **UNIT-IV**

Index numbers: meaning and types, methods for measuring indices, adequacy of indices; Statistical quality control: causes of variation in quality, Control Charts, Acceptance sampling.

### **Suggested Readings:**

1. Gupta, S.P., *Statistical Methods*, Sultan Chand & Sons
2. Anderson, Sweeney and Williams, *Statistics for Business and Economics*, Cengage Learning.
3. Ken Black, *Business Statistics*, Wiley.
4. Levin, Richard I and David S Rubin, *Statistics for Management*, Prentice Hall, Delhi.
5. Aczel and Sounderpandian, *Complete Business Statistics*, Tata McGraw Hill, New Delhi.
6. Hooda, R.P., *Statistics for Business and Economics* Macmillan, New Delhi.
7. Heinz, Kohler, *Statistics for Business & Economics*, Harper Collins, New York.
8. Lawrence B. Morse, *Statistics for Business & Economics*, Harper Collins, NY

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Course Objective:** *The objective of this course is to acquaint the students with concepts and techniques used in the field of economics and to enable them to apply this knowledge in business decision-making. Emphasis is given to changes in the nature of business firms in the context of globalization.*

**Course Outcomes:**

- CO1:** Students will be able to define the terms associated with managerial economics.
- CO2:** Students will be able to explain different theories of managerial economics.
- CO3:** Students will be able to apply the models of managerial economics in business decisions.
- CO4:** Students will be able to examine the demand and supply forces and their effect on pricing and output related decisions.
- CO5:** Students will be able to evaluate the effectiveness of various models and theories of managerial economics in demand, supply, production and costs related decision making procedures.
- CO6:** Students will be able to create the competitive strategies to ensure optimum utilisation of resources.

**Course Contents:****UNIT-I**

Theory of demand and consumer equilibrium-utility and indifference curve approach; Demand function; Elasticity of demand and its significance in managerial decision-making; Demand forecasting and its techniques.

**UNIT-II**

Theory of Cost: Types of cost: production cost, selling cost, R&D Cost, short run and long run cost curves, relation between cost and revenue, break-even point; Economies and

diseconomies of scale and scope; Production function : Short term and long run production function, law of variable proportion and return to scale, Iso-quant curves.

### **UNIT-III**

Market Structure and Competition: Price and output determination under perfect competition, monopoly, monopolistic competition and oligopoly.

### **UNIT-IV**

Modern theories of firm: Bamoul's theory of sales maximization, Managerial Theory, Behavioral Theory; National Income: Concept and Measurement.

### **Suggested Readings:**

1. Ferguson, P. R. Rothschild, R. Ferguson G.J. , Business Economics, Palgrave Macmillan.
2. Dwivedi,D.N., Managerial *Economics*, Vikas Publication.
3. Salvatore, *Managerial Economics in Global Economy*, Thomson Learning.
4. Thomas, C.R. & Maurice S.C., *Managerial Economics*, Tata McGraw Hill.
5. Koutsoyiannis, A., *Modern Economics*, Macmillian

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-104**

**ACCOUNTING FOR MANAGERS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to develop an insight of postulates, principles and techniques of accounting and application of financial and accounting information for planning, decision-making and control.*

**Course Outcomes:**

- CO1:** Students will be able to describe various accounting concepts, principles, techniques associated with decision making.
- CO2:** Students will be able to recognize the usefulness of costing to manager and its applications in the business.
- CO3:** Students will be able to apply the principles, postulates and techniques of accounting for planning and decision making.
- CO4:** Students will be able to differentiate between various types of accounting practices being followed within the organisation.
- CO5:** Students will be able to appraise the performance of organisations with the help of financial statements presented at the end of the year.
- CO6:** Students will be able to formulate advanced policy structure comprising of all accounting information required for controlling deviations in the performance.

**Course Contents:**

**UNIT-I**

Financial Accounting- Meaning, scope and importance; Accounting concepts and conventions; Accounting process: Journal, Ledger and Trial Balance, Depreciation accounting and policy, Preparation of Final Accounts of Joint-stock Companies, Understanding and Analyzing Published Financial Statements of Companies.

## **UNIT-II**

Cost Accounting: Nature and scope of costing; Cost concepts and Classifications; Usefulness of Costing to Managers; Preparation of Cost sheet. Budgeting: Types of budgets and their preparation.

## **UNIT-III**

Management Accounting: Nature, scope and tools of Management Accounting; Management Accounting vs. Financial Accounting; Financial analysis: Ratio analysis, Cash Flow Statement.

## UNIT-IV

Marginal costing: CVP analysis, break-even analysis, Decision involving alternative choices: fixation of selling price, exploring new markets, make or buy decision and product mix decision. An overview of Standard Costing.

### Suggested Readings:

1. Anthony, R.N. & Reece J.S., *Accounting Principles*, Homewood, Illinois, Rd Irwin.
2. Bhattacharya, S.K. & Dearden, J., *Accounting for Management: Text and Cases*, Vikas Publishing House
3. Gupta, R.L. & Ramaswmy, *Advanced Accountancy*, Volume I&II, Sultan Chand & Sons.
4. Hingorani, N.L. & Ramanathan, A.R., *Accounting*, Sultan Chand & Sons.
5. Jawahar Lal, *Cost Accounting*, Vikas Publishing House.
6. Maheshwari, S.N., *Advanced Accounting*, Vikas Publishing House.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAF-105**

**BUSINESS ENVIRONMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the micro and macro environment of business in coherent and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to define and trace all the indicators of micro and macro environment affecting business organizations
- CO2:** Students will be able to identify and illustrate the impact, challenges and opportunities of all environmental indicators on business organizations
- CO3:** Students will be able to apply and demonstrate the gathered knowledge about how the various laws and other national and international policies influence the organizations in order to take proactive measures so that organizational effectiveness is maintained.
- CO4:** Students will be able to distinguish and examine the necessary techniques and skills that help them in handling the organization's global and national issues efficiently.
- CO5:** Students will be able to evaluate and value the importance of environment within which a business organization has to sustain itself successfully
- CO6:** Students will be able to design and develop their approaches and systems in maintaining coherence both at micro and macro level

**Course Contents:**

**UNIT-I**

Indicators of Internal and External Business environment; Environmental scanning and risk assessment; Concepts of Economic systems; New Industrial Policy-1991 and Recent Financial and Economic Reforms, Recent Monetary and Fiscal Policy and their impact on Business Environment.



## **UNIT-II**

Impact of Political, Economic, Social and Technological Environment on the Emerging Sectors of Indian Economy: Public Sector, Private Sectors, Services Sector and SME Sector; Privatization in India; Public Private Partnership; Challenges and Opportunities in the Rural sector.

## **UNIT-III**

Globalization Business Environment; Opportunities and challenges for MNCs in India; Foreign investment in India; Indian Foreign Trade and its Impact on Balance of Payment, Exchange rate Movements and India's Competitiveness in the world economy; World Trade Trends and Economic Integration. Contemporary Issues: Climate change, Food security, Geopolitics Sustainable Development and De-Globalization.

## UNIT-IV

Legislations for Social Responsibilities- Consumer protection Act, 1986 and its Amendments, Competition Act, 2002 and its Amendments and Environmental Protection Act, 1986; Foreign Exchange Management Act, 1999 (FEMA) and their influences on the Business Environment.

### Suggested Readings:

1. Faisal Ahmed and M. Absar Alam. Business Environment: Indian and Global Perspective, PHI, New Delhi.
2. Cherunilam, Francis, *Business Environment*, Himalya Publishing House.
3. Misra, S.K. & Puri, V.K., *Indian Economy*, Himalya Publishing House.
4. Aswath Thapa, K., *Business Environment*, Excel Books.
5. Bedi S.K., *Business Environment*, Excel Books.
6. Khujan Singh, Business Environment – Theory and Practice, IAHRW Publications
7. Paul Jastin, *Business Environment*, Tata Mc Graw Hill.
8. Economic Survey, Govt. of India.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-106**

**CORPORATE FINANCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to acquaint the students with the broad framework of financial decision-making in business*

**Course Outcomes:**

**CO1:** Students will be able to describe the basic concepts related to corporate finance.

**CO2:** Students will be able to interpret theories related to financial decision making.

**CO3:** Students will be able to solve relevant numerical problems.

**CO4:** Students will be able to examine risk in capital budgeting decisions.

**CO5:** Students will be able to select various sources of finance with evaluation of their cost.

**CO6:** Students will be able to create working capital policy for organization.

**Course Contents:**

**UNIT-I**

Financial Management: meaning, objectives and scope; types of financial decisions, risk-return framework for financial decision-making, time value of money.

Capital Budgeting Decisions: nature, importance and types of investment decision; techniques of evaluating capital budgeting decisions, risk analysis in capital budgeting.

**UNIT-II**

Capital Structure Decisions: optimum capital structure; theories of capital structure; factors determining capital structure. Sources of long term and short term finance.

Cost of Capital: concept and importance; computations of cost of various sources of finance; weighted average cost of capital.

### UNIT-III

Working Capital Management: Concept and types of working capital; operating cycle, determinants of working capital, estimation of working capital requirement; working capital policy; Management of cash, accounts receivables and inventories; financing working capital.

### UNIT-IV

Dividend Policy: Dividend and its forms, theories of dividend policy and their impact on the value of a firm; types of dividend policy. An overview of Corporate Restructuring

#### Suggested Readings:

1. Van Horne, James C., *Financial Management and Policy*, Prentice Hall of India.
2. Pandey I. M., *Financial Management*, Vikas Publishing.
3. Damodaran, A, *Corporate Finance: Theory and Practice*, John Wiley & Sons.
4. Hampton, John. *Financial Decision Making*, Englewood Cliffs, Prentice Hall Inc.
5. Khan, M.Y. & Jain, P.K., *Financial Management*, McGraw Hill.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.

- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

MBAF-107

SEMINAR

(On Indian Ethos, Computer Applications in Business,  
Contemporary Issues in Cyber Security and Modern Business)  
(Internal)

**Time Allowed: 1 Hour**

**M.M. : 50**

**Course Objective:** *Objective of this course is to acquaint the students with existing issues pertaining to Indian Ethos and business. Also, inculcating in them the ability of expressing themselves to an audience with poise and self- belief.*

**Course Outcomes:**

- CO1:** Students will be able to define the concept and scope of the seminar topic of their interest relating to Indian ethos or contemporary issues in business.
- CO2:** Students will be able to review an existing issue related to business that can help them to get ahead.
- CO3:** Students will be able to illustrate the possible managerial relevance and implications of the specific issue they have approached.
- CO4:** Students will be able to appraise the relevance of arguments prepared for the topic under consideration.
- CO5:** Students will be able to defend difference in opinion towards a topic.
- CO6:** Students will be able to develop their presentation skills.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The list of contemporary topics in Finance will be announced in the class and at least one topic will be allotted to each student by the Programme Coordinator.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student and the evaluation will be done on the basis of communication skills, contents, delivery, body-language and question-answer handling skills of the student on a proforma duly notified to the students in advance.

SECOND  
SEMESTER

**Course Objective:** *The purpose of this course is to develop an understanding of the underlying concepts, strategies and issues involved in the marketing of products and services.*

**Course Outcomes:**

- CO1:** Students will be able to recall and describe the fundamental concepts related to marketing.
- CO2:** Students will be able to describe the different approaches of marketing and environment in which marketing systems operate.
- CO3:** Students will be able to demonstrate an understanding of the 4Ps used by the marketers.
- CO4:** Students will be able to examine the upcoming trends of marketing in the ever dynamic business world.
- CO5:** Students will be able to evaluate the marketing strategies and programmes of different products in real world.
- CO6:** Students will be able to design a marketing plan for real world market offering (product/ service).

**Course Contents:****UNIT 1**

Nature, scope and concept of marketing; Corporate orientations towards the marketplace; Marketing Mix; Understanding 4 A's of Marketing; Marketing Environment and Environment Scanning; Marketing Information System and Marketing Research; Understanding Consumer and Industrial Markets; Market Segmentation, Targeting and Positioning



## **UNIT II**

Product decisions: Product concept and classification, product mix, product life cycle, new product development; Product branding, packaging and labeling decisions; Pricing decisions: Factors affecting pricing decisions, setting the price, Pricing strategies and methods.

## **UNIT III**

Distribution Channels and Logistics Management: nature, types and role of intermediaries; Channel design decisions, Channel behavior and organization, Channel management decisions, Logistics management decisions. Marketing communication and promotion decisions: Factors influencing promotion mix; Advertising decisions; Personal Selling; Sales force management; Sales promotions; Publicity and Public relations.

## UNIT IV

Holistic marketing: Trends in marketing practices, Internal marketing, Socially responsible marketing, Marketing implementation and control; New issues in marketing -Globalization, Consumerism, Green Marketing, Direct Marketing, Network Marketing, Event Marketing, Ethics in Marketing.

### Suggested Readings:

1. Kotler, Philip and Keller, Kevin, *Marketing Management*, Prentice Hall of India
2. Kotler, Philip and Armstrong, G., *Principles of Marketing*, Prentice Hall of India
3. Czinkota & Kotabe, *Marketing Management*, Thomson Learning
4. Ramaswamy, V.S. & Namakumari, S., *Marketing Management: Planning, Control*, Macmillan
5. Kotler, Lane, Keller., *Marketing Management*, Pearson
6. Rajan Saxena, *Marketing Management*, McGraw Hill
7. R. Srinivas, *Case Studies in Marketing- Indian Context*, PHI Learning
8. Stanton, *Fundamentals of Marketing*, McGraw Hill
9. Sontakki, C.N. et al., *Marketing Management*, Kalyani Publishers
11. Kumar, A and Meenakshi, N, *Marketing Management*, Vikas Publishing House Pvt. Ltd.
12. C.K. Prahalad, *The Fortune at the Bottom of Pyramid*, FT Press
13. Matt Haig, *100 Brand Failures*, Kogan Page
14. W. Chan Kim & Renee Mauborgne, *Blue Ocean Strategies*, Harvard Business Review Press

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-202**

**HUMAN RESOURCE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize students to the various facets of managing people and to create an understanding of the various policies and practices of human resource management.*

**Course Outcomes:**

- CO1:** Students will be able to recall the terms associated with Human Resource Management.
- CO2:** Students will be able to discuss various HR practices used in the business world.
- CO3:** Students will be able to apply various HR practices.
- CO4:** Students will be able to compare and contrast HR practices across companies.
- CO5:** Students will be able to evaluate the effectiveness of HR practices adopted in the organizations.
- CO6:** Students will be able to create and design the HR strategies related to coping in dynamic business environment.

**Course Contents:**

**UNIT-I**

Introduction to HRM: Concepts and Perspectives of Human Resource Management; Human Resources Management in a Changing Environment; Managerial and Operative Functions of HRM.

## **UNIT-II**

Recruitment, Placement and Retention Strategies; Human Resource Planning; Job Analysis; Methods of Manpower Search; Attracting, Selecting and Retaining Human Resources; Induction and Socialization.

## **UNIT-III**

Training and Development: Manpower Training and Development; Performance Appraisal and Potential Evaluation; Career and Succession Planning; Talent Management.

## **UNIT-IV**

Employee Relations and Compensation Administration: Job Evaluation and Compensation Management; Incentives and Employee Benefits; Employee Welfare; Industrial Relation; Employee Separation Practices, HR Accounting and audit.

### **Suggested Readings:**

1. Aswathappa, K., *Human Resource and Personnel Management*, Tata McGraw Hill.
2. Dessler, G., *Human Resource Management*, Pearson Education.
3. Venkatesh, D.N. & Jyothi P., *Human Resource Management*, Oxford University Press.
4. Bohlander, G. & Snell, S., *Human Resource Management*, Cengage Learning.
5. Patnayak, B., *Human Resource Management*, PHI Learning.
6. Rao, V.S.P., *Human Resource Management*, Excel Books.
7. Cascio, W.Y., *Managing Human Resources*, Irwin-McGraw Hill.
8. Noe, Hollenbeck, Gerhart & Wright, *Human Resource Management*, McGraw-Hill Higher Education

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-203**

**BUSINESS COMMUNICATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course is aimed at equipping the students with the necessary techniques and skills that help them in communicating effectively for handling inter as well as intra organizational issues.*

**Course Outcomes:**

- CO1:** Students will be able to define and outline all four business communication skills i.e. reading, writing, speaking and listening
- CO2:** Students will be able to identify and illustrate communication abilities to face corporate challenges.
- CO3:** Students will be able to apply and demonstrate the gathered knowledge about the business communication regarding both inter and intra organizational situations
- CO4:** Students will be able to distinguish and examine the necessary techniques and skills that help them in communicating effectively for handling organizational issues.
- CO5:** Students will be able to evaluate and judge which business correspondence is required when and how to use it in order to handle corporate tasks.
- CO6:** Students will be able to design and develop their methods and ways in transmitting information within and outside the organizations in the most effective manner

**Course Contents:**

**UNIT-I**

Communication: Importance for business organization; Process and associated hurdles; Principles for effective communication; Dimensions of Communication; Network of communication; Grapevine

## **UNIT-II**

Verbal Communication: Oral and Written; Non-Verbal Communication: Kinesics; Paralanguage; Proxemics; Sign Language. Cross Cultural Communication.

## **UNIT- III**

Essentials of effective business correspondence; Business Letter- Types; Proposal writing Report writing- Essentials, Types, and Steps, Introduction to Plagiarism; Notices, Circulars, Office Orders, Memos, Agenda and Minutes, Representations, Employee Newsletters.



## UNIT-IV

Presentation Skills; Listening Skills; Small Talks; Public Speaking; Resume' Writing; Meetings; Interview; Group Discussion; Electronic Mail and Telephone Etiquettes.

### Suggested Readings:

1. Raymond V. Lesikar & Marie E. Flatley, *Basic Business Communication*, TMH
2. Murphy H. A. and Hildebrandt H. W. , *Effective Business Communications*, TMH
3. Sinha, K.K. *Business Communication*, Galgotia Publishing Co
4. Courtland L. Bovee, John V. Thill & Barbara E. Schatzman, *Business Communication Today*, Pearson Education.
5. Krishna Mohan & Meera Banerji, *Developing Communication Skills*, Macmillan India Ltd.
6. Taylor, S., *Communication for Business*, Pearson Education.
7. Any leading National English Daily

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF– 204**

**INDIAN FINANCIAL SYSTEM AND MARKETS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to discuss the Indian financial system, management of financial institutions including a detailed study of the working of the leading financial institutions in India.*

**Course Outcomes:**

**CO1:** Students shall be able to understand the role and functions of financial system in the macro economy.

**CO2:** Students shall be able to demonstrate awareness of the current structure and regulations of Indian Financial System.

**CO3:** Students shall be able to describe and differentiate instrument, participants and operations of Money Market.

**CO4:** Students shall be able to appraise methodology of Primary and Secondary Markets and functioning of banking and stock market regulators.

**CO5:** Students shall be able to evaluate and analyse various financial institutions of India and their role in the development of the country.

**CO6:** Students shall be able to create strategies to design and promote different financial Products and Instruments.

**Course Contents:**

**UNIT I**

Financial System: Introduction, functions and organisation. Role of Financial System in economic development. An overview of Indian financial system. Regulatory Framework; Reforms in the Indian financial system.

## **UNIT II**

Financial Markets: Money market: meaning , constituents and functions; Money market instruments and Recent trends in Indian money market. Capital market: primary and secondary markets; Meaning, functions and recent developments; Government securities market. RBI and SEBI: their objectives and major functions.

## **UNIT III**

Financial Institutions: Commercial Banks: meaning, functions, present structure; E-banking; Recent developments in commercial banking. Concept of banking and non-banking institutions, Development financial institutions: SIDBI, NABARD, EXIM Bank and SFCs.

## UNIT IV

Financial Instruments: Shares, Debentures/Bonds including Floating Rate Bonds, Zero Coupon Bonds, Deep discount bonds. Warrants, Derivatives: Futures, Options, swaps. ADRs, GDRs and IDRs. Interest Rate Structure: Determinants of interest rate structure; Differential interest rate; recent changes in interest rate structure.

### Suggested Readings:

1. Rose, Peter S. and Fraser, Donald R. *Financial Institutions*. Ontario, Irwin Dorsey.
2. Khan M.Y., *Indian Financial System*, Tata McGraw-Hill.
3. Vij, Madhu. *Management of Financial Institutions in India*. Anmol.
4. Yeager, Fred C. and Seitz, Nail E. *Financial Institution Management: Text and Cases*. Englewood Cliffs, Prentice Hall Inc.
5. Bhole L.M., *Management of Financial Institutions*, Tata McGraw-Hill.
6. Pathak, V Bharati, *The Indian Financial System*, Pearson Education.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-205**

**FINANCIAL SERVICES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to help students to learn the various financial services and their role in the overall financial system.*

**Course Outcomes:**

- CO1:** Students shall be able to understand various financial services and their future in Indian Financial Market.
- CO2:** Students shall be able to illustrate concepts of factoring, forfeiting and leasing and their suitability in different corporate situations.
- CO3:** Students shall be able to examine and appraise credit rating and regulatory environment relating to credit rating agencies.
- CO4:** Students shall be able to appraise and evaluate need of securitisation and venture capital in Indian market.
- CO5:** Students shall be able to analyse different methods of issuing securities and role of intermediaries in the Primary market.
- CO6:** Students shall be able to design and formulate strategies for various financial services products.

**Course Contents:**

**UNIT I**

Financial Services: Meaning, Nature and Types; Leasing: Concept, Classification, Accounting, Legal and Tax Aspects of Leasing, Financial Evaluation of Leasing.

**UNIT II**

Factoring: Meaning, Characteristics and Types of Factoring arrangements, Factoring in India, Factoring vs. Forfeiting; Credit Rating: Meaning and Types, Benefits of Credit rating to investors and companies; Objectives and Functions of Credit Rating Agencies.

### **UNIT III**

Credit Cards: Concept and Significance; Types of credit Cards, Credit Card business in India. Book Building: Concept and Mechanism of Book Building; Significance and Benefits of Book Building; Bought Out Deals: Meaning and Nature; Mechanisms of Bought out Deals; Advantages; The Present Scenario.

## UNIT IV

Securitisation: Concept, Mode, Mechanism and Beneficiaries of Securitisation, Securitisation in India; Venture Capital: Meaning and Modes of Financing; Role and Functions of Merchant Bankers.

### Suggested Readings:

1. Clifford, G., *Financial Markets, Institutions and Financial Services*, PHI.
2. Khan, M. Y., *Management of Financial Services*, McGraw-Hill.
3. Gordan, E and K. Natrajan, *Emerging Scenario of Financial Services*. Himalaya Publishing House.
4. Meidan, Arthur Brennet, M., *Option Pricing: Theory & Applications*, Lexington Books.
5. Kim, Suk and Kim, Seung, *Global Corporate Finance. Text and Cases*, Miami Florida, Kotb.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-206**

**MANAGEMENT SCIENCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop an understanding of basic management science techniques and their role in managerial decision making.*

**Course Outcomes:**

- CO1:** Students will be able to define the basic concepts in the field of Management Science.
- CO2:** Students will be able to recognize the contribution of Management Science in quality decision making.
- CO3:** Students will be able to apply various methods and techniques to optimize the utilization of the resources.
- CO4:** Students will be able to appraise the utility of different methods in finding optimal solutions of the managerial problems.
- CO5:** Students will be able to evaluate the performance and suitability of different methods used for efficient utilization of the resources.
- CO6:** Students will be able to formulate the problems and interpret the results produced by the applied models.

**Course Contents:**

**UNIT-I**

Management Science - Basic concepts and its role in decision-making. Linear programming: meaning, scope & assumptions, Formulation of linear programming problem & solution by graphical & simplex methods and some special cases.



## **UNIT-II**

Duality and Sensitivity analysis: change in objective function coefficient and availability of resources with simplex method. Transportation - Some special cases like maximization, unbalanced problems, degeneracy in transportation models, Assignment models (HAM).

## **UNIT-III**

Queuing theory (single channel poisson arrivals with exponential service time, infinite population model); Inventory management techniques (Deterministic Model), special techniques of inventory management; PERT/CPM - Network analysis, determining the critical path, calculation of float.

## UNIT-IV

Game theory: Pure and mixed games, dominance and graphical method. Decision theory: one stage and multi stage decision trees; Introduction to Integer programming, Goal programming, Dynamic programming.

### Suggested Readings:

1. Vohra, N.D. *Quantitative Techniques in Management*, Tata McGraw Hill.
2. Budnik, Frank S. Dennis Mcleavey, Richard *Principles of Operations Research*, Richard Irwin, Illinois - All India Traveller Bookseller
3. Sharma, J K. *Operations Research: Theory and Applications*, New Delhi, Macmillan India Ltd.
4. Taha, H A., *Operations Research - An Introduction*, New York, Mc-Millan.
5. Narang, A S. *Linear Programming and Decision Making*, Sultan Chand.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *This course is designed to introduce the students to the fundamentals of research methods and to equip them to follow scientific methods in solving business problems.*

**Course Outcomes:**

- CO1:** Students will be able to relate with the basic understanding of research methodology in the changing business scenario.
- CO2:** Students will be able to identify and classify the application of analytical techniques to face the tasks aimed at fulfilling the objective of business decision making.
- CO3:** Students will be able to apply and demonstrate an understanding of ethical dimensions of conducting research.
- CO4:** Students will be able to distinguish and examine the necessary experimental techniques that help in scientific decision making.
- CO5:** Students will be able to judge and support best alternatively relating to the practices learnt through research methods.
- CO6:** Students will be able to assemble and formulate advanced ways of taking decisions in a logical manner.

**Course Contents:****UNIT –I**

Introduction to Research: Defining Business Research, Types of Research; Scientific Method, Theory Building, Type of Variables; Research Process: Problem Definition, Exploratory Research.

## **UNIT –II**

Research Designs: Concept, Need and Types of Research Designs; Survey Research: Nature of Surveys, Errors in Survey Research, Personal Interview, Telephone Interview, Self-Administered Questionnaire; Observation Methods; Introduction to Experimental Research.

## **UNIT –III**

Sampling Design: Census v/s Sampling, Sampling Methods, Determination of Sample Size; Measurement and Scaling Concepts, Attitude Measurement, Questionnaire Design, Basic Concepts of Reliability and Validity

## UNIT –IV

Data Analysis: Descriptive Statistics, Univariate Statistics; Bivariate Analysis: Test of Difference, Measures of Association; Introduction to Multivariate Analysis; Report Writing.

### Suggested Readings:

1. Zikmund, W. G. *Business Research Methods*. Thomson.
2. Copper, D. R., Schindler P. S. & Sharma, J. K. *Business Research Methods*, McGraw Hill Education.
3. Burns, R. B. & Burns, R. A. *Business Research Methods and Statistics using SPSS*, SAGE Publications Ltd.
4. Bajpai, N. *Business Research Methods*, Pearson.
5. Chawla, D. & Sondhi N., *Research Methodology: Concepts and Cases*, Vikas Publishing House.
6. Panneerselvam, R., *Research Methodology*, Prentice Hall India.
7. Kothari, C.R. *Research Methodology & Technique*, New Age International Publishers.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

# **THIRD SEMESTER**

**MBAF-301**

**STRATEGIC MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at imparting knowledge of formulation, implementation and evaluation of Business Strategies.*

**Course Outcomes:**

- CO1:** Students will be able to outline the type of decisions taken at different levels of organisation.
- CO2:** Students will be able to explain the process of strategic decision making in an organisation.
- CO3:** Students will be able to apply various tools to assess business environment.
- CO4:** Students will be able to differentiate among various stages of strategic management starting from strategy formulation to its evaluation.
- CO5:** Students will be able to evaluate the strategy which best fits in achieving the organisational goals.
- CO6:** Students will be able to develop a framework of how an organisation actually works by developing policies and strategies.

**Course Contents:**

**UNIT-I**

An introduction to business policy - Nature, Objective and importance of business policy; An overview of strategic management; Strategic decision making; Process of strategic decision making.

## **UNIT-II**

Strategy formulation: Company's vision, mission and objectives; Environmental and organizational appraisal, Strategic alternatives and choice; Types of strategies; Business ethics and corporate strategy, Concept of value chain, core competency, resource base theory and competitive advantage.

## **UNIT-III**

Strategy implementation: Designing organizational structure and activating strategies; Matching structure and corporate strategy, Structural, Behavioral and Functional implementation.



## UNIT-IV

Strategy Evaluation: Strategic evaluation and Control, Strategic and Operational Control; Techniques of evaluation and control.

### Suggested Readings:

1. Jauch & Glueck, *Business Policy and Strategic Management*, McGraw-Hill Publications.
2. Thompson A.A. and Stickland A.J, *Strategic Management- Concept and cases*, Pearson
3. Michael Porter, *Competitive Advantage of Nations*, Free Press.
4. Azhar Kazmi, *Business Policy and Strategic Management*, Thomson Learning
5. Kenneth, A. Andrews, *Concepts of corporate Strategy*, Irwin/McGraw-Hill
6. Melvin J. Stanford, *Management Policy*, Prentice-Hall
7. Pearce, J. A., II, and R. B. Robinson, Jr. *Strategic Management: Strategy Formulation, Implementation, and Control*, Chicago, IL: R. D. Irwin, Inc
8. Jean-Louis Schaan, & Micheál J. Kelly *Cases in Alliance Management: Building Successful Alliances*, SAGE Publications

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever

possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF- 302**

**BUSINESS LEGISLATION**

**Time Allowed: 3Hours**

**M.M: 60**

**Course Objective:** *The aim of the paper is to acquaint the students with the Business law and Company law in their future role as managers.*

**Course Outcomes:**

- CO1:** Students will be able to define laws applicable to a business.
- CO2:** Students will be able to classify different laws and explain their specific purpose.
- CO3:** Students will be able to illustrate cases of law and interpret own manner to solve the problems of business class
- CO4:** Students will be able to examine company laws and compare it with previous laws before amendment of 2013
- CO5:** Students will be able to evaluate the existing business laws in India and analyse their importance
- CO6:** Students will be able to formulate guidelines according to regulatory framework of an organisation

**Course Contents:**

**UNIT-I**

The Indian Contract Act, 1872: Meaning of a Contract, Classification of Contracts, Essentials of a Valid Contract; Performance of a Contract; Discharge of a Contract; Breach of Contract; Quasi Contracts; Contract of Indemnity and Guarantee, Bailment and Pledge, Contract of Agency.

**UNIT-II**

The Sales of Goods Act, 1930: Meaning and essentials of a valid contract of sale, Distinction between sale and agreement to sell, Meaning of goods and their classification, Conditions and warranties, Doctrine of Caveat Emptor, Rights of an unpaid seller, Rights of buyer; Negotiable Instruments Act, 1881: Meaning and characteristics of negotiable instrument, Types of

negotiable instruments and their characteristics, Holder and Holder-in-due-course, Discharge and Dishonour of negotiable instruments, Negotiation and Assignment.

### **UNIT-III**

The Companies Act, 2013; Meaning and Characteristics of a Company; Objects and Applications of Companies Act, 2013; Landmark provisions of new Companies Act, 2013; Classification of companies, Concept of One Person Company; Formation of a company, Memorandum and Articles of association, Prospectus, Allotment of shares and share capital, Membership in companies.

## UNIT-IV

Meetings of Companies: General principles of meetings, Types of meetings; Prevention of Oppression and Mismanagement; Winding up of a Company; Consumer Protection Act: Define consumer rights, provisions regarding complaints in consumer courts, Unfair Trade Practices and Restrictive Trade Practices, Consumer Protection Council, Consumer forum.

### Suggested Readings:

1. Gulshan, S.S. and Kapoor, G.K., *Business Law including Company Law*, New Age International Publication.
2. Macintyre, E., *Business law*, Pearson Education.
3. Tulsian, *Business law*, Tata McGraw Hill.
4. Majumdar A.K. and Kapoor G.K., *Company Law and Practices*, Taxmann Publication.
5. Kothari, V., *Understanding Companies Act, 2013*, Taxmann Publication.
6. Pathak, A., *Contract Law in India*, Oxford University Press.
7. Gogna, P.P.S., *A Textbook of Company Law*, S. Chand Publishing.
8. Nolakha, R.L., *Company Law and Practice*, Vikas Publishing House Private Limited.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-303**

**ENTREPRENEURSHIP DEVELOPMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to expose the students to the growth of entrepreneurship in developing countries with special reference to India.*

**Course Outcomes:**

**CO1:** The students will be able to list various constituents of entrepreneurship development.

**CO2:** The students will be able to identify the various environmental factors affecting entrepreneurship development

**CO3:** The students will be able to demonstrate skills to develop business plan at individual level.

**CO4:** The students will be able to examine the feasibility of a business.

**CO5:** The students will be able to evaluate the funding alternatives available for entrepreneurs.

**CO6:** The students will be able to develop and implement a business plan.

**Course Contents:**

**UNIT-I**

Concept of Entrepreneur and Entrepreneurship, Entrepreneur vs. Manager, Significance of Entrepreneurship in Economic Development; Economic, Social and Psychological needs for Entrepreneurship; Characteristics, Qualities and Pre-requisites of Entrepreneur; Rural Entrepreneurship.

**UNIT-II**

The Function of the Entrepreneur in Economic Development of a Country; Methods and Procedures to start and expand one's own Business; Achievement Motivation; Environmental Factors affecting success of a new Business.

### **UNIT-III**

Feasibility Study -Preparation of Feasibility Reports: Selection of factory location, Economic, Technical, Financial and Managerial Feasibility of Project.

### **UNIT-IV**

Government support to new Enterprises; Role of Government and Promotional agencies in Entrepreneurship Development; Entrepreneurship Development Programmes in India

### Suggested Readings:

1. Clifton, Davis S & Fyfe, David E., *Project Feasibility Analysis*, John Wiley.
2. Desai, A N., *Entrepreneur & Environment*, Ashish Publications.
3. Drucker, Peter., *Innovation and Entrepreneurship*, Heinemann.
4. Jain R., *Planning a Small Scale Industry: A Guide to Entrepreneurs*, S.S. Books.
5. Kumar, S A., *Entrepreneurship in Small Industry*, Discovery.
6. McClelland, D C & Winter, W G., *Motivating Economic Achievement*, Free Press.
7. Pareek, Udai and Venkateswara Rao, T., *Developing Entrepreneurship -A Handbook Learning Systems*, Learning Systems

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAF-304**

**SUMMER INTERNSHIP AND SEMINAR**

**(Internal)**

**Time Allowed: 1 Hour**

**M.M: 50**

**Course Objective:** *The objective of this course is to enable students to explore a career path and give themselves an edge in job market.*

**Course Outcomes:**

- CO1:** Students will be able to describe organizational structure and its functions with all the theoretical aspects learned in class room settings and simulated environment
- CO2:** Students will be able to identify (through understanding and learning the routine tasks within the organization) which work they would prefer to do after completion of MBA.
- CO3:** Students will be able to interpret the organizational dynamics in terms of organizational behavior, culture, competition, future strategies and change initiatives of the organization.
- CO4:** Students will be able to appraise the practical exposure and knowledge related to the job of their interest by working as an intern in any organization.
- CO5:** Students will be able to evaluate their learning during the internship phase and report it in form of a seminar.
- CO6:** Students will be able to assemble and present the learnings from internship.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The list of students will be notified by the Programme Coordinator in the class along with the schedule of seminar presentation by each student during the semester.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student on his/her summer training and the evaluation will be done on the basis of exposure to industry/academics, problem undertaken, communication skills, contents, delivery, body-language and question-

answer handling skills of the student on a proforma duly notified to the students in advance.

**MBAF-305**

**SECURITY ANALYSIS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart knowledge to students regarding the theory and practice of Security Analysis.*

### **Course Outcomes**

- CO1:** Students will be able to describe the environment and working of capital markets.
- CO2:** Students will be able to discuss and differentiate different financial assets and their holding motives
- CO3:** Students will be able to demonstrate the processes of calculating risk and return of financial assets
- CO4:** Students will be able to able to appraise the processes of doing fundamental and technical analysis
- CO5:** Students will be able to judge the trends in the stock markets.
- CO6:** Students will be able to develop a reasoned argument for security selection and investment choices

### **Course Contents:**

#### **UNIT-I**

The Investment Environment - Meaning and objective of investment, investment vs. gambling and speculation, investment alternatives, investment process, concept of return and risk.

## **UNIT-II**

Security Analysis – Fundamental analysis: economic analysis, industry analysis and company analysis. Technical analysis: assumptions Dow theory, chart patterns, moving averages and market indicators. Efficient market theory: weak form hypothesis, semi-strong form hypothesis and strong form hypothesis.

## **UNIT-III**

Fixed Income Securities - Bond fundamentals: bond characteristics, pricing and yields  
Valuation of fixed income and variable income securities

## **UNIT-IV**

Indian Security Market - New issue market, secondary market: SEBI, NSE, BSE and market indices. Recent trends in Indian and international stock markets, exposure to leading business web portals like [www.moneycontrol.com](http://www.moneycontrol.com), [www.bloomberg.com](http://www.bloomberg.com) etc.

### Suggested Readings:

1. Reilly, Frank K. And Brown, Keith C., *Investment Analysis and Portfolio Management*, South-Western Cengage Learning India Pvt. Ltd.
2. Bodie, Z., Kane, A. and Marcus, A., *Investments*, McGraw-Hill.
3. Fischer, Donald E. and Jordan, Ronald J., *Security Analysis and Portfolio Management*, Prentice Hall of India.
4. Sharpe, William F. et al, *Investment*. New Delhi, Prentice Hall of India.
5. Fuller, Russell J. and Farrell, James L., *Modern Investment and Security Analysis*, New York, McGraw Hill.
6. Alexander, Gordon J. and Bailey, Jeffery V., *Investment Analysis and Portfolio Management*, Dryden Press, Thomson Learning
7. Machiraju, H. R., *Indian Financial System*, Vikas Publishing House.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-306**

**RISK MANAGEMENT AND INSURANCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart knowledge to students regarding the techniques of measurement and control of risk.*

**Course Outcomes**

- CO1:** Students will be able to define the basic concepts of Insurance and Risk management
- CO2:** Students will be able to understand and comprehend the regulatory environment of Insurance
- CO3:** Students will be able to apply the knowledge in making suitable decisions to manage Risk
- CO4:** Students will be able to appraise the role of Insurance in Risk Management.
- CO5:** Students will be able to evaluate different forms of insurance that are prevailing in practice
- CO6:** Students will be able to develop products for life, general and health insurance.

**Course Contents:**

**UNIT-I**

Introduction to risk management: The Concept of Risk, Risk v/s Uncertainty, Classification of risk; Major Personal Risks and Commercial Risks; objectives of Risk Management, steps in the Risk Management Process; Techniques of managing Risk

**UNIT-II**

Insurance and Risk: meaning and characteristics of Insurance, Insurable risk characteristics, Adverse selection, Types of Insurance, Benefits and costs of Insurance to Society, Enterprise Risk Management, Insurance Market Dynamics, Financial Analysis in Risk management Decision Making

### **UNIT-III**

The evolution and growth of Life Insurance, various types of insurance; Principles of insurance; Insurance Contracts, Insurance Company Operations, leading Insurance companies in India, Role of IRDA

## UNIT-IV

Life Insurance: Types of Life Insurance, Life Insurance Contractual Provisions, Buying Life Insurance, The Liability Risk, Auto Insurance, Home Insurance, Health Insurance, Group and Pension Insurance Policies

### Suggested Readings:

1. Emmett J. Vaughan, *Risk Management*, John Wiley & Sons, Inc.
2. Rejda, G.E. & McNamara, J.M., *Principle of Risk Management & Insurance*, Parson
3. A. Suryanarayana, *Risk Management Models: A Primer*, ICFAI Reader.
4. Marshall Johon F. & Bansal, V. K., *Financial Engineering*, PHI Learning.
5. Watsham Terry J., *Futures and Options in Risk Management*, Thomson Learning
6. Karam Pal, Bodla & Garg, M.C., *Insurance Management*, Deep & deep Publications, New Delhi

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAF -307    MANAGEMENT OF BANKS AND FINANCIAL INSTITUTIONS**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objective:**    *The objective of this course is to analyze the major concepts, theories and principles of banking and financial institutions in logical and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to tell about the Indian banking structure and banking reforms in India.
- CO2:** Students will be able to explain the functions of banks and financial institutions.
- CO3:** Students will be able to interpret the role of RBI, NABARD, IFCI, SIDBI, NHB for economic development.
- CO4:** Students will be able to examine the concept of non-performing assets in Indian banking.
- CO5:** Students will be able to evaluate the risk management in bank.
- CO6:** Students will be able to formulate loan policy.

**Course Contents:**

**UNIT 1**

Indian Financial System: Introduction, Evolution and growth of banking system in India, Bank Market structure in India, Banking sector reforms (The Narsimham Committee and The Raghu Ram Rajan Committee), Recent Innovations and development in Indian Banking.

## UNIT II

**Management of Commercial Banks in India:** Functions of Bank, Sources of Bank Funds, Credit Management-Cardinal principles of sound bank lending, Formulating loan policy, Factors influencing loan policy; Investment Management-Nature and significance of investment management in commercial banks, Fundamental principles of security investment by commercial bank.

## UNIT III

Capital Adequacy in Indian Banks: Functions of capital funds in commercial banks, Capital adequacy –Basel III norms on capital adequacy in Indian commercial banks; Concept of ALM : Objectives, Functions, Process, Measurement and Management of Risks, Concept of NPAs.

## UNIT IV

**Management of Financial Institutions:** Financial Institutions, their role in economic development, challenges and opportunities; NABARD, IFCI, SIDBI, NHB– Introduction and their operational policies; Role of RBI; Insurance Industry in India, Mutual Funds, Micro Finance Institutions (MFIs); Current issues and future challenges in Management of Banks and financial Institutions.

### Suggested Readings:

1. Srivastava, R.M. & Nigam, D., *Management of Indian Financial Institutions*, Himalaya Publishing House.
2. Khan, M. Y. *Indian Financial System*, Tata McGraw Hill.
3. Suresh, P. & Paul, J., *Management of Banking and Financial Services*, Pearson
4. Singh, S.P.N., *Management of Banking and Financial Institutions*, Centrum Press
5. *Principles & Practices of Banking by Indian Institute of Banking and Finance*, Macmillan Publications

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Course Objective:** *To acquaint the students with the mechanism of the foreign exchange markets, measurement of the foreign exchange exposure, and hedging against exposure risk. Upon successful completion of this paper, Students should expect to learn the nature and purposes of foreign exchange management under the new financial order evolving higher degree of vulnerability in a highly borderless financial world.*

**Course Outcomes:**

- CO1:** Students will be able to state appropriate formats and technologies to financial communication.
- CO2:** Students will be able to identify market conventions on exchange rate quotation and correctly calculate those quotations.
- CO3:** Students will be able to apply information within the global financial environment of foreign exchange to solve problems and make informed decisions.
- CO4:** Students will be able to appraise forward exchange rates given spot exchanges rates and rationale behind it.
- CO5:** Students will be able to evaluate the problems of dealing in foreign currency and the advantages and disadvantages of overseas funding.
- CO6:** Students will be able to develop an integrative understanding of the foreign exchange market and the relationships between interest rates, spot and forward rates and expected inflation rates.

**Course Contents:****UNIT-I**

Foreign Exchange Market: Function and Structure of the FOREX markets, Foreign exchange market participants, Types of transactions and Settlements Dates, Exchange rate quotations, Nominal, Real and Effective exchange rates, and Determination of Exchange rates in Spot markets. Exchange rates determinations in Forward markets. Exchange rate behavior-Cross Rates Arbitrage profit in foreign exchange markets, Swift Mechanism.

**UNIT-II**

International Parity Relationships & Forecasting Foreign Exchange rate:- Measuring exchange rate movements-Exchange rate equilibrium – Factors effecting foreign exchange rate- Forecasting foreign exchange rates .Interest Rate Parity, Purchasing Power Parity & International Fisher effects.

### UNIT-III

Foreign Exchange exposure: -Management of Transaction exposure (Case Study: Airbus Dollar Exposure); Management of Translation exposure- Management of Economic exposure (Case study: Exporter's/Importer's Position: Hedge or Hedge Not).

### UNIT-IV

Foreign exchange risk Management: Hedging against foreign exchange exposure – Forward Market- Futures Market- Options Market- Currency Swaps-Interest Rate Swap. Cross currency Swaps-Hedging through currency of invoicing- Hedging through mixed currency invoicing.

#### Suggested Readings:

1. Eun and Resnick, *International Financial Management*, Tata McGraw Hill.
2. Eiteman, Moffett and Stonehill, *Multinational Business Finance*, Pearson.
3. Jeff Madura, *International Corporate Finance*, Cengage Learning.
4. Alan C. Shapiro, *Multinational Financial Management*, Wiley India
5. Apte, P. G *International Financial Management*, TMH.
6. Maurice Levi International Finance, Routledge.
7. Paul Einzip, *A Textbook on Foreign Exchange*
8. Paul Roth, *Mastering Foreign Exchange and Money Markets*, Pitman.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.

The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAF-309**

**PROJECT MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to understand the framework for evaluating capital expenditure proposals, their planning, finance, appraisal and management in the review of the projects undertaken.*

**Course Outcomes:**

- CO1:** Students will be able to explain the importance, scope and functions of Project Management.
- CO2:** Students will be able to illustrate the Life Cycle of any given project.
- CO3:** Students will be able to sketch estimation of Guidelines for Time, Costs and Resources required for Project Management by applying different methods.
- CO4:** Students will be able to examine the Scheduling Resources and Reducing Project Duration.
- CO5:** Students will be able to evaluate Role and Responsibilities of the project Manager, Planning, Organizing, Controlling, Skills of the Project Manager.
- CO6:** Students will be able to formulate strategies for risk reduction.

**Course Contents:**

**UNIT-I**

Project Analysis: Meaning, Overview, Capital Budgeting and Strategic Issues, Generation and Screening of Project Ideas.

**UNIT-II**

Feasibility Reports: Market and Demand Analysis; Technical Analysis; Financial Analysis; Analysis of Project Risk; Risk specific to individual firm and Market Risk; Decision under risk and Risk Analysis in Practice.

**UNIT-III**

Social Cost and Benefit Analysis: UNIDO approach and L-M Approach; Multiple Projects and Constraints, Financing of Projects, Sources of Risk capital, Recent development in India.

#### **UNIT-IV**

Project Management: Project Planning and Control, Human aspects of Project Management; Project Review and Administrative Aspects; Problem of Time and Cost Overrun.

### **Suggested Readings:**

1. Chandra, Prasanna, *Projects: Preparation, Appraisal, Budgeting and Implementation*, Tata McGraw Hill.
2. Dhankar, Raj S., *Financial Management of Public Sector Undertakings*, Westville.
3. Little I.M.D. and J.A. Mirrlees, *Project Appraisal and Planning for Developing Countries*, Hienemann Educational Book.
4. OCED Manual of Industrial Project Analysis in Developing Countries- Methodology and Case Studies, OCED, Paris.
5. Planning Commission, *Guidelines for Preparation of Feasibility reports of Industrial Projects*, Controller of Publication.
6. UNIDO Guide to Practical Project Appraisal, United Nations.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**MBAF-310**

**BUSINESS TAXATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of the course is to acquaint the participant with the implications of tax structure and corporate tax planning in operational as well as strategic terms.*

**Course Outcomes:**

- CO1:** Students will be able to outline the meaning and scope of tax policy and basic concepts of tax in India
- CO2:** Students will be able to explain constitutional provisions pertaining to taxes in India
- CO3:** Students will be able to illustrate the computation of tax liability
- CO4:** Students will be able to appraise the rationale, benefits and costs of various tax incentives offered by government
- CO5:** Students will be able to evaluate tax implications while taking business decisions
- CO6:** Students will be able to formulate tax planning for individuals or business houses

**Course Contents:**

**UNIT-I**

Basic Concepts of Income Tax; Computation of Income under Different Heads of Income, Clubbing of income, Set off and Carry forward of Losses, Deductions and Exemptions.

**UNIT-II**

Meaning and Scope of Tax Planning, Difference between Tax planning Tax Evasion and Tax Avoidance, Residential status and Tax incidence of a Company; Computation of Corporate Tax Liability.

### **UNIT-III**

Tax Planning with reference to Location of Undertaking, Tax Planning regarding Dividends Policy, Tax Planning relating to specific managerial decisions, Tax planning for employees

### **UNIT-IV**

Major defects in the structure of indirect taxes prior to GST: rationale for GST; features of GST law in India, structure of GST (SGST, CGST, UTGST and IGST); rates of GST, models of GST, GST Council

### **Suggested Reading:**

1. Singhania, V., K. & Singhania, Monica, *Students' Guide to Income Tax*, Taxmann
2. Singhania, V., K. & Singhania, Kapil, *Direct Taxes Law and practice*, Taxmann
3. Singhania, V., K. & Singhania, Monica, *Corporate tax Planning and Business Tax Procedures*, Taxmann
4. Narwal, K.,P., &Anushuya, *GST in India*, DBH Publishers and Distributers
5. Ahuja, G.& Gupta, R., *Simplified Approach to Corporate Tax Planning and Management*, Bharat Law House private limited
6. Srinivas, E. A., *Handbook of Corporate Tax Planning*, Tata McGraw Hill.
7. Iyengar, A. & C. Sampat, *Law of Income Tax*, Bharat House.

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**MBAF-311**

**CORPORATE FINANCIAL REPORTING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to acquaint the students with the contemporary issues in accounting and financial reporting which facilitates in managerial decision making.*

**Course Outcomes:**

- CO1:** Students shall be able to demonstrate understanding of Financial Statements for stakeholders.
- CO2:** : Students shall be able to illustrate complete framework of Financial Statements including notes to accounts, Auditor's report, Director's report and corporate governance report.
- CO3:** Students shall be able to apply ongoing developments for financial reporting.
- CO4:** Students shall be able to analyse impact of GAAP and its applications for reporting and compliance.
- CO5:** Students shall be able to evaluate Financial Statements for decision making in corporates.
- CO6:** Students shall be able to develop and establish a system of Financial reporting for corporates.

**Course Contents:**

**UNIT-I**

Introduction to Accounting: Meaning, nature and scope, Ethics in accounting, branches of accounting, generally accepted accounting principles (GAAP), Demand for financial

information: parties demanding financial statement information, Conflicts among parties, factors affecting demand for financial statement information; Supply of financial statement information.

## **UNIT-II**

The conceptual framework of financial Statements: purpose of the framework, scope and coverage, qualitative characteristics of financial statements, Performance financial statements of corporate entities. Significance of notes to financial statements and accounting policies. Other financial reports: Auditor's report, Directors report and corporate governance report.

## **UNIT-III**

Contemporary Issues in Financial Reporting: Human Resource Accounting, Social Accounting and Inflation Accounting.



## UNIT-IV

New Dimension of Accounting: Introduction to IFRS, Web-based reporting, Window dressing, Creative financial practices, earnings management and forensic accounting.

### Suggested Reading:

1. Foster, George, *Financial Statement Analysis*, Pearson Education Incl., Delhi.
2. Gupta, Ambrish, *Financial Accounting for Management*, Pearson Education
3. Jawahar Lal, *Accounting Theory and Practice*, Himalaya Publishing House
4. Gupta, R.L. and Radhaswamy, M., *Advanced Accountancy*, Sultan Chand & Sons
5. Anthony R.N., D.F. Hawkins and K.A. Merchant, *Accounting: Text and Cases*, McGraw Hill.
6. Ken Marshall, Steve Arnold, IFRS Conversion: Issues, Implications, Insights, John Wiley.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**MBAF-312**

**TREASURY MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the major concepts, theories of treasury management in logical and critical manner.*

**Course Outcomes:**

**CO1:** Students shall be able to explain role and objective of treasury operations and related regulatory environment.

**CO2:** Students shall be able to understand different ways of raising debt and financing deployed

by leading global treasury organisations.

**CO3:** Students shall be able to examine various short, medium and long term cash flows and different risk associated to them.

**CO4:** Students shall be able to appraise techniques related to liquidity management in a treasury.

**CO5:** Students shall be able to examine and evaluate operations of treasury office and its complete processing from inception to end.

**CO6:** Students shall be able to develop practical skills that can be applied in treasury office.

**Course Contents:**

**UNIT-I**

Scope and Function of Treasury Management: Objectives of Treasury, Structure and Organization, Responsibilities of Treasury Manager, Function of treasury – Centralized vs. Decentralized. Domestic Cash Management: Short Term/Medium Term Funding – Meaning and Importance of Cash Management, Objectives of Cash Management, Cash Flow Cycle, Cash Flow Budgeting and Forecasting, Electronic Cash Management

## **UNIT-II**

Medium term and Long term Funding: FDs/NCDs/Term Loans, Securitization; Cost Centre / Profit Centre: Financial Planning and Control, Capital Budgeting, Risk Analysis; Liquidity Management: Objectives, Sources of Liquidity, Maturity Concerns: Projected Cash Flow and Core Sources-Contingency Plans.

## **UNIT-III**

Treasury's role in International Banking: Changing Global Scenario and Treasury Functions, Treasury Structure- Front and Back Office, Forex Cash Management – Positions vs. Cash Flows- Funding Alternatives, Control of Dealing Operations – Trading Limits – Trading and Operational Policy – Moral and Ethical aspects, Confirmations, Revaluation Mark to Market and Profit Calculations.

## UNIT-IV

Regulation, Supervision and Compliance: The Need and Significance of Internal and External Audit, The Objectives, Role and Functions of Reserve Bank's Supervision and Exchange Control Departments, RBI requirements, Recent Developments in the Central Bank's Policy Framework.

### Suggested Reading:

1. Steven M. Bragg , "Treasury Management: The Practitioner's Guide", Willey Publication.
2. Robert Cooper, "Corporate Treasury and Cash Management", Palgrave Macmillan Publishers.
3. S.K. Bagchi, "Treasury Risk Management", 2<sup>nd</sup> Edition, Jaico Publishing House
4. V. A. Avadhani, "Treasury Management In India", Himalaya Publishing House
5. Indian Institute of Banking and Finance, "Theory and Practice of Treasury and Risk Management in Banks" Taxman Publishers.
6. Indian Institute of Banking and Finance, "Treasury Management, Macmillan Publishers.

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**MBAF-313**

**FINANCIAL ECONOMETRICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course aims at enabling the students to understand and analyse financial econometrics and developing their skills for the solution with the help of innovative financial econometrics.*

**Course Outcomes:**

- CO1:** Students will be able to outline the meaning and scope of financial econometrics.
- CO2:** Students will be able to explain various assumptions, concepts and methodologies underlying Time-series modelling.
- CO3:** Students will be able to solve issues in regression modelling.
- CO4:** Students will be able to appraise suitability statistical techniques to business data.
- CO5:** Students will be able to evaluate model outcomes.
- CO6:** Students will be able to assemble the knowledge of financial econometric tools for forecasting financial data.

**Course Contents:**

**UNIT-I**

Nature, scope and methodology of Financial Econometrics Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method; Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression coefficient,  $R^2$  and adjusted R

**UNIT-II**

Issues with Classical Regression Model: Multi co linearity, Autocorrelation and Heteroscedasticity; Functional forms; Dummy variables-Nature and uses; Parameter stability tests.

### **UNIT-III**

Univariate Smoothing Methods: Moving average, weighted moving average, Exponential smoothing, Seasonal indexes, Trend-seasonal and Holt-Winters smoothing.

### **UNIT-IV**

Stationary Time Series Models: Stochastic process, Stationary, Modeling AR, MA, ARMA processes, Deterministic and stochastic trends, unit roots, testing unit roots – Dickey & Fuller, Phillips and Perron tests.

### Suggested Readings:

1. Gujarati, D. N., *Basic Econometrics*. McGraw-Hill
2. Enders Walter., *Applied Econometrics Time Series*. Wiley.
3. Koutsoyiannis, A, *Theory of Econometrics*, Harper & Row.
4. Makridakis S & Wheelwright, *Forecasting Methods & Application*. Willey.
5. Brooks, *Introductory Econometrics for Finance*. Cambridge Press.
6. Johnston, J., *Econometric Methods*. McGraw Hill.
7. Patterson K, *An Introduction to Applied Econometrics*. Palgrave.

### Important Instructions for the Course Coordinator and the Examiner:

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**Course Objective:** *The main objective of this course is to make students learn the various aspects of personal finance.*

**Course Outcomes:**

- CO1:** Students will be able to describe the different concepts of personal finance.
- CO2:** Students will be able to explain the risk profiling.
- CO3:** Students will be able to demonstrate the skills in selecting financial products.
- CO4:** Students will be able to examine the different financial products according to their risk profile.
- CO5:** Students will be able to evaluate the different financial products on the basis of their cost and benefits.
- CO6:** Students will be able to design the different financial products keeping in mind macro and micro variables.

**Course Contents:**

## UNIT-I

Personal Finance: Meaning and importance. Financial planning: meaning, process and role of financial planner. Risk profiling: client data analysis, life cycle, wealth cycle. Asset allocation: Strategic, Tactical, Fixed and Flexible.

## UNIT-II

Risk Management: Meaning, process and importance. Distinguish between risk assessment, risk management and risk avoidance. Assessment of requirement of Health Insurance, Life Insurance and General Insurance. Choice of products for risk coverage



### UNIT-III

Investment Management: meaning and importance. Investment avenues: equity, debt, gold, real estate, mutual funds, exchange traded funds. Portfolio management: meaning, construction, evaluation and revision. Loan management: meaning, types, importance and assessment, personal, car loan, home Loan etc.

## UNIT-IV

Tax planning: basics terms of income tax, advance tax, tax deduction at source, deductions under section 80C, 80 CCC, 80 D and 80 G. Taxation of investment products. Retirement planning, Management of nomination, power of attorney and will

### **Suggested Readings:**

1. Kapoor Jack R, *Personal Finance*, The McGraw-Hill companies.
2. Huang. Stanley S C and Randall, Maury R., *Investment Analysis and Management*. Allyn and Bacon.
3. Gaungully, Ashok, *Insurance Management*, New Age Publishers, New Delhi.
4. Ahuja, G K & Gupta Ravi, *Systematic Approach to Income Tax*, Allahabad, Bharat Law House.
5. Pandian, *Security Analysis and Portfolio Management*, Vikas Publishing House, New Delhi.

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**OE – 301**

**COUNSELING SKILLS FOR MANAGERS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To develop basic skills among students to independently handle a wide range of employee counseling and performance counseling.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in counselling.
- CO2:** Students will be able to explain conceptual framework of counselling.
- CO3:** Students will be able to demonstrate the process of counselling.
- CO4:** Students will be able to differentiate between theories of counselling.
- CO5:** Students will be able to evaluate practical solutions to human behaviour related problems in the organization
- CO6:** Students will be able to develop his own model of counselling.

**Course Contents:**

**UNIT-I**

Introduction to Counseling- Emergence, Growth, Definition, Need, Goal, Role and Characteristics of Counselor and Counselee, Difference between Counseling and Psychotherapy, and General Principles of Counseling

**UNIT-II**

Approaches to Counseling- Psycho-analytical (Sigmund Freud Theory), Therapeutic (Alfred Adler Theory), Behaviouristic (B. F. Skinner Theory), Cognitive (Albert Ellis Model) and Humanistic Approaches (Carl Rogers Approach);

**UNIT-III**

Counseling Process- 5-D Model, the Phases of Counseling Process, Counseling Environment and Procedure, and the Core Conditions of Counseling; Counselor's Attitude and Skills of Counseling- Verbal and Non-verbal Communication Modalities, Listening Skills, Listening Barriers and Strategies to Overcome Listening Barriers;

#### **UNIT-IV**

Organizational Applications of Counseling Skills- Identifying Problems and Coping Strategies with regard to Occupational Stress and Performance Management; Special Problems in Counseling- Selection of Counseling Strategies and Interventions, Changing Behavior through Counseling; Ethical and Legal Aspects of Counseling, and Current trends in Counseling.

### **Suggested Readings:**

1. Corner, L.S., and Hackney, H., *The Professional Counselor's Process Guide Helping*, Englewood Cliffs, Prentice Hall Inc.
2. Moursund, J., *The Process of Counseling and Therapy*, Englewood Cliffs, Prentice Hall Inc.
3. Munro, C A, *Counseling: A Skills Approach*, Methuen.
4. Reddy, Michael, *Counseling at Work*, British Psychological Society and Methuen.
5. Rao, S. Narayana, *Counselling and Guidance*, Tata McGraw Hill.
6. Gladding, S. T, *Counseling- A Comprehensive Profession*, Pearson.
7. Singh, Kavita, *Counselling Skills for Managers*, Prentice Hall of India.

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**Course Objective:** *Econometrics is concerned with quantifying economic relations, with the provision of numerical estimates of the parameters involved and testing hypotheses embodied in economic relationships. This course aims to provide a basic introduction to econometric analysis, to enable students to examine existing theories with empirical data. In doing so, it examines the difficulties inherent in confronting theory with business data in order to quantify relationships, in dealing with errors and problems in variables which can be only observed but not controlled, and the means of compensating for uncertainty in data.*

**Course Outcomes:**

- CO1:** Students will be able to define and memorize the various fundamental terms and concepts of econometrics.
- CO2:** Students will be able to explain the basic assumptions, procedures and properties of various estimators.
- CO3:** Students will be able to apply various data analysis models.
- CO4:** Students will be able to compare the results obtained from various models.
- CO5:** Students will be able to evaluate the results and test their statistical significance.
- CO6:** Students will be able to develop a good quality research paper in finance and economics using the econometric methods

**Course Contents:****UNIT-I**

Nature, scope and methodology of econometrics; Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method.

## **UNIT-II**

Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression co-efficient,  $R^2$  and adjusted  $R^2$ ; Econometric Problems: Multi co linearity, Autocorrelation and Heteroscedasticity.

## **UNIT-III**

Dummy variables-Nature and uses, Regression on dummy variables, Regression on Dummy Dependent Variable-The basic idea of the Linear Probability Model (LPM), Probit and Logit Models. Dynamic Econometric Models: Koyck distributed lag model, the adaptive expectation model, and the partial adjustment model.

## UNIT-IV

Simultaneous Equation Models: Structural, Reduced and final forms, Identification-Order and rank conditions, Methods for estimating the simultaneous models-Basic idea of Indirect Least Square (ILS) and Two Stage Least Square (2SLS) methods. Seemingly Unrelated Regressions (SUR), SUR versus OLS

### Suggested Readings:

1. Greene, William H., *Econometric Analysis*, Macmillan.
2. Johnston, J., *Econometric Methods*, McGraw -Hill.
3. Gujarati, Damodar N., *Basic Econometrics*, McGraw-Hill.
4. Stock J. H. and Watson M.W. *Introduction to Econometrics*, Addison-Wesley Series in Economics, 2nd Edition (2006).
5. Koutsoyiannis, A., *Theory of Econometrics*, Harper & Row.
6. Kmenta, J., *Theory of Econometrics*, Macmillan.
7. Maddala, G.S., *Introduction to Econometrics*, Macmillan.

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**OE-304**

**APPLICATIONS OF MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to acquaint the students with the various aspects of applications of the marketing principles in corporate world.*

**Course Outcomes:**

- CO1:** Students will be able to outline with the various application areas of marketing.
- CO2:** Students will be able to explain the key concepts related to the application areas of marketing.
- CO3:** Students will be able to use the marketing concepts in interpreting marketing strategies.
- CO4:** Students will be able to appraise a marketing environment from different perspective.
- CO5:** Students will be able to judge the overall marketing mix strategy of an organization.
- CO6:** Students will be able to develop a basic marketing strategy for varied areas of marketing.

**Course Contents:**

**UNIT-I**

Consumer Behavior: Introduction to consumer behavior, Understanding the role of internal and external influences on consumer behavior, Consumer Decision Making Process.

Sales and Distribution: Introduction to Sales, Its Importance, objectives and functions; Sales forecasting & designing sales territories; Distribution Channels: purpose & types of distribution channels

**UNIT-II**

Retailing: Introduction to Retailing; Organized Vs Unorganized retailing, Types of Retail formats. Internet marketing: Relevance of Internet Marketing, Web analytics, SEO, Social Media Marketing.

### **UNIT-III**

Marketing of Services: Introduction to Services, Characteristics of Services compared to Goods, Service Mix, Gap model of Service Quality, Service classification. Marketing Communication: Elements of Marketing Communication, Relevance of IMC, Designing a Marketing Communication Programme

### **UNIT-IV**

Industrial Marketing: Meaning and Concept of Industrial Marketing, Types of Industrial Customers, Classification of Industrial Products, Industrial Buying Process. Rural Marketing: Introduction to rural markets in India, Classification of products and services in rural marketing, Analysis of rural demand, Marketing Practices in rural market.

### **Suggested Readings:**

1. Schiffman, L., & Wisenblit, J., *Consumer Behaviour*, Prentice Hall PTR.
2. Still, Richard R., Edward W. Cundiff, and Norman A.P. Govoni: *Sales Management*, Prentice Hall, New Delhi.
3. Christopher Lovelock, Jochen Wirtz and Jayanta Chatterjee, *Services Marketing*, Pearson Education
4. Bowersox and Others, *Physical Distribution Management*, Tata McGraw Hill, New Delhi.
5. Levy Micheal, Weitz Barton A. And Pandit Ajay, *Retailing Management*, Tata McGraw Hill, New Delhi
6. Havalder, Krishna K., *Industrial Marketing*, TMH, New Delhi.
7. George E. Belch, Michael A. Belch and Keyoor, Purani, *Advertising and Promotion*, McGraw Hill Education.
8. Charlesworth, A., *Internet Marketing: A Practical Approach*, BH Publications.
9. Acharya S. S. and Agarwal N. L., *Agricultural Marketing in India*, Oxford & IBH Publishing Co.

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**OE-305 EXPORT IMPORT PROCEDURES AND DOCUMENTATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of the course is to acquaint the students with the export-import procedures and documentation*

**Course Outcomes:**

- CO1:** Students will be able to describe the legal framework and procedure governing international trade.
- CO2:** Students will be able to explain the incorporation of various terms in drafting of an export contract and understand the importance of risk management.
- CO3:** Students will be able to apply the concepts learned in terms of export order, delivery and international trade pricing to actual transactions.
- CO4:** Students will be able to appraise the role and importance of export-import documentation and procedure framework according to commodities and countries.
- CO5:** Students will be able to evaluate the nuances of import and export clearance procedures.
- CO6** Students will be able to develop the skills to export-import various commodities in different countries and avail benefits of various export incentives and promotional schemes given by government.

**Course Contents:**

**UNIT I**

Export Preliminaries, Documentation in international trade: Aligned Documentation System (ADS); Commercial documents, Regulatory documents, Documents related to goods, shipment, payment, inspection and legal regulated documents, Official machinery for consultation.

## **UNIT II**

Export contract: Distinction between domestic sales contract and export sales contract, Major laws for export contracts, Elements in export contracts, Dispute settlement, Role of ICC; INCOTERMS, Containerization.

## **UNIT III**

Export order processing; shipping and custom clearance of export and import cargo; central excise clearance; Role of clearing and forwarding agents. Types of risks in international trade, Cargo Insurance and claim Procedures

## UNIT IV

Methods of payment in international trade; documentary collection of export bills, UCPDC guideline, Instruments of payments, Pre-shipment and post-shipment finance, Negotiation of documents with banks, Main Provisions of FEMA; Procedure and documentation for availing export incentives.

### Suggested Readings:

1. C. Rama Gopal, *Export Import Procedures, Documentation and Logistics*, New Age International Publishers, New Delhi.
2. M. D. Jitendra, *Export Procedures and Documentation*, Rajat Publications.
3. Pervin Wadia, *Export Markets and Foreign Trade Management*, Manishka Publications.
4. Paras Ram, *Export: What, Where and How*, Anupam, Publications.
5. Government of India, *Handbook of Import - Export Procedures*.
6. Nabhi's *Exporters Manual and Documentation*.
7. Nabhi's *New Import-Export Policy Procedures*

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**OE-306**

**CORPORATE GOVERNANCE AND BUSINESS ETHICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize the students about the various ethical and corporate governance issues in business management in the current environment.*

**Course Outcomes:**

- CO1:** Students will be able to describe the different concepts of corporate governance.
- CO2:** Students will be able to explain the ethical dimension of doing business.
- CO3:** Students will be able to demonstrate the skills in implementing governance related matters
- CO4:** Students will be able to examine the different issues pertaining to corporate social responsibility of business.
- CO5:** Students will be able to evaluate the regulatory aspects of corporate governance.
- CO6:** Students will be able to design practical ways of inculcating ethics in various functions and operations of business.

**Course Contents:**

**UNIT-I**

Evolution of corporate governance; developments in India; regulatory framework of corporate governance in India; SEBI guidelines on corporate governance; reforms in the Companies Act

**UNIT-II**

Corporate management vs. governance; internal constituents of the corporate governance; key managerial personnel (KMP); chairman- qualities of a chairman, powers, responsibilities and duties of a chairman; chief executive officer (CEO), role and responsibilities of the CEO.

### **UNIT-III**

Introduction to Business Ethics: The concept, nature and growing significance of Ethics in Business, Ethical Principles in Business, Ethics in Management, Theories of Business Ethics, Ethical Issues in Business, Business Ethics in 21<sup>st</sup> Century.

### **UNIT-IV**

Ethics in various functional areas of Business: Ethics in Finance, Ethics in HRM, Ethics in Marketing, Ethics in Production and Operation Management.



### **Suggested Readings:**

1. Mallin, Christine A., *Corporate Governance (Indian Edition)*, Oxford University Press, Delhi.
2. Blowfield, Michael, and Alan Murray, *Corporate Responsibility*, Oxford University Press.
3. Francesco Perrini, Stefano, and Antonio Tencati, *Developing Corporate Social Responsibility-A European Perspective*, Edward Elgar.
4. Sharma, J.P., *Corporate Governance, Business Ethics & CSR*, Ane Books Pvt Ltd, New Delhi.
5. Manuel G. Velasquez, *Business Ethics*, Pearson Prentice Hall.
6. Ravindranath B. & Narayana B., *Business Ethics*, Vrinda Publications Pvt. Ltd

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE-307**

**INDIAN ETHOS AND VALUES**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objectives:** *The course aims to help student appreciate the significance of Indian Ethos and Values along with its relevance and implications to managerial decision making.*

**Course Outcomes:**

- CO1:** Students will be able to recall the values related to Indian ethos.
- CO2:** Students will be able to identify how Indian ethos is associated with business organizations.
- CO3:** Students will be able to demonstrate the skills required to develop a holistic approach towards management of organizations
- CO4:** Students will be able to appraise the importance of Indian education system and philosophy behind it.
- CO5:** Students will be able to evaluate the human values thus generating a value-driven management.
- CO6:** Students will be able to develop ways to solve real-life problems related to human behaviour based on his understanding on Indian ethos and values.

**Course Contents:**

**UNIT I**

Indian Ethos: Meaning of Bharat, relevance of Indian ethos, role of Indian ethos in managerial practices; Sources of Indian Ethos in Management: Vedas, Ramayana, Bible, Quran, Kautilya's Arthashastra, Ethics v/s Ethos; Indian Management v/s Western Management.

**UNIT II**

Modern Approach towards Indian Ethos : Introduction, Indian Management Thoughts, Holistic Approach to Management; Sadhana –In Management context, The Tatwas in Indian Ethos; Management Thoughts and Practice: Harmony with Environment, Dharma, Swadharma and Detachment, Holistic approach to Personality, Managerial Purusharth Karma yoga & enlightened leadership.

### **UNIT III**

Learning and Education System in India: Learning concept, Gurukul System of Learning, The beginning of modern education system, Achievements of the Indian education system; Law of Karma, Law of creation, law of humility, law of growth, law of responsibility.

## UNIT IV

Human Values: Meaning, significance, Vedic literature and values, formation of values, Aristotle's view on value inculcation, Objectives of value-based system, Interrelation of Values and Skills, Values and the workplace, Value-based Human response management, Need of value-based holistic management, Value-driven management, Indian culture and wisdom, The ethical and spiritual values and Methods of heart and mind purification.

### Suggested Readings:

1. Agarwal, T. & Chandorkar, N., *Indian Ethos in Management*, Himalaya Publishing House
2. Nandgopal, R. & Sankar, R.N.A., *Indian Ethos & Values in Management*, Tata McGraw Hill Education
3. **Ganjre, A.K., Pawar, P. & Laxman R.**, *Indian Ethos - Modern Management Mantra*, Himalaya Publishing House
4. **Bansal, I.**, *Management Concept in ancient India psycho-philosophic thought and their significance in present day organization*, Jaipur, Narayan Publication
5. Sharma. S., *Management in New Age: Western Windows Eastern Doors Management*, New Age International

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

OE-308      COMPUTER APPLICATIONS IN BUSINESS  
AND CYBER SECURITY

**Time Allowed: 3Hours**

**MM: 60**

**Course Objective:** *Objective of this course is to familiarize the student with basic concepts of information technology, its application in business and make them conscious of cyber security laws and practice.*

**Course Outcomes:**

**CO1:** Students will be able to relate with various software related to office application.

**CO2:** Students will be able to explain and identify electronic data transfer takes place and will

be able to handle data base management systems.

**CO3:** Students will be able to use and operate telecommunication networks which are most commonly used in organizations.

**CO4:** Students will be able to question and test the various operations of the internet.

**CO5:** Students will be able to evaluate and examine the perspectives of cyber security hence bearing ethical responsibility.

**CO6:** Students will be able to develop solutions for real-life problems based on computer applications and cyber security.

**Course Contents:**

UNIT-I

Software Packages for Office Applications- Word Processing using MS Word, Spreadsheets using MS Excel, Presentations using MS PowerPoint, Creating web pages and web applications with HTML, Business functionalities using Tally software.

## UNIT-II

Electronic Data Processing: An introduction; Data processing cycle; data hierarchy; data file structure; file organization, Data Base Management Systems

## UNIT-III

Telecommunication and Networks: Types of Telecommunication Networks, Telecommunications Media, Network Topologies, Network Architectures-The OSI Model. The Internet, Intranet and Extranets: Operation of the Internet, Services provided by Internet, World Wide Web, Intranet and Extranets.

## UNIT-IV

Cyber Security: Perspective of Cyber security, Application security, Information security, Network security, End-user education, Cryptography / Encryption, Security issues in wireless, Security Threats and Vulnerabilities, Ethical Responsibility - Business Ethics, Technology Ethics; Cyber Crime and Privacy Issues. Brief introduction to Information Technology Act, 2000, IT (Amendment) Act

### Suggested Readings:

1. Ram, B., *Computer Fundamentals*, New Age Publications.
2. Rajaraman, V., *Introduction to Information Technology*, PHI.
3. Shrivastava., *Fundamental of Computer & Information Systems* ,Wiley Dreamtech.
4. Chwan-Hwa (John) Wu, J. David Irwin, *Introduction to Computer Networks and Cyber security*, CRC Press.
5. Aparna Viswanathan, *Cyber Law*, Lexi sNexis Butterworths

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of four short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry 8 marks each. The maximum time allotted for the major test is 03 (three) hours.

**OE-309**

**DISASTER MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to understand the framework for evaluating disaster management regarding the capital expenditure proposals, their planning, finance, appraisal and management in the review of the projects undertaken.*

**Course Outcomes:**

- CO1:** Students will be able to explain the importance, scope and functions of Disaster Management.
- CO2:** Students will be able to illustrate the Life Cycle of any given disaster management project.
- CO3:** Students will be able to sketch estimation of Guidelines for Time, Costs and Resources required for Disaster Management by applying different methods.
- CO4:** Students will be able to examine the Scheduling Resources and Reducing Disaster Duration.
- CO5:** Students will be able to evaluate Role and Responsibilities of the Disaster Manager, Planning, Organizing, Controlling, Skills of the Disaster Manager.
- CO6:** Students will be able to formulate strategies for risk reduction in Disaster.

**Course Contents:**

**UNIT-I**

Introduction to Disasters: Concepts, and definitions (Disaster, Hazard, Vulnerability, Resilience, Risks) Disasters: Classification, Causes, Impacts (including social, economic, political, environmental, health, psychosocial, etc.), Differential impacts- in terms of caste, class, gender, age, location, disability, Global trends in disasters, urban disasters, pandemics, complex emergencies, Climate change

**UNIT-II**

Approaches to Disaster Risk reduction: Disaster cycle its analysis, Phases, Culture of safety, prevention, mitigation and preparedness community based DRR, Structural- nonstructural



measures, roles and responsibilities of- community, Panchayati Raj Institutions/Urban Local Bodies (PRIs/ULBs), states, Centre, and other stake-holders.

### **UNIT-III**

Inter-relationship between Disasters and Development: Factors affecting Vulnerabilities, differential impacts, impact of Development projects such as dams, embankments, changes in Land-use etc. Climate Change Adaptation. Relevance of indigenous knowledge, appropriate technology and local resources

## UNIT-IV

Disaster Risk Management in India Hazard and Vulnerability profile of India, Components of Disaster Relief: Water, Food, Sanitation, Shelter, Health, Waste Management Institutional arrangements (Mitigation, Response and Preparedness, DM Act and Policy, Other related policies, plans, programmes and legislation), Contemporary issues in Disaster Management including COVID-19.

### **Suggested Readings:**

1. Alexander David, Introduction in 'Confronting Catastrophe', Oxford University Press, 2000
2. Andharia J. Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Paper no. 8, 2008
3. Blaikie, P, Cannon T, Davis I, Wisner B 1997. At Risk Natural Hazards, Peoples' Vulnerability and Disasters, Routledge.
4. Coppola P Damon, 2007. Introduction to International Disaster Management,
5. Carter, Nick 1991. Disaster Management: A Disaster Manager's Handbook. Asian Development Bank, Manila Philippines.
6. Cuny, F. 1983. Development and Disasters, Oxford University Press.
7. Document on World Summit on Sustainable Development 2002.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FOURTH  
SEMESTER**

**MBAF-401**

**COMPREHENSIVE VIVA-VOCE**

**M.M: 100**

**(Compulsory for all the Students)**

**Course Objective:** *The objective of the course is to enable students to get a thorough understanding of what conceptual knowledge they have acquired and how they will be able to express it unambiguously in a demanding situation.*

**Course Outcomes:**

- CO1:** Student will be able to recall the important terms related to core and general courses of management.
- CO2:** Students will be able to explain their understanding about learnings from the programme.
- CO3:** Students will be able to demonstrate their soft and hard skills.
- CO4:** Students will be able to examine their own spontaneity, mannerisms and presence of mind which will help them in introspection for future such events (Job Interviews).
- CO5:** Students will be able to defend the knowledge about their respective field.
- CO6:** Students will be able to assemble their experiences gained during the programme.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The Programme Coordinator will announce in the class in the beginning of the semester regarding the significance of the Comprehensive Viva-Voce Examination and the expectations of the Panel of Examiners from the passing out students of MBA Programme.
- The Panel of Examiners duly constituted by the COE/Director/Principal will conduct an oral viva-voce examination to assess the overall programme objectives and overall course outcomes achieved by the students, during the programmes, on the basis of communication skills, course contents, analytical ability and question-answer handling skills of the student on a proforma duly notified to the students in advance.



**MBAF-402**

**RESEARCH PROJECT**

**(Optional in lieu of one paper)**

**Time Allowed: 1 Hour**

**M.M: 100**

**Course Objective:** *The objective of this course is to make students understand the scientific and systematic way of solving organizational problems by making valuable choices.*

**Course Outcomes:**

- CO1:** Students will be able to draw a management problem in a scientific manner.
- CO2:** Students will be able to recognize the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Student will be able to distinguish the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO5:** Students will be able to evaluate the procedure for the scientific and systematic research in solving pragmatic problems of any organization.
- CO6:** Student will be able to construct and formulate research problems objectively thus enabling themselves to make effective decisions.

**Instructions for Research Project:** The following instructions will be followed:

1. Research project, which is optional, should be from major or core area of specialization of the student and shall be in lieu of one paper of his/her major or core area of specialization.
2. Students opting for MBA-402 Research Project in the 4th semester will have to register for the project in Semester III itself by submitting a synopsis along with consent of the supervisor in the Office of HSB and to the office of Director/ Principal in case of affiliated institutes by 15th November.
3. Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, (HSB) in case of HSB and Director/ Principal in case of affiliated institutes.

4. The external examiner, appointed by the COE/Director, will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the internal out of 40 marks separately.
  
5. The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva voce will be appointed by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes.



**MBAF-403**

**PORTFOLIO MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart knowledge to students regarding the theory and practice of portfolio management.*

**Course Outcomes:**

- CO1:** Students will be able to define the concepts and terminologies of portfolio management.
- CO2:** Students will be able to summarise the theories underlying portfolio management.
- CO3:** Students will be able to apply the concepts of portfolio management and solve relevant numerical problems.
- CO4:** Students will be able to examine and evaluate portfolio performance.
- CO5:** Students will be able to apprise and judge trends in international financial markets.
- CO6:** Students will be able to construct investment portfolio and defend their choices.

**Course Contents:**

**UNIT-I**

Introduction to Portfolio Management: Meaning, need, and objective of portfolio management, the process of portfolio management, determination of risk & return of a portfolio, risk analysis tools

**UNIT-II**

Theories of portfolio selection and management- Markowitz portfolio theory: optimal portfolio, meaning and construction of efficient frontier, investors' utility; CAPM: capital asset pricing model, risk-free and risky lending and borrowing, market portfolio; capital market theory: CML, SML and Sharpe Single Index Model; Arbitrage Pricing Theory (APT).

### **UNIT-III**

Bond portfolio management strategies –bond characteristics, fundamentals of bond valuation, bond & equity portfolio management strategies: passive portfolio strategies & active portfolio strategies.

### **UNIT-IV**

Portfolio evaluation and revision – portfolio performance evaluation, risk adjusted performance measures; meaning, need and constraints of portfolio revision; formula plans: constant-dollar-value plan, constant ratio plan, variable ratio plan, process and intricacies of trading system in Indian stock market.

### Suggested Readings:

1. Reilly, Frank K. And Brown, Keith C., *Investment Analysis and Portfolio Management*, South-Western Cengage Learning India Pvt. Ltd.
2. Fischer, Donald E. and Jordan, Ronald J., *Security Analysis and Portfolio Management*, Prentice Hall of India.
3. Sharpe, William F. et al, *Investment*. New Delhi, Prentice Hall of India.
4. Fuller, Russell J. and Farrell, James L., *Modern Investment and Security Analysis*, New York, McGraw Hill.
5. Alexander, Gordon J. and Bailey, Jeffery V., *Investment Analysis and Portfolio Management*, Dryden Press, Thomson Learning
6. Machiraju, H. R., *Indian Financial System*, Vikas Publishing House.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-404**

**FINANCIAL AND COMMODITY DERIVATIVES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to give an in depth knowledge of the functioning of derivative securities market.*

**Course Outcomes:**

- CO1:** Students will be able to describe the concepts and terminologies of financial and commodity derivatives.
- CO2:** Students will be able to explain the models used for pricing/valuation of derivatives
- CO3:** Students will be able to interpret innovations in financial and commodity markets
- CO4:** Students will be able to appraise investment opportunities in derivative market.
- CO5:** Students will be able to evaluate derivative pricing and hedging practices.
- CO6:** Students will be able to formulate basic risk management and trading strategies using derivatives.

**Course Contents:**

**UNIT-I**

Financial Derivatives –Meaning, types, uses and factors driving the growth of derivatives. Forward Contracts v/s Future Contracts. Types of Traders: Futures Markets and the use of Futures for Hedging.

**UNIT-II**

Future Payoffs: long futures and short futures. Pricing stock futures: with dividend and without dividend. Application of futures: Hedging, speculation and arbitrage. Currency Futures: Meaning, uses and contract details. Interest Rate Futures: Meaning, uses and contract details.

**UNIT-III**

Stock Options: meaning, types and uses. General factors affecting stock option price Black-Scholes Option Model and Binomial model. Option based investment strategies-bullish,

bearish, straddle, strangle and butterfly, Swaps: meaning& uses, currency swap & interest rate swap

#### UNIT-IV

Introduction to Commodity Derivatives: meaning, uses, Cereals, metals and energy products. History and Contemporary issues of Indian derivative market.

#### **Suggested Readings:**

1. Brennet, M., *Option Pricing: Theory & Applications*. Toronto, Lexington Books.
2. Cox, John C and Rubinstein, *Mark Options Markets*. Englewood Cliffs, Prentice Hall Inc.
3. Huang. Stanley S C and Randall, Maury R., *Investment Analysis and Management*, Allyn and Bacon.
4. Hull. John C. Options, *Futures and Other Derivative Securities*, PHI.
5. Sharpe. William F. et al., *Investment*, Prentice Hall of India.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *This course is designed to provide an understanding of international financial products, financial markets, and institutional structures necessary to be effective financial managers in modern corporations. Upon successful completion of this paper, Students should expect to learn the nature and purposes of financial management in the international context under the new financial order evolving higher degree of vulnerability in a highly borderless financial world.*

**Course Outcomes:**

- CO1:** Students will be able to define appropriate formats and technologies to financial communication.
- CO2:** Students will be able to explain international capital and foreign exchange market,
- CO3:** Students will be able to demonstrate an integrative understanding of the foreign exchange market and the relationships between interest rates, spot and forward rates and expected inflation rates
- CO4:** Students will be able to appraise investment opportunities in the international environment, identify market conventions on exchange rate quotation and correctly calculate those quotations
- CO5:** Students will be able to evaluate various hedging strategies.
- CO6:** Students will be able to develop strategies for futures and option contracts in hedging foreign exchange exposure.

**Course Contents:****UNIT-I**

International financial Environment- Importance, rewards & risk of international finance  
Goals of MNCs; Globalization & Multinational firm: finance functions in MNCs, structure of international financial Market; Cost and availability of international financial flows; Corporate Governance around the World; International monetary system

**UNIT-II**

The markets for foreign exchange (case study: St. Bury Herbal products Ltd) Futures and

options on foreign exchange Management of Transaction & Economic exposure (case Study: Airbus Dollar exposure); Management of translation exposure.

### UNIT-III

International Banking & Money market; forward rate Agreements (FRAs) International bond markets; International equity markets and Instruments: ADR, GDR, ECBs etc.

### UNIT-IV

Interest rates and currency swaps, FDI and cross-border acquisitions; Contemporary issues in international financial management.

#### **Suggested Readings:**

1. Aliber, R.Z., *Exchange Risk and Corporate International Finance*, Macmillan.
2. Apte P G, *International Financial Management*.
3. *International Financial Management* - Eun & Resnick, Tata McGraw Hill.
4. Luca Cornelius, *Trading in the Global Currency Markets*, Prentice Hall.
5. Shapiro, A.C., *International Financial Management*.
6. Utton, W.H., *Trading in Currency Options*, New York Institute of Finance.
7. Eiteman, Moffett and Stonehill, *Multinational Business finance*.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAF-406**

**FUNDS MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to make students learn the various aspects of funds management.*

**Course Outcomes:**

- CO1:** Students will be able to tell different concepts of funds management
- CO2:** Students will be able to explain different types of schemes available in the market
- CO3:** Students will be able to choose the schemes according to their risk profile
- CO4:** Students will be able to compare risk and return of different schemes in which funds have been invested.
- CO5:** Students will be able to evaluate different mutual fund schemes keeping into consideration the risk level.
- CO6:** Students will be able to design different mutual fund schemes taking into consideration the requirements

**Course Contents:**

UNIT-I

Concept and Role of Mutual Funds: Introduction, types of funds, key developments over the years and key constituents of a mutual fund. Legal and Regulatory Environment: Legal structure of mutual funds in India, Role of regulators in India, Investment restrictions for schemes and Investors' rights and obligations.

UNIT-II

Investment Philosophies and Styles: Diversification, growth investing, value investing, momentum style.

UNIT-III

Performance of Funds: Drivers of return and risk in a scheme. Measures of return and risk of a scheme Benchmarking and fund performance Measuring fund managers' performance Introduction to financial planning, financial planning approaches, Risk profiling and asset allocation

#### UNIT-IV

Investment strategies of funds managers: Asset class and geographic diversification, active strategies, passive strategies, top down approach, bottom up approach, sector rotation style, momentum style, small capitalization style, comparing fund management styles.

### **Suggested Readings:**

1. Mutual Fund Distributors Module, Workbook from NISM
2. Brentani, C. *Portfolio Management in Practice*, Elsevier
3. Kane and Marcus, *Investments by Bodie*, Tata McGraw Hill.
4. Blake, D., *Financial Market Analysis*, John Wiley & Sons.
5. Fabozzi, F.J., *Bond Markets Analysis & Strategies*, Pearson.
6. Freeman, A.J. and Wiles, R., *How Mutual Funds Work?* Prentice Hall India.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-407**

**FINANCIAL RESTRUCTURING AND VALUATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at providing an in-depth understanding of all aspects affecting and arising out of Corporate & Financial Restructuring and Valuation, stressing upon and dealing exhaustively with key concepts, legislative aspects and procedures.*

**Course Outcomes:**

- CO1:** Students will be able to define the concepts and terminologies of financial restructuring.
- CO2:** Students will be able to summarise the theories underlying corporate restructuring and business valuation.
- CO3:** Students will be able to interpret the regulatory environment governing financial restructuring and valuation.
- CO4:** Students will be able to compare different valuation models.
- CO5:** Students will be able to apprise and evaluate real-world cases in corporate restructuring and valuation.
- CO6:** Students will be able to formulate a plan to successfully liquidate or reorganize a business.

**Course Contents:**

**UNIT-1**

Corporate Restructuring: Meaning, Need, Scope and Modes of Restructuring; Historical Background; Emerging Trends; Planning, Formulation and Execution of Various Corporate Restructuring Strategies - Mergers, Acquisitions, Takeovers, Disinvestments and Strategic Alliances, Demerger.

## **UNIT-II**

Financial Restructuring: concept & need for Financial Restructuring, Reduction of Capital; Reorganization of Share Capital; Buy-Back of Shares – Concept and Necessity; Procedure for Buy-Back of Shares by Listed and Unlisted Companies. Legal, Economic, Taxation and Financial aspects of Mergers and Amalgamation

## **UNIT-III**

Valuation: Meaning, Objective & Scope of Valuation; Principles of Valuation; Preliminary Work relating to Valuation; Valuation Standards and Valuation Analysis; Valuation Techniques; Historical Earnings Valuation; Asset Based Valuation; Market Based Valuation.

## UNIT-IV

Regulatory Aspects of Valuation: Legal & Regulatory aspects related to Valuation such as SEBI Regulations/ RBI Regulations; Income Tax Implications; Valuations for Different Strategies- Merger & Acquisition, Demerger, Slump Sale, Liquidation and Corporate Insolvency, Internal & External Restructuring, Valuation of Intangibles, Valuation of Securities

### Suggested Readings:

1. Corporate Restructuring Valuation and Insolvency by The Institute of Company Secretaries of India
2. Ray, *Mergers and Acquisition Strategy, Valuation and Integration*, PHI
3. Ramaiya, A., *Guide to Companies Act*, LexisNexis Butterworths, Wadhwa, Nagpur
4. Sampath, K., R., *Mergers /Amalgamations, Takeovers, Joint Ventures, LLPs and Corporate Restructure*, Snow White Publications
5. *Handbook on Mergers Amalgamations and takeovers* by The Institute of Company Secretaries of India

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-408**

**WORKING CAPITAL MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this paper is to expose the students to the concepts of working capital management in contemporary regulatory corporate framework.*

**Course Outcomes:**

**CO1:** Students shall be able to understand the concepts of working capital management and its impact on corporate decisions.

**CO2:** Students shall be able to recognize the importance of working capital management policies and its relations with firm's profitability, liquidity, risk and operating flexibility.

**CO3:** Students shall be able to apply corporate cash management, accounts receivable management, inventory management techniques.

**CO4:** Students shall be able to compare and appraise relative merits of working capital financing options – short term as well as long term.

**CO5:** Students shall be able to analyse credit policies and terms to enhance decision making process in the firm.

**CO6:** Students shall be able to formulate appropriate working capital management policies and techniques to achieve corporate objectives.

**Course Contents:**

**UNIT-I**

Working Capital Management: introduction, need and importance of working capital, factors influencing working capital investment, determinants, computation of working capital, approaches to financing of working capital. Financing of working capital - introduction, and sources of finance. Working capital & banking policy (Tandon, Chore, Marathe committee reports.)

## **UNIT-II**

Cash management system: introduction, motives for holding cash and marketable securities; factors determining the cash balance, the cash system; managing the cash flow; types of collection systems, mailed payment collection system, other collection systems. Cash concentration strategies; disbursement tools, investment in marketable securities; types of marketable securities. Forecasting cash flows: introduction, methods of financial forecasting.



### UNIT-III

Receivable management: introduction, objectives, costs, benefits, nature and goals of credit policies, credit policy variables, marginal cost-benefit analysis, evaluation of the credit applicant, credit terms, collections from accounts receivable. Introduction to factoring.

### UNIT-IV

Inventory management: introduction, type of control required, cost of holding inventories, inventory control models, inventory control responsibility, other control devices, inventory management & evaluation.

#### Suggested Readings:

1. *Hampton John. Financial Decision Making. Englewood Cliffs, Prentice Hall Inc.*
2. *Khan, M. Y and Jain, P. K. Financial Management, McGraw Hill.*
3. *Prasanna Chandra, Financial Management, McGraw Hill.*
4. *Pandey, I. M. Financial Management, Vikas Publication House.*
5. *Van Home. James C. Financial Management and Policy, PHI.*
6. *Winger, Bernard and Mohan, Nancy. Principles of Financial Management. New York, Macmillan Publishing Company.*

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAF-409**

**BEHAVIOURAL FINANCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic objective of this course is to acquaint the new field of behavioural finance and importance of behavioral traits in financial decision making.*

**Course Outcomes:**

- CO1:** Students will be able to describe the concepts related to behavioural finance.
- CO2:** Students will be able to summarize the theories of behavioural finance.
- CO3:** Students will be able to differentiate between standard financial theories and behavioural finance.
- CO4:** Students will be able to appraise the influence of behavioural biases on financial decision making.
- CO5:** Students will be able to judge investor behaviour.
- CO6:** Students will be able to formulate investment and financial policies with an understanding of behavioural finance.

**Course Contents:**

**UNIT – I**

Introduction: Meaning, nature, scope and history of Behavioral Finance; Comparison between Behavioral Finance and Standard Finance; Are financial markets efficient?; Limits to arbitrage-Fundamental Risk, Noise Trader Risk, Implementation cost.

**UNIT – II**

Behavior and Decision Making: Cognitive Bias, Emotional Bias, Concept of bounded rationality. beliefs and heuristics-Preferences: Prospect Theory, Ambiguity aversion, Loss aversion, Framing, Non-consequentialism: Disjunction Effect, Self-deception, Neuro finance (introduction only); Mental Accounting, Self-control, Regret avoidance and Cognitive dissonance, Representativeness and Availability, Anchoring and Belief perseverance, Overconfidence, Optimism and wishful thinking, Overreaction and Conservatism, Self attribution, Recency bias.

### **UNIT – III**

Anomalies: Fundamental anomalies, Accounting Based Anomalies, Calendar Anomalies, Technical anomalies: Value v/s Growth, size, and equity premium myopia.

## UNIT – IV

Market Bubbles: Identification and causes, investor behavior during bubbles, case study of prominent market bubbles/scams. Introduction to Behavioral Corporate Finance

### Suggested Readings:

1. William Forbes, *Behavioural Finance*, John Wiley.
2. Mihe Elvin, *An Introduction to the psychology of Trading and Behavioural Finance*, John Wiley.
3. James Montier, *Behavioural Investing: A Practitioners Guide to Applying Behavioural Finance*, John Wiley.
4. Sulphey. M.M., *Behavioural Finance*, PHI.
5. James Montier, *Behavioural Investing: Insights into Irrational minds and markets*, John Wiley.
6. Paragh Parikh, *Value Investing and Behavioural Finance*, Tata McGraw-Hill.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAF-410**

**IN-COMPANY-PROJECT-WORK**

**(Optional in lieu of 3 Elective Courses)**

**Time Allowed: 1 Hour**

**M.M: 300**

**Course Objective:** *The objective of this course is to make the already placed students to understand the procedural scientific and systematic way of solving organizational problems by making valuable choices.*

**Course Outcomes:**

- CO1:** Students will be able to outline the real issues faced by the organization.
- CO2:** Students will be able to convert their learning of research methods into a realistic research design for their topic of research.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Students will be able to examine the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO5:** Student will learn to evaluate and select the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO6:** Students will be able to assemble and present the findings in a report.

**Instructions for In-Company-Project-Work:**

The following instructions will be followed:

- If any student gets placement offer from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work-Report for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the university.

- However, such In-Company-Project-Work-Report will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes) and Industry Guide (to be appointed by the competent authority of the concerned Organization, who has offered appointment to our student and any pressing hard to join immediately). The Academic Guide will get two hours per week credit per students maximum up to ten credits in his or her teaching workload.
- The evaluation process will be along with detailed guidelines in this connection.

# **MBA (INTERNATIONAL BUSINESS)**

**TWO YEARS (FOUR SEMESTERS) PROGRAMME**

**Choice Based Credit System on Outcome Based Education**

**(Effective from Session 2020-21)**



**HARYANA SCHOOL OF BUSINESS**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE**

**& TECHNOLOGY HISAR-125001, HARYANA**

**(YEAR-2020)**



# THE CURRICULUM BOOK

## OF

### MBA (International Business)

#### 1.1. Vision and Mission of the Haryana School of Business

##### **1.1.1** Vision

The school shall strive to achieve the vision of a globally respected institution engaged in generation of knowledge and dissemination of the same through teaching, research and collaboration with leading business schools, the industry, government and society in the fields of business management studies for the benefits of the economy, nation and the world.

##### **1.1.2** Mission

- i) Striving to contribute its best in transforming raw brains into effective business leaders ready to contribute towards the emerging frontiers of economic and societal growth.
- ii) Imparting state-of-the-art knowledge in the field of business and management keeping into the changing requirements of the industry.
- iii) Ensuring that our students graduate with a sound theoretical basis and wide-ranging practical business cases and problem-solving experience.
- iv) Fostering linkages between the academics, business and industry.
- v) Promoting ethical research of high quality in the field of business and management.
- vi) Adopting the best pedagogical methods in order to maximize knowledge transfer to ensure outcome-based education in business and management.
- vii) Inculcating a culture of free and open discussions in the School thereby engaging students in evolving original business ideas and applying them to solve complex business problems.
- viii) Inspiring an enthusiasm into students for lifelong learning thereby infusing scientific temper, enthusiasm, professionalism, team spirit and business leadership qualities in the students.

- ix) Sensitizing students to look for environmentally sustainable vis-à-vis globally acceptable business solutions.
- x) Upholding democratic values and an environment of equal opportunity for everyone vis-à-vis preparing the students as global humane citizens.

## 1.2. Vision Programme Educational Objectives (PEOs) of the MBA International Business Programme

The Programme Educational Objectives of the MBA International Business Programme are:

- PEO1.** To prepare responsible and ethical management professionals to be successfully employed in public and private sector especially in the corporate sectors at national and global levels, who will be able to apply the principles of business and management to evolve, develop and deploy best possible solutions for real world business and financial problems after assessing their economic, environmental, cultural and societal implications.
- PEO2.** To groom the budding professionals for analyzing, evaluating and designing complex business and management solutions individually or in teams by doing a methodical and in-depth research and analysis in business domains, by using embryonic modern tools and by communicating effectively among the various stakeholders about due awareness of such business and management solutions.
- PEO3.** To mentor the budding professionals and entrepreneurs of tomorrow with global business leadership qualities and deep economic and societal concerns who can move up in their business professional career or start their own ventures as well.
- PEO4.** To guide the management graduates to develop a positive attitude towards ethical and value-based learning and motivate them to take up higher studies and research in the field of business and management.
- PEO5.** To groom budding professional to make them sensitive human beings who can keep due emotions towards humanity and global diversities.

### **1.3 Programme Outcomes (POs) of MBA International Business Programme**

MBA International Business is a highly prestigious management course of modern times and prepares the participants for taking up middle and top-level challenging executive assignments in private and public sectors. Accordingly, they are imparted adequate conceptual knowledge and practical training in various fields of international business. MBA International Business at HSB is two-years program divided into four semesters. The program is aimed at following outcomes:

- PO1. Business Management Knowledge:** Apply knowledge of business management and financial theories and practices to solve business problems.
- PO2. Critical Thinking and Problem Analysis:** Foster Analytical and critical thinking abilities for databased decision-making.
- PO3. Leadership and Business Solutions:** Ability to develop Value based Leadership ability that offers business solutions.
- PO4. Communication and Other Skills:** Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
- PO5. Team Dynamics and Management:** Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

### **Programme Specific Outcomes (PSOs) of MBA International Business Programme**

- PSO1. Environmental Awareness for Sustainability:** Understand the impact of the professional business solutions in economic, societal and environmental contexts, and demonstrate the business knowledge for sustainable global business development.
- PSO2. Business Ethics and Values:** Apply ethical principles and commit to business professional ethics and values for discharging all responsibilities within the laid norms of the business and management practices.

**PSO3. Social Responsibility and Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of global business environment dynamics.

#### 1.4 Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA International Business Programme

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1								
CO2								
CO3								
CO4								
CO5								
CO6								
	Overall Mapping Result: .....							

**Note :** The Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA International Business Programme will be done every year independently by the Committee constituted by the Board of Studies and Research by making 360 degree feedback including auditing of previous years question-papers and answer-sheets as well. It will be part of the annual Academic Audit of the Haryana School of Business.

#### 1.5 Important Instructions-cum-Ordinance for Implementing the Outcome based Education Scheme and Syllabus of MBA International Business Programme

- i) The MBA international business programme will be divided into four semesters (two semesters in the first year and two semesters in the second year). Every semester, generally, shall be of 21 weeks of duration inclusive of teaching and examination. Since, University is in five-days a week functioning mode, hence, allotted credits to each and every course of the programme would be duly compensated with extra hours to essentially fulfill the objective of minimum working days, per semester, as prescribed by the UGC/AICTE for the Universities and Colleges in this connection.
  
- ii) The course of 05 (five) credits shall be of 100 marks in the ratio of 60% external and 40% internal. If otherwise not specifically mentioned against each course, each course of study, ordinarily, consists of five hours lectures per week per semester and one-hour tutorial per week, per group, per semester.
  
- iii) Unless and otherwise specified at appropriate places, the division and distribution of marks is as under:

Final/Major Test (External) : 60 Marks

Internal Assessment (Internal) : 40 Marks

Distribution of weightage of 40 marks of Internal Assessment will be as per following details:

**Minor Tests** : 15 Marks

**Attendance & Co-curricular Activities** : 25 Marks (Attendance: 05)

(To be announced by the teacher or course coordinator, in the light of expected Course Outcomes of the concerned course, in the beginning of the semester, which may include Attendance, Home-Assignment, Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc. However, a teacher or course coordinator will choose any five components and announce to the class in the beginning of the semester)

- iv)** Each individual course will consist of Maximum Marks as 100 Marks and Passing Marks will be 40 Marks only. However, the aggregate passing marks in a semester will be 50 per cent of the total marks per semester.
  
- v)** A wide range of assessment types for evaluating students is available for the teachers/ institutions to use for internal assessment. Each assessment type has its distinct utility, advantages and limitations. A suitable compendium of such types needs to be carefully chosen for a particular course depending on its nature, objectives and available resources.
  
- vi)** The Internal Assessment awarded to a student in any particular course will be based on performance of the students in Two Minor Tests, Attendance and Co-Curricular Activities (which may include Attendance, Home-Assignment, Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc.)
  
- vii)** The internal assessment should be designed with learner attributes in mind. These attributes, which have clear linkages to Programme Education Objectives and Course Outcomes, stem from the taxonomy, should be clearly told to the students in the beginning of the semester.

- viii)** At least, one or two activities of the internal assessment should focus to achieve the 5<sup>th</sup> or 6<sup>th</sup> Course Outcome in each course of study in every semester.
- ix)** The students who fail in internal assessment as well as in aggregate will have the option to improve their score in the internal assessment giving a special chance to such students. However, no student will be allowed to improve his/her score of internal assessment, if he/she has already scored 50% marks in aggregate as well as in external examination.
- x)** A student who could not secure 40% marks in external examination of the particular course will have to reappear in the external examination of the respective paper as per university rules in this connection.
- xi)** Unless and otherwise specified at appropriate place for specific course, the instructions to the examiners and students for the External Exam/Major Test of 60 marks will be given as under:
  - a)** The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus.
  - b)** In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.
  - c)** The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the External Exam/Major Test is 03 (three) hours.
- xii)** All courses in 1<sup>st</sup> and 2<sup>nd</sup> semesters will be compulsory, whereas, the courses in 3<sup>rd</sup> and 4<sup>th</sup> semesters will be compulsory, optional-elective, project-work-report and open-elective as well.
- xiii)** The specific instructions have been given at appropriate places regarding compulsory, optional-elective, project-work-report and open-elective courses depending upon the specializations opted by the students.
- xiv)** At the end of the second semester, all the students will have to undergo online/offline summer summer training of 6-8 weeks with an industrial, business or service or academic organization, either through offline or online modes, under the supervision of Training and Placement Office (TPO) in case of Haryana School of Business (HSB) and Director/Principal in case of affiliated institutes.

- xv) Each student will be required to submit a training report, on a prescribed proforma, in the beginning of third semester along with a certificate issued by the concern where he/she has undertaken the summer training either with an industrial, business or service or academic organization to the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes up to 31st August without late fees, for the purpose of evaluation in the third semester. However, the guidelines along with prescribed proforma for the purpose will be notified at the end of second semester.
- xvi) Each student shall present a seminar on the summer training, during third semester, before a committee of teachers constituted by the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes.
- xvii) The distribution of marks of Summer Training Report would be 25 marks for the seminar on training report and 25 marks for the written training report.
- xviii) The Committee of Examiners to be appointed by the Director/Principal will evaluate this written training report; the Committee will be coordinated by the Programme Coordinator.
- xix) If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the university.
- xx) This new Scheme and Syllabus of MBA International Business Programme shall be effective from the academic session 2020-21.
- xxi) In case of any slip-up in above instructions, the general rules of university ordinance will be applicable if the same is in the interest of students.

## 1.6 General Course Structure and Credit Distribution in Various Components of Teaching-Learning in the MBA International Business Programme

### 1.6.1 Definition of a Credit may be further classified as under:

Type of Teaching Learning Activity and Workload	o. of Credits
5 Hours Lecture (L) per week per semester	4 Credit



1 Hour Tutorial (T) per week per semester but maximum two groups irrespective of number of students in the classes	1 Credit
2 Hours Practical (Lab) per week per semester	1 Credit
1 Hour Seminar per week per semester	1 Credit
1 Hour Training Seminar per week per semester	1 Credit
1 Student Guidance for In-Company-Work-Project	2 Credit
2 Hours per week per semester if a teacher is asked to act as Programme Coordinator	2 Credit
1 Hour per week per semester if a teacher is asked to act as Convener of any Standing Committee for discharge of Departmental work during the semester	1 Credit
6 Hours per week for Preparing Students for Training and Placement Activities through mock assessment, group discussion, personal interviews and workshops/seminars per Semester, if officially assigned to a teacher by the Director during the particular semester.	5 Credit

### 1.6.2 Credits for Different Curriculum Components

Semester-Wise Credit Distribution of MBA Programme			
Sr No	Semester-Wise	Number of Courses	Total No. of Credits
1.	1 <sup>st</sup> Semester	7 Courses	33 Credits
2.	2 <sup>nd</sup> Semester	7 Courses	35 Credits
3.	3 <sup>rd</sup> Semester	8 Courses	38 Credits
4.	4 <sup>th</sup> Semester	4 Courses	20 Credits
		<b>Total</b>	<b>126 Credits</b>
Core and Elective Courses Wise Credit Distribution			
Sr No	Core Courses-Wise	Elective and Open-Elective Courses Wise	Total No. of Credits

1.	96	30	<b>126 Credits</b>
		<b>Total</b>	<b>126 Credits</b>

**1.7 For the purpose of enhancing the current knowledge base, students can also access various online resources (supported by MHRD, Government of India) for their respective courses. These resources are available at:**

- <http://nptel.ac.in/courses>
- [www.mooc.org](http://www.mooc.org)
- <https://epgp.inflibnet.ac.in>

## 1.8 : Scheme and Syllabus of MBA International Business Programme

The MBA International Business is a two-year full time programme, which is divided into four semesters. The course structure, viz, the scheme and syllabus of this Programme are given as under:

<b>SEMESTER-I</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAIB-101	Management Process and Organisational Behaviour	5-----0-----1	05 Credits
MBAIB-102	Business Statistics	5-----0-----1	05 Credits
MBAIB-103	Managerial Economics	5-----0-----1	05 Credits
MBAIB-104	Accounting for Managers	5-----0-----1	05 Credits
MBAIB-105	Business Environment	5-----0-----1	05 Credits
MBAIB-106	International Business	5-----0-----1	05 Credits
MBAIB-107	Seminar (On Indian Ethos, Computer Applications in Business, Contemporary Issues in Cyber Security and Modern Business)* (Internal)		03 Credits
		<b>Total</b>	<b>33 Credits</b>

\* Seminar (MBAIB - 108) will be organized by a committee of not less than three teachers.

<b>SEMESTER-II</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAIB - 201	Marketing Management	5-----0-----1	05 Credits
MBAIB - 202	Human Resource Management	5-----0-----1	05 Credits

MBAIB - 203	Financial Management	5-----0-----1	05 Credits
MBAIB - 204	Production and Operations Management	5-----0-----1	05 Credits
MBAIB - 205	International Trade Procedures and Documentation	5-----0-----1	05 Credits
MBAIB - 206	Management Science	5-----0-----1	05 Credits
MBAIB - 207	Business Research Methods	5-----0-----1	05 Credits
		<b>Total</b>	<b>35 Credits</b>

<b>SEMESTER-III</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAIB -301	Strategic Management	5-----0-----1	05 Credits
MBAIB -302	Business Legislation	5-----0-----1	05 Credits
MBAIB -303	Entrepreneurship Development	5-----0-----1	05 Credits
MBAIB -304	Summer Internship and Seminar (Internal)		03 Credits
	Elective-I*	5-----0-----1	05 Credits
	Elective-II*	5-----0-----1	05 Credits
	Elective-III*	5-----0-----1	05 Credits
	Elective-IV*	5-----0-----1	05 Credits
	Open Elective-I**	5-----0-----1	05 Credits
		<b>Total</b>	<b>38 Credits</b>

\* The students are required to choose 04 (four) Elective Courses offered in Semester III.

\*\* In addition to above 04 (four) Elective Courses, the students are also required to choose one

course from the list of Open Elective Courses offered in Semester III.

<b>SEMESTER-IV</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAIB -401	Comprehensive Viva- Voce (External)		05 Credits
MBAIB -402	Research Project (optional in lieu of one Elective Course) **	05-----0-----1	05 Credits
	Elective-I*	5-----0-----1	05 Credits
	Elective-II*	5-----0-----1	05 Credits
	Elective-III*	5-----0-----1	05 Credits
	Or		
MBAIB -410	In-Company Project Work***		15 Credits
		<b>Total</b>	<b>20 Credits</b>

\* The students are required to choose any 3 (three) Elective Courses offered in Semester IV. In any case, if the nomenclature of the paper is same/similar as opted by the student in any semester that cannot be opted again.

\*\* Instructions for Research Project (MBAIB -402): The following instructions will be followed:

1. Research project, which is optional, should be from major or core area of specialization of the student and shall be in lieu of one elective course.
2. Students opting for Research Project in Semester IV will have to register for the project in Semester III itself by submitting a synopsis along with consent of

the supervisor in the Office of HSB and to the office of Director, HSB by 30th November.

3. Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, HSB.
4. External examiner will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the internal awards out of 40 marks separately on the basis of overall performance of the student in the project.
5. The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva-voce will be appointed by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes.

\*\*\* Instructions for In-Company Project Work (MBAIB- 410): The following instructions will be followed:

1. If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4<sup>th</sup> semester and is willing to join immediately, he or she may opt for In-Company Project Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the University.
2. However, such In-Company Project Work will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB and Industry Guide (to be appointed by the competent authority of the concerned organization, who has offered appointment letter to the student and requires the student to join

immediately). The Academic Guide will get two hours per week credit per student subject to a maximum of ten credits in his or her teaching workload during the semester.

<b>List of Elective Courses for Semester III</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAIB-305	International Financial Markets	5 0 1	5 Credits
MBAIB-306	India's Foreign Trade & Policy	5 0 1	5 Credits
MBAIB-307	Global Marketing	5 0 1	5 Credits
MBAIB-308	International Logistics	5 0 1	5 Credits
MBAIB-309	International Accounting	5 0 1	5 Credits
MBAIB-310	Risk Management in International Business	5 0 1	5 Credits

<b>List of Open Elective Courses for Semester III</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
OE-301	Counseling Skills for Managers	5 0 1	5 Credits
OE-302	Fundamentals of Econometrics	5 0 1	5 Credits
OE-303	Personal Finance	5 0 1	5 Credit
OE-304	Applications of Marketing	5 0 1	5 Credits
OE-306	Corporate Governance and Business Ethics	5 0 1	5 Credits
OE-307	Indian Ethos and Values	5 0 1	5 Credits
OE-308	Computer Application in Business and Cyber Security	5 0 1	5 Credits
OE-309	Disaster Management	5 0 1	5 Credits

### List of Elective Courses for Semester IV

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
MBAIB-403	Foreign Exchange Management	5	0	1	5 Credits
MBAIB-404	Regional Economic Blocks	5	0	1	5 Credits
MBAIB-405	Management of International Finance	5	0	1	5 Credits
MBAIB-406	Global Strategic Management	5	0	1	5 Credits
MBAIB-407	Cross Cultural and Global Management	5	0	1	5 Credits
MBAIB-408	International Trade Laws	5	0	1	5 Credits
MBAIB-409	Integrated Marketing Communication Strategy	5	0	1	5 Credits



**Detailed Syllabus of MBA (International Business) Programme is as follows...**

**FIRST  
SEMESTER**



**MBAIB-101**

**MANAGEMENT PROCESS AND ORGANISATIONAL BEHAVIOUR**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this paper is to familiarize the students with basic management concepts and behavioral processes in the organization.*

**Course Outcomes:**

- CO1:** Students will be able to recall the concepts of management process and organizational behavior.
- CO2:** Students will be able to understand individual and group behavior, and understand the implications of organizational behavior on the process of management.
- CO3:** Students will be able to employ different motivational theories and evaluate motivational strategies used in a variety of organizational settings.
- CO4:** Students will be able to appraise the basic design elements of organizational structure and evaluate their impact on employees.
- CO5:** Students will be able to evaluate how organizational change and culture affect working relationships within organizations.
- CO6:** Students will be able to design strategies to manage individual, group and organizational behaviour.

**Course Contents:**

**UNIT-I**

Introduction to management: Meaning, nature and scope of management; Evolution of management thoughts: School of management thoughts, Approaches to management;

Managerial skills; Managerial functions; Social Responsibility of managers and business; Challenges before modern managers

## **UNIT-II**

Managerial functions: Planning, Decision Making, Management by Objectives; Organizing, Organizational Design, Organizational Structure, Authority and Responsibility, Power, Decentralization; Staffing; Directing, Leading, Motivating, Communicating; Controlling; Co-ordinating.

## **UNIT-III**

Organizational Behavior: concepts, determinants, challenges and opportunities of OB; contributing disciplines to the OB; Organizational culture and climate, Impact of organizational structure on OB; Understanding and managing individual behavior: Personality; Perception; Values; Attitudes; Learning.

## UNIT-IV

Understanding and managing group processes: Interpersonal and Group Dynamics; Understanding Self: Transactional Analysis; Applications of Emotional Intelligence in organizations; Conflict Management; Stress Management.

### Suggested Readings:

1. Chandan, J.S., *Organizational Behaviour*, Vikas Publications
2. Koontz, H & Wechrich, H., *Management*, Tata McGraw Hill.
3. Luthans, F., *Organizational Behaviour*, Tata McGraw Hill.
4. Robbins, S.P., *Management*, Prentice Hall Ins.
5. Robbins, S., Judge, T. & Sanghi, S., *Organizational Behaviour*, Prentice Hall of India.
6. Stoner, J., *Management*, Prentice Hall of India.
7. Davis, K., *Organisational Behaviour*, Tata McGraw Hill.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The objective of this course is to make students learn about the applications of statistical tools and techniques for decision making.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in statistics.
- CO2:** Students will be able to understand the different methods used in statistics.
- CO3:** Students will be able to apply the knowledge of statistics in their future studies as well as in corporate sector also.
- CO4:** Students will be able to analyze the importance of statistics in business.
- CO5:** Students will be able to evaluate the proficiency of statistical methods in an industry or business.
- CO6:** Students will be able to assemble the different methods of statistics for the well being of business

**Course Contents:****UNIT-I**

Univariate analysis: central tendency, dispersion (theoretical concept); Probability: Introduction, addition theorem, multiplication theorem, conditional probability, Bayes Theorem. Theoretical probability distributions: Binomial, Poisson, Normal Distribution; their characteristics and applications.

**UNIT-II**

Sampling: probability and non probability sampling methods; Sampling distribution and its characteristics; Hypothesis testing: hypothesis formulation, and testing; Statistical Tests: z-test, t-test, F-test, Analysis of variance, Chi-square test, Wilcoxon Signed-Rank test, Kruskal-Wallis test.

**UNIT-III**

Correlation analysis: simple, partial and multiple correlations; Regression analysis: simple linear regression model, ordinary least square method. Time series analysis: components of a time series and their measurements and uses.

#### UNIT-IV

Index numbers: meaning and types, methods for measuring indices, adequacy of indices; Statistical quality control: causes of variation in quality, Control Charts, Acceptance sampling.

#### Suggested Readings:

1. Gupta, S.P., *Statistical Methods*, Sultan Chand & Sons
2. Anderson, Sweeney and Williams, *Statistics for Business and Economics*, Cengage Learning.
3. Ken Black, *Business Statistics*, Wiley.
4. Levin, Richard I and David S Rubin, *Statistics for Management*, Prentice Hall, Delhi.
5. Aczel and Sounderpandian, *Complete Business Statistics*, Tata McGraw Hill, New Delhi.
6. Hooda, R.P., *Statistics for Business and Economics* Macmillan, New Delhi.
7. Heinz, Kohler, *Statistics for Business & Economics*, Harper Collins, New York.
8. Lawrence B. Morse, *Statistics for Business & Economics*, Harper Collins, NY

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- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Course Objective:** *The objective of this course is to acquaint the students with concepts and techniques used in the field of economics and to enable them to apply this knowledge in business decision-making. Emphasis is given to changes in the nature of business firms in the context of globalization.*

**Course Outcomes:**

- CO1:** Students will be able to define the terms associated with managerial economics.
- CO2:** Students will be able to explain different theories of managerial economics.
- CO3:** Students will be able to apply the models of managerial economics in business decisions.
- CO4:** Students will be able to examine the demand and supply forces and their effect on pricing and output related decisions.
- CO5:** Students will be able to evaluate the effectiveness of various models and theories of managerial economics in demand, supply, production and costs related decision making procedures.
- CO6:** Students will be able to create the competitive strategies to ensure optimum utilisation of resources.

**Course Contents:****UNIT-I**

Theory of demand and consumer equilibrium-utility and indifference curve approach; Demand function; Elasticity of demand and its significance in managerial decision-making; Demand forecasting and its techniques.

**UNIT-II**

Theory of Cost: Types of cost: production cost, selling cost, R&D Cost, short run and long run cost curves, relation between cost and revenue, break-even point; Economies and diseconomies of scale and scope; Production function : Short term and long run production function, law of variable proportion and return to scale, Iso-quant curves.

### **UNIT-III**

Market Structure and Competition: Price and output determination under perfect competition, monopoly, monopolistic competition and oligopoly.

## UNIT-IV

Modern theories of firm: Bamoul's theory of sales maximization, Managerial Theory, Behavioral Theory; National Income: Concept and Measurement.

### Suggested Readings:

1. Ferguson, P. R. Rothschild, R. Ferguson G.J. , Business Economics, Palgrave Macmillan.
2. Dwivedi,D.N., Managerial *Economics*, Vikas Publication.
3. Salvatore, *Managerial Economics in Global Economy*, Thomson Learning.
4. Thomas, C.R. & Maurice S.C., *Managerial Economics*, Tata McGraw Hill.
5. Koutsoyiannis, A., *Modern Economics*, Macmillian

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-104**

**ACCOUNTING FOR MANAGERS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to develop an insight of postulates, principles and techniques of accounting and application of financial and accounting information for planning, decision-making and control.*

**Course Outcomes:**

- CO1:** Students will be able to describe various accounting concepts, principles, techniques associated with decision making.
- CO2:** Students will be able to recognize the usefulness of costing to manager and its applications in the business.
- CO3:** Students will be able to apply the principles, postulates and techniques of accounting for planning and decision making.
- CO4:** Students will be able to differentiate between various types of accounting practices being followed within the organisation.
- CO5:** Students will be able to appraise the performance of organisations with the help of financial statements presented at the end of the year.
- CO6:** Students will be able to formulate advanced policy structure comprising of all accounting information required for controlling deviations in the performance.

**Course Contents:**

**UNIT-I**

Financial Accounting- Meaning, scope and importance; Accounting concepts and conventions; Accounting process: Journal, Ledger and Trial Balance, Depreciation accounting and policy, Preparation of Final Accounts of Joint-stock Companies, Understanding and Analyzing Published Financial Statements of Companies.

## **UNIT-II**

Cost Accounting: Nature and scope of costing; Cost concepts and Classifications; Usefulness of Costing to Managers; Preparation of Cost sheet. Budgeting: Types of budgets and their preparation.

## **UNIT-III**

Management Accounting: Nature, scope and tools of Management Accounting; Management Accounting vs. Financial Accounting; Financial analysis: Ratio analysis, Cash Flow Statement.

## UNIT-IV

Marginal costing: CVP analysis, break-even analysis, Decision involving alternative choices: fixation of selling price, exploring new markets, make or buy decision and product mix decision. An overview of Standard Costing.

### Suggested Readings:

1. Anthony, R.N. & Reece J.S., *Accounting Principles*, Homewood, Illinois, Rd Irwin.
2. Bhattacharya, S.K. & Dearden, J., *Accounting for Management: Text and Cases*, Vikas Publishing House
3. Gupta, R.L. & Ramaswmy, *Advanced Accountancy*, Volume I&II, Sultan Chand & Sons.
4. Hingorani, N.L. & Ramanathan, A.R., *Accounting*, Sultan Chand & Sons.
5. Jawahar Lal, *Cost Accounting*, Vikas Publishing House.
6. Maheshwari, S.N., *Advanced Accounting*, Vikas Publishing House.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAIB-105**

**BUSINESS ENVIRONMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the micro and macro environment of business in coherent and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to define and trace all the indicators of micro and macro environment affecting business organizations
- CO2:** Students will be able to identify and illustrate the impact, challenges and opportunities of all environmental indicators on business organizations
- CO3:** Students will be able to apply and demonstrate the gathered knowledge about how the various laws and other national and international policies influence the organizations in order to take proactive measures so that organizational effectiveness is maintained.
- CO4:** Students will be able to distinguish and examine the necessary techniques and skills that help them in handling the organization's global and national issues efficiently.
- CO5:** Students will be able to evaluate and value the importance of environment within which a business organization has to sustain itself successfully
- CO6:** Students will be able to design and develop their approaches and systems in maintaining coherence both at micro and macro level

**Course Contents:**

**UNIT-I**



Indicators of Internal and External Business environment; Environmental scanning and risk assessment; Concepts of Economic systems; New Industrial Policy-1991 and Recent Financial and Economic Reforms, Recent Monetary and Fiscal Policy and their impact on Business Environment.

## **UNIT-II**

Impact of Political, Economic, Social and Technological Environment on the Emerging Sectors of Indian Economy: Public Sector, Private Sectors, Services Sector and SME Sector; Privatization in India; Public Private Partnership; Challenges and Opportunities in the Rural sector.

## **UNIT-III**

Globalization Business Environment; Opportunities and challenges for MNCs in India; Foreign investment in India; Indian Foreign Trade and its Impact on Balance of Payment, Exchange rate Movements and India's Competitiveness in the world economy; World Trade Trends and Economic Integration. Contemporary Issues: Climate change, Food security, Geopolitics Sustainable Development and De-Globalization.

## UNIT-IV

Legislations for Social Responsibilities- Consumer protection Act, 1986 and its Amendments, Competition Act, 2002 and its Amendments and Environmental Protection Act, 1986; Foreign Exchange Management Act, 1999 (FEMA) and their influences on the Business Environment.

### Suggested Readings:

1. Faisal Ahmed and M. Absar Alam. *Business Environment: Indian and Global Perspective*, PHI, New Delhi.
2. Cherunilam, Francis, *Business Environment*, Himalya Publishing House.
3. Misra, S.K. & Puri, V.K., *Indian Economy*, Himalya Publishing House.
4. Aswath Thapa, K., *Business Environment*, Excel Books.
5. Bedi S.K., *Business Environment*, Excel Books.
6. Khujan Singh, *Business Environment – Theory and Practice*, IAHRW Publications
7. Paul Jastin, *Business Environment*, Tata Mc Graw Hill.
8. Economic Survey, Govt. of India.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** The objective of this course is to highlight the international environment, including relationships between business, government, economic groupings and the consumer. The course will also highlight the problems encountered and issues raised in managing overseas business.

**Course Outcomes:**

- CO1:** Students will be able to describe the different concepts and terms used in the literature of International Business.
- CO2:** Students will be able to identify the importance of tariffs, theories, modes, foreign exchange market, international organization and strategies.
- CO3:** Students will be able to illustrate and interpret the macroeconomic changes that affect the international business.
- CO4:** Students will be able to examine the recent practices followed across functional areas of international business.
- CO5:** Students will be able to evaluate the strategic alliance, merger and acquisition, joint venture and regulation of international business.
- CO6:** Students will be able to design international business strategies.

## **Course Contents:**

### **UNIT – I**

Overview of International Business: Evolution and development of international business; International Business Environment: Factors leading to growth in international business, Modes of international business.

### **UNIT -II**

An overview of International trade theories, Commercial Policy Instruments: Tariff and Non-Tariff Measures and their impact; Balance of Payment Account, Foreign Direct Investment, International Financial Environment; Foreign Exchange Rates and Markets, Management of exchange rate.

### UNIT III

Organizational Structure for International Business, International Marketing Management, International Financial Management, International Production Management, International HRM, International Business Negotiations, Recent developments and issues in International Business.

### UNIT IV

Multinational Corporations: Conceptual framework of MNCs; MNCs and host and home country relations; Technology transfers, Strategic Alliances, Mergers and Acquisitions, Foreign Trade Promotion, Indian Joint Ventures Abroad, Multilateral regulation of trade and investment: IMF, World Bank, WTO, UNCTAD, Regional Economic Cooperation.

#### Suggested Readings:

1. Korth, Christopher M., *International Business Environment and Management*, Prentice Hall.
2. Ramu, S. Shiva, *International Business: Governance Structure*, Wheeler Publishing.
3. Bhalla, V.K., *International Business Environment and Management*, Anmol Publications.
4. Mithani, D.M., *International Economics*, Himalaya Publishing House.
5. Charles W.L. Hill, *International Business*, Tata MC Graw-Hill.
6. Czinkota, Ronkainen & Moffet, *International Business*, Thomson, South-Western.
7. Daneiels, Radebaugh and Sullivan, *International Business, Environments and Operations*, Pearson Education.
8. V. Sharan, *International Business, concept, environment and strategy*, Pearson Education

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be

compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

MBAIB-107

SEMINAR

(On Indian Ethos, Computer Applications in Business,  
Contemporary Issues in Cyber Security and Modern Business)  
(Internal)

**Time Allowed: 1 Hour  
50**

**M.M. :**

**Course Objective:** *Objective of this course is to acquaint the students with existing issues pertaining to Indian Ethos and business. Also, inculcating in them the ability of expressing themselves to an audience with poise and self- belief.*

**Course Outcomes:**

- CO1:** Students will be able to define the concept and scope of the seminar topic of their interest relating to Indian ethos or contemporary issues in business.
- CO2:** Students will be able to review an existing issue related to business that can help them to get ahead.
- CO3:** Students will be able to illustrate the possible managerial relevance and implications of the specific issue they have approached.
- CO4:** Students will be able to appraise the relevance of arguments prepared for the topic under consideration.
- CO5:** Students will be able to defend difference in opinion towards a topic.

**CO6:** Students will be able to develop their presentation skills.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The list of contemporary topics in Business will be announced in the class and at least one topic will be allotted to each student by the Programme Coordinator.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student and the evaluation will be done on the basis of communication skills, contents, delivery, body-language and question-answer handling skills of the student on a proforma duly notified to the students in advance.

SECOND  
SEMESTER



**Time Allowed: 3 Hours****M.M: 60**

**Course Objective:** *The purpose of this course is to develop an understanding of the underlying concepts, strategies and issues involved in the marketing of products and services.*

**Course Outcomes:**

- CO1:** Students will be able to recall and describe the fundamental concepts related to marketing.
- CO2:** Students will be able to describe the different approaches of marketing and environment in which marketing systems operate.
- CO3:** Students will be able to demonstrate an understanding of the 4Ps used by the marketers.
- CO4:** Students will be able to examine the upcoming trends of marketing in the ever dynamic business world.
- CO5:** Students will be able to evaluate the marketing strategies and programmes of different products in real world.
- CO6:** Students will be able to design a marketing plan for real world market offering (product/ service).

**Course Contents:****UNIT 1**

Nature, scope and concept of marketing; Corporate orientations towards the marketplace; Marketing Mix; Understanding 4 A's of Marketing; Marketing Environment and Environment Scanning; Marketing Information System and Marketing Research; Understanding Consumer and Industrial Markets; Market Segmentation, Targeting and Positioning

## **UNIT II**

Product decisions: Product concept and classification, product mix, product life cycle, new product development; Product branding, packaging and labeling decisions; Pricing decisions: Factors affecting pricing decisions, setting the price, Pricing strategies and methods.

## **UNIT III**

Distribution Channels and Logistics Management: nature, types and role of intermediaries; Channel design decisions, Channel behavior and organization, Channel management decisions, Logistics management decisions. Marketing communication and promotion decisions: Factors influencing promotion mix; Advertising decisions; Personal Selling; Sales force management; Sales promotions; Publicity and Public relations.

## UNIT IV

Holistic marketing: Trends in marketing practices, Internal marketing, Socially responsible marketing, Marketing implementation and control; New issues in marketing-Globalization, Consumerism, Green Marketing, Direct Marketing, Network Marketing, Event Marketing, Ethics in Marketing.

### Suggested Readings:

1. Kotler, Philip and Keller, Kevin, Marketing Management, Prentice Hall of India
2. Kotler, Philip and Armstrong, G., Principles of Marketing, Prentice Hall of India
3. Czinkota & Kotabe, Marketing Management, Thomson Learning
4. Ramaswamy, V.S. & Namakumari, S., Marketing Management: Planning, Control, Macmillan
5. Kotler, Lane, Keller., Marketing Management, Pearson
6. Rajan Saxena, Marketing Management, McGraw Hill
7. R. Srinivas, Case Studies in Marketing- Indian Context, PHI Learning
8. Stanton, Fundamentals of Marketing, McGraw Hill
9. Sontakki, C.N. et al., *Marketing Management*, Kalyani Publishers
10. Kumar, A and Meenakshi, N, Marketing Management, Vikas Publishing House Pvt. Ltd.
11. C.K. Prahalad, The Fortune at the Bottom of Pyramid, FT Press
12. Matt Haig, 100 Brand Failures, Kogan Page
13. W. Chan Kim & Renee Mauborgne, Blue Ocean Strategies, Harvard Business Review Press

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-202**

**HUMAN RESOURCE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize students to the various facets of managing people and to create an understanding of the various policies and practices of human resource management.*

**Course Outcomes:**

- CO1:** Students will be able to recall the terms associated with Human Resource Management.
- CO2:** Students will be able to discuss various HR practices used in the business world.
- CO3:** Students will be able to apply various HR practices.
- CO4:** Students will be able to compare and contrast HR practices across companies.
- CO5:** Students will be able to evaluate the effectiveness of HR practices adopted in the organizations.
- CO6:** Students will be able to create and design the HR strategies related to coping in dynamic business environment.

**Course Contents:**

**UNIT-I**

Introduction to HRM: Concepts and Perspectives of Human Resource Management; Human Resources Management in a Changing Environment; Managerial and Operative Functions of HRM.

## UNIT-II

Recruitment, Placement and Retention Strategies: Human Resource Planning; Job Analysis; Methods of Manpower Search; Attracting, Selecting and Retaining Human Resources; Induction and Socialization.

## UNIT-III

Training and Development: Manpower Training and Development; Performance Appraisal and Potential Evaluation; Career and Succession Planning; Talent Management.

## UNIT-IV

Employee Relations and Compensation Administration: Job Evaluation and Compensation Management; Incentives and Employee Benefits; Employee Welfare; Industrial Relation; Employee Separation Practices, HR Accounting and audit.

### Suggested Readings:

1. Aswathappa, K., *Human Resource and Personnel Management*, Tata McGraw Hill.
2. Dessler, G., *Human Resource Management*, Pearson Education.
3. Venkatesh, D.N. & Jyothi P., *Human Resource Management*, Oxford University Press.
4. Bohlander, G. & Snell, S., *Human Resource Management*, Cengage Learning.
5. Patnayak, B., *Human Resource Management*, PHI Learning.
6. Rao, V.S.P., *Human Resource Management*, Excel Books.
7. Cascio, W.Y., *Managing Human Resources*, Irwin-McGraw Hill.
8. Noe, Hollenbeck, Gerhart & Wright, *Human Resource Management*, McGraw-Hill Higher Education

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-203**

**FINANCIAL MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to acquaint the students with the broad framework of financial decision-making in business.*

**Course Outcomes:**

- CO1:** Students will be able to outline the basic framework of financial management.
- CO2:** Students will be able to explain the role of financial management for financial decision making in business.
- CO3:** Students will be able to apply various theories of capital structure and dividend policy.
- CO4:** Students will be able to examine risk in capital budgeting decisions.
- CO5:** Students will be able to select various sources of finance with evaluation of their cost.
- CO6:** Students will be able to create working capital policy for organization.

**Course Contents:**

**UNIT-I**



Financial Management: meaning, objectives and scope; types of financial decisions, risk-return framework for financial decision-making, time value of money.

Capital Budgeting Decisions: nature, importance and types of investment decision; techniques of evaluating capital budgeting decisions, risk analysis in capital budgeting.

## **UNIT-II**

Capital Structure Decisions: optimum capital structure; theories of capital structure; factors determining capital structure. Sources of long term and short term finance.

Cost of Capital: concept and importance; computations of cost of various sources of finance; weighted average cost of capital.

## **UNIT-III**

Working Capital Management: Concept and types of working capital; operating cycle, determinants of working capital, estimation of working capital requirement; working capital policy; Management of cash, accounts receivables and inventories; financing working capital.

## UNIT-IV

Dividend Policy: Dividend and its forms, theories of dividend policy and their impact on the value of a firm; types of dividend policy. An overview of Corporate Restructuring

### Suggested Readings:

1. Van Horne, James C., *Financial Management and Policy*, Prentice Hall of India.
2. Pandey I. M., *Financial Management*, Vikas Publishing.
3. Damodaran, A, *Corporate Finance: Theory and Practice*, John Wiley & Sons.
4. Hampton, John. *Financial Decision Making*, Englewood Cliffs, Prentice Hall Inc.
5. Khan, M.Y. & Jain, P.K., *Financial Management*, McGraw Hill.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The Course is designed to acquaint the students with decision making in planning, scheduling and control of production operations in both manufacturing and service organizations.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in production and operation management.

**CO2:** Students will be able to summarize basic concepts in production and quality control.

**CO3:** Students will be able to apply different techniques/methods for effective management of production.

**CO4:** Students will be able to analyze the utility of different techniques for operation management.

**CO5:** Students will be able to evaluate the performance of different methods used for management of materials, its production process and operation.

**CO6:** Students will be able to create and design new techniques for quality control in the process of production and operation management.

**Course Contents:**

## **UNIT-I**

Nature and Scope of Production and Operations Management; Types of Manufacturing Systems Facility Location; Plant Layout: Layout Planning and Analysis.

## **UNIT-II**

Production Planning: Capacity Planning, Aggregate Planning, Master Production Scheduling, Material Requirement Planning; Maintenance Management.

## **UNIT-III**

Material Management: An overview of Material Management, Inventory Control, Purchase Management, Just in Time; Material Handling; Scheduling: Gantt Charts, Sequencing.

## UNIT-IV

Quality Control: Statistical Quality Control, Acceptance Sampling, Total Quality Management, ISO-9000; Work Study: Method Study, Work Measurement.

### Suggested Readings:

1. Heizer, J. & Render, B., *Operations Management*, Pearson.
2. Gaither, N. & Frazier, G., *Operations Management*, Thomson.
3. Adams, Everett E. (Jr.) and Ebert, Ronald J., *Production and Operations Management: Concepts, Models and Behavior*, Prentice Hall of India.
4. Krajewski Lee J. & Ritzman Larry P., *Operations Management: Processes and Value Chain*, Pearson.
5. Buffa, E. S. & Sareen, *Modern Production Management*, John Wiley.
6. Chary, S. N., *Production and Operations Management*, Tata McGraw Hill.
7. Richard, B. Chase, F. Robert Jacobs, Nicolas J. Aquilano & Nitin K Agarwal, *Operations Management for Competitive Advantage*, Tata McGraw Hill.
8. Nair, N.G. *Production and Operations Management*, Tata McGraw Hill.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Course Objective:**     *The aim of the course is to acquaint the students with the export-import procedures and documentation*

**Course Outcomes:**

**CO1:** Students will be able to describe the legal framework and procedure governing international trade.

**CO2:** Students will be able to explain the incorporation of various terms in drafting of an export contract and understand the importance of risk management.

**CO3:** Students will be able to apply the concepts learned in terms of export order, delivery and international trade pricing to actual transactions.

**CO4:** Students will be able to appraise the role and importance of export-import documentation and procedure framework according to commodities and countries.

**CO5:** Students will be able to evaluate the nuances of import and export clearance procedures.

**CO6**    Students will be able to develop the skills to export-import various commodities in different countries and avail benefits of various export incentives and promotional schemes given by government.

**Course Contents:**

**UNIT I**

Export Preliminaries, Documentation in international trade: Aligned Documentation System (ADS); Commercial documents, Regulatory documents, Documents related to goods,

shipment, payment, inspection and legal regulated documents, Official machinery for consultation.

## **UNIT II**

Export contract: Distinction between domestic sales contract and export sales contract, Major laws for export contracts, Elements in export contracts, Dispute settlement, Role of ICC; INCOTERMS, Containerization.

## **UNIT III**

Export order processing; shipping and custom clearance of export and import cargo; central excise clearance; Role of clearing and forwarding agents. Types of risks in international trade, Cargo Insurance and claim Procedures



## UNIT IV

Methods of payment in international trade; documentary collection of export bills, UCPDC guideline, Instruments of payments, Pre-shipment and post-shipment finance, Negotiation of documents with banks, Main Provisions of FEMA; Procedure and documentation for availing export incentives.

### Suggested Readings:

1. C. Rama Gopal, *Export Import Procedures, Documentation and Logistics*, New Age International Publishers, New Delhi.
2. M. D. Jitendra, *Export Procedures and Documentation*, Rajat Publications.
3. Pervin Wadia, *Export Markets and Foreign Trade Management*, Manishka Publications.
4. Paras Ram, *Export: What, Where and How*, Anupam, Publications.
5. Government of India, *Handbook of Import - Export Procedures*.
6. Nabhi's *Exporters Manual and Documentation*.
7. Nabhi's *New Import-Export Policy Procedures*

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAIB-206**

**MANAGEMENT SCIENCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop an understanding of basic management science techniques and their role in managerial decision making.*

**Course Outcomes:**

- CO1:** Students will be able to define the basic concepts in the field of Management Science.
- CO2:** Students will be able to recognize the contribution of Management Science in quality decision making.
- CO3:** Students will be able to apply various methods and techniques to optimize the utilization of the resources.
- CO4:** Students will be able to appraise the utility of different methods in finding optimal solutions of the managerial problems.
- CO5:** Students will be able to evaluate the performance and suitability of different methods used for efficient utilization of the resources.
- CO6:** Students will be able to formulate the problems and interpret the results produced by the applied models.

**Course Contents:**

**UNIT-I**

Management Science - Basic concepts and its role in decision-making. Linear programming: meaning, scope & assumptions, Formulation of linear programming problem & solution by graphical & simplex methods and some special cases.

## **UNIT-II**

Duality and Sensitivity analysis: change in objective function coefficient and availability of resources with simplex method. Transportation - Some special cases like maximization, unbalanced problems, degeneracy in transportation models, Assignment models (HAM).

## **UNIT-III**

Queuing theory (single channel poisson arrivals with exponential service time, infinite population model); Inventory management techniques (Deterministic Model), special techniques of inventory management; PERT/CPM - Network analysis, determining the critical path, calculation of float.

## UNIT-IV

Game theory: Pure and mixed games, dominance and graphical method. Decision theory: one stage and multi stage decision trees; Introduction to Integer programming, Goal programming, Dynamic programming.

### Suggested Readings:

1. Vohra, N.D. *Quantitative Techniques in Management*, Tata McGraw Hill.
2. Budnik, Frank S. Dennis Mcleavey, Richard *Principles of Operations Research*, Richard Irwin, Illinois - All India Traveller Bookseller
3. Sharma, J K. *Operations Research: Theory and Applications*, New Delhi, Macmillan India Ltd.
4. Taha, H A., *Operations Research - An Introduction*, New York, Mc-Millan.
5. Narang, A S. *Linear Programming and Decision Making*, Sultan Chand.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *This course is designed to introduce the students to the fundamentals of research methods and to equip them to follow scientific methods in solving business problems.*

**Course Outcomes:**

- CO1:** Students will be able to relate with the basic understanding of research methodology in the changing business scenario.
- CO2:** Students will be able to identify and classify the application of analytical techniques to face the tasks aimed at fulfilling the objective of business decision making.
- CO3:** Students will be able to apply and demonstrate an understanding of ethical dimensions of conducting research.
- CO4:** Students will be able to distinguish and examine the necessary experimental techniques that help in scientific decision making.
- CO5:** Students will be able to judge and support best alternatively relating to the practices learnt through research methods.
- CO6:** Students will be able to assemble and formulate advanced ways of taking decisions in a logical manner.

**Course Contents:****UNIT –I**

Introduction to Research: Defining Business Research, Types of Research; Scientific Method, Theory Building, Type of Variables; Research Process: Problem Definition, Exploratory Research.

## **UNIT –II**

Research Designs: Concept, Need and Types of Research Designs; Survey Research: Nature of Surveys, Errors in Survey Research, Personal Interview, Telephone Interview, Self-Administered Questionnaire; Observation Methods; Introduction to Experimental Research.

## **UNIT –III**

Sampling Design: Census v/s Sampling, Sampling Methods, Determination of Sample Size; Measurement and Scaling Concepts, Attitude Measurement, Questionnaire Design, Basic Concepts of Reliability and Validity

## UNIT –IV

Data Analysis: Descriptive Statistics, Univariate Statistics; Bivariate Analysis: Test of Difference, Measures of Association; Introduction to Multivariate Analysis; Report Writing.

### Suggested Readings:

1. Zikmund, W. G. *Business Research Methods*. Thomson.
2. Copper, D. R., Schindler P. S. & Sharma, J. K. *Business Research Methods*, McGraw Hill Education.
3. Burns, R. B. & Burns, R. A. *Business Research Methods and Statistics using SPSS*, SAGE Publications Ltd.
4. Bajpai, N. *Business Research Methods*, Pearson.
5. Chawla, D. & Sondhi N., *Research Methodology: Concepts and Cases*, Vikas Publishing House.
6. Panneerselvam, R., *Research Methodology*, Prentice Hall India.
7. Kothari, C.R. *Research Methodology & Technique*, New Age International Publishers.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



# **THIRD SEMESTER**

**MBAIB-301**

**STRATEGIC MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at imparting knowledge of formulation, implementation and evaluation of Business Strategies.*

**Course Outcomes:**

- CO1:** Students will be able to outline the type of decisions taken at different levels of organisation.
- CO2:** Students will be able to explain the process of strategic decision making in an organisation.
- CO3:** Students will be able to apply various tools to assess business environment.
- CO4:** Students will be able to differentiate among various stages of strategic management starting from strategy formulation to its evaluation.
- CO5:** Students will be able to evaluate the strategy which best fits in achieving the organisational goals.
- CO6:** Students will be able to develop a framework of how an organisation actually works by developing policies and strategies.

**Course Contents:**

**UNIT-I**

An introduction to business policy - Nature, Objective and importance of business policy; An overview of strategic management; Strategic decision making; Process of strategic decision making.

## **UNIT-II**

Strategy formulation: Company's vision, mission and objectives; Environmental and organizational appraisal, Strategic alternatives and choice; Types of strategies; Business ethics and corporate strategy, Concept of value chain, core competency, resource base theory and competitive advantage.

## **UNIT-III**

Strategy implementation: Designing organizational structure and activating strategies; Matching structure and corporate strategy, Structural, Behavioral and Functional implementation.

## UNIT-IV

Strategy Evaluation: Strategic evaluation and Control, Strategic and Operational Control; Techniques of evaluation and control.

### Suggested Readings:

1. Jauch & Glueck, *Business Policy and Strategic Management*, McGraw-Hill Publications.
2. Thompson A.A. and Stickland A.J, *Strategic Management- Concept and cases*, Pearson
3. Michael Porter, *Competitive Advantage of Nations*, Free Press.
4. Azhar Kazmi, *Business Policy and Strategic Management*, Thomson Learning
5. Kenneth, A. Andrews, *Concepts of corporate Strategy*, Irwin/McGraw-Hill
6. Melvin J. Stanford, *Management Policy*, Prentice-Hall
7. Pearce, J. A., II, and R. B. Robinson, Jr. *Strategic Management: Strategy Formulation, Implementation, and Control*, Chicago, IL: R. D. Irwin, Inc
8. Jean-Louis Schaan, & Micheál J. Kelly *Cases in Alliance Management: Building Successful Alliances*, SAGE Publications

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB- 302**

**BUSINESS LEGISLATION**

**Time Allowed: 3 Hours**

**M.M: 60**

**Course Objective:** *The aim of the paper is to acquaint the students with the Business law and Company law in their future role as managers.*

**Course Outcomes:**

- CO1:** Students will be able to define laws applicable to a business.
- CO2:** Students will be able to classify different laws and explain their specific purpose.
- CO3:** Students will be able to illustrate cases of law and interpret own manner to solve the problems of business class
- CO4:** Students will be able to examine company laws and compare it with previous laws before amendment of 2013
- CO5:** Students will be able to evaluate the existing business laws in India and analyse their importance
- CO6:** Students will be able to formulate guidelines according to regulatory framework of an organisation

**Course Contents:**

**UNIT-I**

The Indian Contract Act, 1872: Meaning of a Contract, Classification of Contracts, Essentials of a Valid Contract; Performance of a Contract; Discharge of a Contract; Breach of Contract; Quasi Contracts; Contract of Indemnity and Guarantee, Bailment and Pledge, Contract of Agency.

**UNIT-II**

The Sales of Goods Act, 1930: Meaning and essentials of a valid contract of sale, Distinction between sale and agreement to sell, Meaning of goods and their classification, Conditions and warranties, Doctrine of Caveat Emptor, Rights of an unpaid seller, Rights of buyer; Negotiable Instruments Act, 1881: Meaning and characteristics of negotiable instrument, Types of

negotiable instruments and their characteristics, Holder and Holder-in-due-course, Discharge and Dishonour of negotiable instruments, Negotiation and Assignment.

### **UNIT-III**

The Companies Act, 2013; Meaning and Characteristics of a Company; Objects and Applications of Companies Act, 2013; Landmark provisions of new Companies Act, 2013; Classification of companies, Concept of One Person Company; Formation of a company, Memorandum and Articles of association, Prospectus, Allotment of shares and share capital, Membership in companies.

## UNIT-IV

Meetings of Companies: General principles of meetings, Types of meetings; Prevention of Oppression and Mismanagement; Winding up of a Company; Consumer Protection Act: Define consumer rights, provisions regarding complaints in consumer courts, Unfair Trade Practices and Restrictive Trade Practices, Consumer Protection Council, Consumer forum.

### Suggested Readings:

1. Gulshan, S.S. and Kapoor, G.K., *Business Law including Company Law*, New Age International Publication.
2. Macintyre, E., *Business law*, Pearson Education.
3. Tulsian, *Business law*, Tata McGraw Hill.
4. Majumdar A.K. and Kapoor G.K., *Company Law and Practices*, Taxmann Publication.
5. Kothari, V., *Understanding Companies Act, 2013*, Taxmann Publication.
6. Pathak, A., *Contract Law in India*, Oxford University Press.
7. Gogna, P.P.S., *A Textbook of Company Law*, S. Chand Publishing.
8. Nolakha, R.L., *Company Law and Practice*, Vikas Publishing House Private Limited.

### Important Instructions for the Course Coordinator and the Examiner:

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**MBAIB-303**

**ENTREPRENEURSHIP DEVELOPMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to expose the students to the growth of entrepreneurship in developing countries with special reference to India.*

**Course Outcomes:**

**CO1:** The students will be able to list various constituents of entrepreneurship development.

**CO2:** The students will be able to identify the various environmental factors affecting entrepreneurship development

**CO3:** The students will be able to demonstrate skills to develop business plan at individual level.

**CO4:** The students will be able to examine the feasibility of a business.

**CO5:** The students will be able to evaluate the funding alternatives available for entrepreneurs.

**CO6:** The students will be able to develop and implement a business plan.

**Course Contents:**

**UNIT-I**

Concept of Entrepreneur and Entrepreneurship, Entrepreneur vs. Manager, Significance of Entrepreneurship in Economic Development; Economic, Social and Psychological needs for Entrepreneurship; Characteristics, Qualities and Pre-requisites of Entrepreneur; Rural Entrepreneurship.

## **UNIT-II**

The Function of the Entrepreneur in Economic Development of a Country; Methods and Procedures to start and expand one's own Business; Achievement Motivation; Environmental Factors affecting success of a new Business.

## **UNIT-III**

Feasibility Study -Preparation of Feasibility Reports: Selection of factory location, Economic, Technical, Financial and Managerial Feasibility of Project.

## **UNIT-IV**

Government support to new Enterprises; Role of Government and Promotional agencies in Entrepreneurship Development; Entrepreneurship Development Programmes in India

### Suggested Readings:

1. Clifton, Davis S & Fyfe, David E., *Project Feasibility Analysis*, John Wiley.
2. Desai, A N., *Entrepreneur & Environment*, Ashish Publications.
3. Drucker, Peter., *Innovation and Entrepreneurship*, Heinemann.
4. Jain R., *Planning a Small Scale Industry: A Guide to Entrepreneurs*, S.S. Books.
5. Kumar, S A., *Entrepreneurship in Small Industry*, Discovery.
6. McClelland, D C & Winter, W G., *Motivating Economic Achievement*, Free Press.
7. Pareek, Udai and Venkateswara Rao, T., *Developing Entrepreneurship -A Handbook Learning Systems*, Learning Systems

### Important Instructions for the Course Coordinator and the Examiner:

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**MBAIB-304**

**SUMMER INTERNSHIP AND SEMINAR**

**(Internal)**

**Time Allowed: 1 Hour**

**M.M: 50**

**Course Objective:** *The objective of this course is to enable students to explore a career path and give themselves an edge in job market.*

**Course Outcomes:**

- CO1:** Students will be able to describe organizational structure and its functions with all the theoretical aspects learned in class room settings and simulated environment
- CO2:** Students will be able to identify (through understanding and learning the routine tasks within the organization) which work they would prefer to do after completion of MBA.
- CO3:** Students will be able to interpret the organizational dynamics in terms of organizational behavior, culture, competition, future strategies and change initiatives of the organization.
- CO4:** Students will be able to appraise the practical exposure and knowledge related to the job of their interest by working as an intern in any organization.
- CO5:** Students will be able to evaluate their learning during the internship phase and report it in form of a seminar.
- CO6:** Students will be able to assemble and present the learnings from internship.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The list of students will be notified by the Programme Coordinator in the class along with the schedule of seminar presentation by each student during the semester.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student on his/her summer training and the evaluation will be done on the basis of exposure to industry/academics, problem undertaken, communication skills, contents, delivery, body-language and question-

answer handling skills of the student on a proforma duly notified to the students in advance.

**Course Objective:** *The objective of this course is to give students an in-depth knowledge of the working of international financial markets.*

**Course Outcomes:**

**CO1:** Students will be able to recall the structure and components of International Financial System through currency derivatives, future and option.

**CO2:** Students will be able to describe the concepts of International Financial Markets, their co-existence and mutual global importance.

**CO3:** Students will be able to illustrate the working and contribution of World Bank, IMF and other regional developments banks.

**CO4:** Students will be able to examine the linkages in the International Financial Markets vis-à-vis interaction between leading international currencies and monetary instruments in international financial markets.

**CO5:** Students will be able to evaluate the various procedures relating to international financial markets vis-à-vis bond market, derivatives and international portfolio diversification.

**CO6:** Students will be able to develop necessary competencies expected of an international finance professional who have the ability to analyse the cyclical waves in international financial markets.

**Course Contents:**

## **UNIT-I**

Globalization and the Growth of Derivatives, Euro-currency Market, Euro banking and Euro-currency Centers, Term Structure of Euro-currency Rates, Euro-currency Futures and Options, Syndicated Euro-credits.

## **UNIT-II**

International Bond Markets - Introduction, New Issue Procedures in the Eurobond Markets, Eurobond Valuation and Hedging, Interest Rates and Currency Swaps



### UNIT-III

New Instruments in International Capital Markets, International Banking, International Portfolio Diversification

### UNIT-IV

Multilateral agencies: International Development banks such as World bank, IFC and others, Regional development banks such as Asian Development bank and others, bilateral agencies.

#### Suggested Readings:

1. Buckley, Adrian, *Multinational Finance*, Englewood Cliffs, Prentice Hall Inc.
2. Eiteman, David K. & Stonehill, Arthur 1, *Multinational Business Finance*, Addison-Wesley.
3. Johnson & Giaccott, *Options and Futures*. S1 Paul, West.
4. Kim, Suk & Kim, Seung, *Global Corporate Finance: Text and Cases*, Miami.
5. Shapiro, Alan C., *Multinational Financial Management*, Prentice Hall of India.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-306**

**INDIA'S FOREIGN TRADE AND POLICY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To acquaint the students with recent trends in India's foreign trade management and policy related issues in the global context.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in India's Foreign Trade Policy.

**CO2:** Students will be able to describe the different concepts of India's Foreign Trade.

**CO3:** Students will be able to apply the terms used in India's Foreign Trade Policy in doing their business.

**CO4:** Students will be able to appraise the overall structure of India's foreign trade.

**CO5:** Students will be able to evaluate the different schemes run by government in promoting India's foreign trade.

**CO6:** Students will be able to create their own business by getting support from government.

**Course Contents:**

**UNIT – I**

India's Foreign Trade Recent Trends, and Directional Pattern in the Global Context, objectives of foreign trade policy, Structure and Equilibrium of India's Balance of Payments, major exports and imports, prohibited and restricted items.

**UNIT – II**

Merchandise Exports from India Scheme (MEIS), Service Exports from India Scheme (SEIS), export promotion capital goods (EPCG) scheme, schemes for exporters of gems and jewellery, Duty exemption / remission schemes: duty free import authorization scheme (DFIA), deemed exports.

### **UNIT – III**

Role of State Trading Organizations, Specific Service Institutions, Quality complaints and other trade Disputes, Role of EXIM Bank of India, Export Promotion Councils, Role of central board of excise and custom, Role of WTO in India's foreign trade policy.

## UNIT – IV

Special Economic Zones, Agriculture Export Zones, Export Oriented Units electronics hardware technology parks (EHTPS), software technology parks (STPS) scheme and bio-technology parks (BTPS), Ministry of Commerce, organization and Role of DGFT in India's trade policy.

### Suggested Readings:

1. Latest Foreign Trade Policy
2. Datt, Ruddar and Sundaram, K.P.M., *Indian Economy*, S.Chand & Co. New Delhi.
3. Mishra and Puri, *Indian economy*, Himalaya Publishing House.
4. *Export-Import Policy*, Nabhi Publications.
5. Paras Ram, *Export, What, Where & How*, Anupam Publications.
6. Bhalla, V.K., *International Business Environment and Management*, Anmol Publications.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAIB-307**

**GLOBAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic objective of this course is to acquaint the students with environmental, procedural, institutional and decisional aspects of global marketing.*

**Course Outcomes:**

- CO1:** Students will be able to describe basic global market entry strategies.
- CO2:** Students will be able to identify the emerging issues and developments in global marketing.
- CO3:** Students will be able to interpret the marketing environment at global level.
- CO4:** Students will be able to differentiate the marketing practices at domestic and global level.
- CO5:** Students will be able to evaluate the marketing mix strategy of a company competing at global level.
- CO6:** Students will be able to create global marketing strategies.

**Course Contents:**

**UNIT-I**

Global Marketing- Introduction, Drivers towards globalization, Global marketing objectives; Initial modes of entry; Process of international marketing Culture and Global Marketing- Cultures across countries, Culture and negotiations

## UNIT –II

Country Attractiveness- Environmental research, Entry evaluation procedure, Country data sources, Forecasting country sales and market share. Local Marketing- Understanding local customers, Local marketing in mature markets and growth markets

## UNIT-III

Global Segmentation and Positioning- Global market segment, Targeting segments, Global product positioning. Global products- Standardization versus Adaptation, Developing new global products, Global brand management.

## UNIT-IV

Global Pricing- Pricing policy and strategy, Transfer pricing, Counter trade. Global Distribution-Local channels, Wholesaling and retailing, Global logistics, Effects of parallel distribution. Global Advertising and Promotion- Global advertising decision, Elements of global advertising, Global sales promotion; E-commerce as a tool of global marketing

### Suggested Readings:

1. Warren, J. Keegan, *Global Marketing Management*, Pearson Edu/PHI, New Delhi
2. Johansson Johny, *Global Marketing: Foreign Entry, Local Marketing and Global Management*, McGraw Hill.
3. Sak Onkvisit and John Shaw, *International Marketing (analysis and Strategy)*, PHI.
4. Phillip R. Cateora, *International Marketing*, Tata McGraw Hill.



5. Vern Terpestra and Ravi Sarathy, *International Marketing*, Thomson
6. R. L. Varshney and B. Bhattacharya, *International Marketing*, Sultan Chand Publications.

**Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-308**

**INTERNATIONAL LOGISTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *This course exposes students to the fundamentals of logistics as applied to international business.*

**Course Outcomes:**

- CO1:** Students will be able to recall the different terms of international logistics.
- CO2:** Students will be able to differentiate the transportation through different modes, i.e., road, rail, air, and ships.
- CO3:** Students will be able to apply the knowledge to optimize the logistics cost.
- CO4:** Students will be able to compare the role of various agencies involved in the international logistics business.
- CO5:** Students will be able to judge and select the efficient agency involved in international logistics.
- CO6:** Students will be able to create an optimal logistics strategy for a company.

**Course Contents:**

**UNIT – I**

Logistics: Concept, objectives and scope; logistics interface with marketing; Logistics System elements, Relevance of International logistics, logistics as a strategic resource, Principles for logistics excellence.

## UNIT II

General Structure of Shipping Industry: Characteristics, liner and tramp operations; Liner conferences; Freight structure and practices; chartering principles; UN convention on shipping.

## UNIT III

Developments in Ocean Transportation: Containerization: Inland container depots; Multi-modal transportation and CONCOR; Highlights of the Multi-modal Transport of Goods Act 1993, Role of intermediaries including freight forwarders, Shipping agents, freight brokers and Stevedores.

## UNIT IV

Port organization and management: Responsibilities of Port Trust: Major ports of India; International Maritime Organization (IMO), INCOTERMS, Air Transport Management, Air Cargo Tariff Structure

### Suggested Readings:

1. Annual Reports, INSA.
2. Annual Reports, CONCOR.
3. Bowersox, Dhohld J. and Closs David J., *Logistical Management*, Tata McGraw-Hill
4. Coyle, Bard and Langley, *The management of Business Logistics*, Thomson.
5. Pierre Davd, *International Logistics*, Biztantra.
6. Bloomberg David J., Stephan Lemay& Joe B. Hanna., *Logistic*, PHI.
7. Shipping Documents and Reports, UNCTAD.
8. Krishnaveni, M., *Logistice Management and World Seaborne Trade*, Himalaya Publishing House, New Delhi.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-309**

**INTERNATIONAL ACCOUNTING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint the students with the accounting needs of international financial markets and to analyze the accounting measurement and reporting issues unique to multinational business transactions.*

**Course Outcomes:**

**CO1:** Students will be able to describe the basic concepts related to International Accounting, International Audit and International Accounting Standards.

**CO2:** Students will be able to explain in detail International Audit Environment and harmonization of International Accounting Practices.

**CO3:** Students will be able to illustrate the international perspective on Inflation Accounting, International Financial Reporting and Transfer Pricing.

**CO4:** Students will be able to examine the Foreign Financial Statements and international accounting for Environmental Protection.

**CO5:** Students will be able to evaluate the international accounting practices impact on Foreign Currency Translation and International Audit.

**CO6:** Students will be able to assemble international accounting practices.

**Course Contents:**

**UNIT – I**

International dimensions of accounting; conceptual development and comparative development patterns; foreign currency translation; international audit environment

**UNIT – II**

International accounting standards: concept and mechanism of setting international standards, disclosure requirements of international accounting standards.

### UNIT – III

Managing international information systems; international perspective on inflation accounting; international dimensions of financial reporting; harmonization of accounting practices

### UNIT – IV

Analyzing foreign financial statements; accounting for environmental protection measures. Transfer pricing.

#### **Suggested Readings:**

1. Arpon, Jeffrey S. and Radebaugh, Lee H., *International Accounting and Multinational Enterprises*, John Wiley.
2. Choi, Frederick D. S. and Mueller Gerhard G., *International Accounting*, Englewood Cliffs, Prentice Hall Inc.
3. Evans, Thomas G., *International Accounting & Reporting*, MacMillan.
4. Gray, S 1., *International Accounting and Transnational Decisions*, Butterworth.
5. Holzer, H Peter, *International Accounting*, Harper & Row.
6. Prodhan, Bimal, *Multinational Accounting*, Croom-Helm.
7. Rathore, Shirin, *International Accounting*, Englewood Cliffs, Prentice Hall Inc.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Course Objective:** *The objective of the course is to introduce state of the art tools and necessary for planning, executing and maintain risk management risk management in today's environment*

**Course Outcomes:**

- CO1:** Students will be able to describe the basic concepts of risk management in international management vis-à-vis International Financial Derivatives and Foreign Exchange Risk Management.
- CO2:** Students will be able to explain and illustrate the terminology used in risk management vis-à-vis Financial Risk, Credit Risk and Political Risk.
- CO3:** Students will be able to apply optimum solutions in the cases of risk management especially in international scenario through hedging with currency future and option.
- CO4:** Students will be able to differentiate between Options and Futures pricing in risk management and apply the understanding in the simulated foreign currency derivatives and cultural diversities in risk analysis.
- CO5:** Students will be able to evaluate the various risk management strategies for their application in international business.
- CO6:** Students will be able to develop the analytical ability to apprehend and comprehend the risk management practices and their impact on international business vis-à-vis cultural diversities, currency derivatives and asset liability management.

**Course Contents:**



## **UNIT-I**

The concept of risk, Benefit of risk management, Country risk analysis, Cultural diversity and Multi-National Corporations.

## **UNIT-II**

Financial risk management, Management of credit risk, Political risk and its management. Foreign Exchange Risk Management

### UNIT-III

Risk management through derivative: Swaps Forwards, Futures, Options, Option prices models, interest rate derivatives, foreign currency derivatives.

### UNIT-IV

Concept of value at risk, Approaches for calculating value at risk, introduction to assets liability management. Organizational and Accounting issues in Risk Management

Case studies in risk management

#### Suggested Readings:

1. Milind S., *International Financial Management*, John Wiley and Sons.
2. Chance, D.M., *An introduction to Derivatives and Risk Management*, Harcourt College Publishers.
3. Marrison, C, *Fundamentals of Risk management*, TMH Publications.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**OE – 301**

**COUNSELING SKILLS FOR MANAGERS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To develop basic skills among students to independently handle a wide range of employee counseling and performance counselling.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in counselling.
- CO2:** Students will be able to explain conceptual framework of counselling.
- CO3:** Students will be able to demonstrate the process of counselling.
- CO4:** Students will be able to differentiate between theories of counselling.
- CO5:** Students will be able to evaluate practical solutions to human behaviour related problems in the organization
- CO6:** Students will be able to develop his own model of counselling.

**Course Contents:**

**UNIT-I**

Introduction to Counseling- Emergence, Growth, Definition, Need, Goal, Role and Characteristics of Counselor and Counselee, Difference between Counseling and Psychotherapy, and General Principles of Counseling

**UNIT-II**

Approaches to Counseling- Psycho-analytical (Sigmund Freud Theory), Therapeutic (Alfred Adler Theory), Behaviouristic (B. F. Skinner Theory), Cognitive (Albert Ellis Model) and Humanistic Approaches (Carl Rogers Approach);

**UNIT-III**

Counseling Process- 5-D Model, the Phases of Counseling Process, Counseling Environment and Procedure, and the Core Conditions of Counseling; Counselor's Attitude and Skills of Counseling- Verbal and Non-verbal Communication Modalities, Listening Skills, Listening Barriers and Strategies to Overcome Listening Barriers;

#### **UNIT-IV**

Organizational Applications of Counseling Skills- Identifying Problems and Coping Strategies with regard to Occupational Stress and Performance Management; Special Problems in Counseling- Selection of Counseling Strategies and Interventions, Changing Behavior through Counseling; Ethical and Legal Aspects of Counseling, and Current trends in Counseling.

### **Suggested Readings:**

1. Corner, L.S., and Hackney, H., *The Professional Counselor's Process Guide Helping*, Englewood Cliffs, Prentice Hall Inc.
2. Moursund, J., *The Process of Counseling and Therapy*, Englewood Cliffs, Prentice Hall Inc.
3. Munro, C A, *Counseling: A Skills Approach*, Methuen.
4. Reddy, Michael, *Counseling at Work*, British Psychological Society and Methuen.
5. Rao, S. Narayana, *Counselling and Guidance*, Tata McGraw Hill.
6. Gladding, S. T, *Counseling- A Comprehensive Profession*, Pearson.
7. Singh, Kavita, *Counselling Skills for Managers*, Prentice Hall of India.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *Econometrics is concerned with quantifying economic relations, with the provision of numerical estimates of the parameters involved and testing hypotheses embodied in economic relationships. This course aims to provide a basic introduction to econometric analysis, to enable students to examine existing theories with empirical data. In doing so, it examines the difficulties inherent in confronting theory with business data in order to quantify relationships, in dealing with errors and problems in variables which can be only observed but not controlled, and the means of compensating for uncertainty in data.*

**Course Outcomes:**

- CO1:** Students will be able to define and memorize the various fundamental terms and concepts of econometrics.
- CO2:** Students will be able to explain the basic assumptions, procedures and properties of various estimators.
- CO3:** Students will be able to apply various data analysis models.
- CO4:** Students will be able to compare the results obtained from various models.
- CO5:** Students will be able to evaluate the results and test their statistical significance.
- CO6:** Students will be able to develop a good quality research paper in finance and economics using the econometric methods

**Course Contents:****UNIT-I**

Nature, scope and methodology of econometrics; Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method.

## **UNIT-II**

Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression co-efficient,  $R^2$  and adjusted  $R^2$ ; Econometric Problems: Multi co linearity, Autocorrelation and Heteroscedasticity.

## **UNIT-III**

Dummy variables-Nature and uses, Regression on dummy variables, Regression on Dummy Dependent Variable-The basic idea of the Linear Probability Model (LPM), Probit and Logit Models. Dynamic Econometric Models: Koyck distributed lag model, the adaptive expectation model, and the partial adjustment model.



## UNIT-IV

Simultaneous Equation Models: Structural, Reduced and final forms, Identification-Order and rank conditions, Methods for estimating the simultaneous models-Basic idea of Indirect Least Square (ILS) and Two Stage Least Square (2SLS) methods. Seemingly Unrelated Regressions (SUR), SUR versus OLS

### Suggested Readings:

1. Greene, William H., *Econometric Analysis*, Macmillan.
2. Johnston, J., *Econometric Methods*, McGraw -Hill.
3. Gujarati, Damodar N., *Basic Econometrics*, McGraw-Hill.
4. Stock J. H. and Watson M.W. *Introduction to Econometrics*, Addison-Wesley Series in Economics, 2nd Edition (2006).
5. Koutsoyiannis, A., *Theory of Econometrics*, Harper & Row.
6. Kmenta, J., *Theory of Econometrics*, Macmilan.
7. Maddala, G.S., *Introduction to Econometrics*, Macmillan.

### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE - 303**

PERSONAL FINANCE

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to make students learn the various aspects of personal finance.*

**Course Outcomes:**

**CO1:** Students will be able to describe the different concepts of personal finance.

**CO2:** Students will be able to explain the risk profiling.

**CO3:** Students will be able to demonstrate the skills in selecting financial products.

**CO4:** Students will be able to examine the different financial products according to their risk profile.

**CO5:** Students will be able to evaluate the different financial products on the basis of their cost and benefits.

**CO6:** Students will be able to design the different financial products keeping in mind macro and micro variables.

**Course Contents:**

UNIT-I

Personal Finance: Meaning and importance. Financial planning: meaning, process and role of financial planner. Risk profiling: client data analysis, life cycle, wealth cycle. Asset allocation: Strategic, Tactical, Fixed and Flexible.

UNIT-II

Risk Management: Meaning, process and importance. Distinguish between risk assessment, risk management and risk avoidance. Assessment of requirement of Health Insurance, Life Insurance and General Insurance. Choice of products for risk coverage

### UNIT-III

Investment Management: meaning and importance. Investment avenues: equity, debt, gold, real estate, mutual funds, exchange traded funds. Portfolio management: meaning, construction, evaluation and revision. Loan management: meaning, types, importance and assessment, personal, car loan, home Loan etc.

## UNIT-IV

Tax planning: basics terms of income tax, advance tax, tax deduction at source, deductions under section 80C, 80 CCC, 80 D and 80 G. Taxation of investment products. Retirement planning, Management of nomination, power of attorney and will

### **Suggested Readings:**

1. Kapoor Jack R, *Personal Finance*, The McGraw-Hill companies.
2. Huang. Stanley S C and Randall, Maury R., *Investment Analysis and Management*. Allyn and Bacon.
3. Gaungully, Ashok, *Insurance Management*, New Age Publishers, New Delhi.
4. Ahuja, G K & Gupta Ravi, *Systematic Approach to Income Tax*, Allahabad, Bharat Law House.
5. Pandian, *Security Analysis and Portfolio Management*, Vikas Publishing House, New Delhi.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE-304**

**APPLICATIONS OF MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to acquaint the students with the various aspects of applications of the marketing principles in corporate world.*

**Course Outcomes:**

- CO1:** Students will be able to outline with the various application areas of marketing.
- CO2:** Students will be able to explain the key concepts related to the application areas of marketing.
- CO3:** Students will be able to use the marketing concepts in interpreting marketing strategies.
- CO4:** Students will be able to appraise a marketing environment from different perspective.
- CO5:** Students will be able to judge the overall marketing mix strategy of an organization.
- CO6:** Students will be able to develop a basic marketing strategy for varied areas of marketing.

**Course Contents:**

**UNIT-I**

Consumer Behavior: Introduction to consumer behavior, Understanding the role of internal and external influences on consumer behavior, Consumer Decision Making Process.

Sales and Distribution: Introduction to Sales, Its Importance, objectives and functions; Sales forecasting & designing sales territories; Distribution Channels: purpose & types of distribution channels

## **UNIT-II**

Retailing: Introduction to Retailing; Organized Vs Unorganized retailing, Types of Retail formats. Internet marketing: Relevance of Internet Marketing, Web analytics, SEO, Social Media Marketing.

## **UNIT-III**

Marketing of Services: Introduction to Services, Characteristics of Services compared to Goods, Service Mix, Gap model of Service Quality, Service classification. Marketing Communication: Elements of Marketing Communication, Relevance of IMC, Designing a Marketing Communication Programme

## UNIT-IV

Industrial Marketing: Meaning and Concept of Industrial Marketing, Types of Industrial Customers, Classification of Industrial Products, Industrial Buying Process. Rural Marketing: Introduction to rural markets in India, Classification of products and services in rural marketing, Analysis of rural demand, Marketing Practices in rural market.

### Suggested Readings:

1. Schiffman, L., & Wisenblit, J., *Consumer Behaviour*, Prentice Hall PTR.
2. Still, Richard R., Edward W. Cundiff, and Norman A.P. Govoni: *Sales Management*, Prentice Hall, New Delhi.
3. Christopher Lovelock, Jochen Wirtz and Jayanta Chatterjee, *Services Marketing*, Pearson Education
4. Bowersox and Others, *Physical Distribution Management*, Tata McGraw Hill, New Delhi.
5. Levy Micheal, Weitz Barton A. And Pandit Ajay, *Retailing Management*, Tata McGraw Hill, New Delhi
6. Havalder, Krishna K., *Industrial Marketing*, TMH, New Delhi.
7. George E. Belch, Michael A. Belch and Keyoor, Purani, *Advertising and Promotion*, McGraw Hill Education.
8. Charlesworth, A., *Internet Marketing: A Practical Approach*, BH Publications.
9. Acharya S. S. and Agarwal N. L., *Agricultural Marketing in India*, Oxford & IBH Publishing Co.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**OE-306**

**CORPORATE GOVERNANCE AND BUSINESS ETHICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize the students about the various ethical and corporate governance issues in business management in the current environment.*

**Course Outcomes:**

- CO1:** Students will be able to describe the different concepts of corporate governance.
- CO2:** Students will be able to explain the ethical dimension of doing business.
- CO3:** Students will be able to demonstrate the skills in implementing governance related matters
- CO4:** Students will be able to examine the different issues pertaining to corporate social responsibility of business.
- CO5:** Students will be able to evaluate the regulatory aspects of corporate governance.
- CO6:** Students will be able to design practical ways of inculcating ethics in various functions and operations of business.

**Course Contents:**

**UNIT-I**

Evolution of corporate governance; developments in India; regulatory framework of corporate governance in India; SEBI guidelines on corporate governance; reforms in the Companies Act

**UNIT-II**

Corporate management vs. governance; internal constituents of the corporate governance; key managerial personnel (KMP); chairman- qualities of a chairman, powers, responsibilities and duties of a chairman; chief executive officer (CEO), role and responsibilities of the CEO.

### **UNIT-III**

Introduction to Business Ethics: The concept, nature and growing significance of Ethics in Business, Ethical Principles in Business, Ethics in Management, Theories of Business Ethics, Ethical Issues in Business, Business Ethics in 21<sup>st</sup> Century.

### **UNIT-IV**

Ethics in various functional areas of Business: Ethics in Finance, Ethics in HRM, Ethics in Marketing, Ethics in Production and Operation Management.

### **Suggested Readings:**

1. Mallin, Christine A., *Corporate Governance (Indian Edition)*, Oxford University Press, Delhi.
2. Blowfield, Michael, and Alan Murray, *Corporate Responsibility*, Oxford University Press.
3. Francesco Perrini, Stefano, and Antonio Tencati, *Developing Corporate Social Responsibility-A European Perspective*, Edward Elgar.
4. Sharma, J.P., *Corporate Governance, Business Ethics & CSR*, Ane Books Pvt Ltd, New Delhi.
5. Manuel G. Velasquez, *Business Ethics*, Pearson Prentice Hall.
6. Ravindranath B. & Narayana B., *Business Ethics*, Vrinda Publications Pvt. Ltd

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE-307**

**INDIAN ETHOS AND VALUES**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objectives:** *The course aims to help student appreciate the significance of Indian Ethos and Values along with its relevance and implications to managerial decision making.*

**Course Outcomes:**

- CO1:** Students will be able to recall the values related to Indian ethos.
- CO2:** Students will be able to identify how Indian ethos is associated with business organizations.
- CO3:** Students will be able to demonstrate the skills required to develop a holistic approach towards management of organizations
- CO4:** Students will be able to appraise the importance of Indian education system and philosophy behind it.
- CO5:** Students will be able to evaluate the human values thus generating a value-driven management.
- CO6:** Students will be able to develop ways to solve real-life problems related to human behaviour based on his understanding on Indian ethos and values.

**Course Contents:**

**UNIT I**

Indian Ethos: Meaning of Bharat, relevance of Indian ethos, role of Indian ethos in managerial practices; Sources of Indian Ethos in Management: Vedas, Ramayana, Bible, Quran, Kautilya's Arthashastra, Ethics v/s Ethos; Indian Management v/s Western Management.

**UNIT II**

Modern Approach towards Indian Ethos : Introduction, Indian Management Thoughts, Holistic Approach to Management; Sadhana –In Management context, The Tatwas in Indian Ethos; Management Thoughts and Practice: Harmony with Environment, Dharma, Swadharma and Detachment, Holistic approach to Personality, Managerial Purusharth Karma yoga & enlightened leadership.

### **UNIT III**

Learning and Education System in India: Learning concept, Gurukul System of Learning, The beginning of modern education system, Achievements of the Indian education system; Law of Karma, Law of creation, law of humility, law of growth, law of responsibility.

## UNIT IV

Human Values: Meaning, significance, Vedic literature and values, formation of values, Aristotle's view on value inculcation, Objectives of value-based system, Interrelation of Values and Skills, Values and the workplace, Value-based Human response management, Need of value-based holistic management, Value-driven management, Indian culture and wisdom, The ethical and spiritual values and Methods of heart and mind purification.

### Suggested Readings:

1. Agarwal, T. & Chandorkar, N., *Indian Ethos in Management*, Himalaya Publishing House
2. Nandgopal, R. & Sankar, R.N.A., *Indian Ethos & Values in Management*, Tata McGraw Hill Education
3. **Ganjre, A.K., Pawar, P. & Laxman R.**, *Indian Ethos - Modern Management Mantra*, Himalaya Publishing House
4. **Bansal, I.**, *Management Concept in ancient India psycho-philosophic thought and their significance in present day organization*, Jaipur, Narayan Publication
5. Sharma. S., *Management in New Age: Western Windows Eastern Doors Management*, New Age International

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



OE-308

COMPUTER APPLICATIONS IN BUSINESS  
AND CYBER SECURITY

**Time Allowed: 3Hours**

**MM: 60**

**Course Objective:** *Objective of this course is to familiarize the student with basic concepts of information technology, its application in business and make them conscious of cyber security laws and practice.*

**Course Outcomes:**

**CO1:** Students will be able to relate with various software related to office application.

**CO2:** Students will be able to explain and identify electronic data transfer takes place and will

be able to handle data base management systems.

**CO3:** Students will be able to use and operate telecommunication networks which are most commonly used in organizations.

**CO4:** Students will be able to question and test the various operations of the internet.

**CO5:** Students will be able to evaluate and examine the perspectives of cyber security hence bearing ethical responsibility.

**CO6:** Students will be able to develop solutions for real-life problems based on computer applications and cyber security.

**Course Contents:**

UNIT-I

Software Packages for Office Applications- Word Processing using MS Word, Spreadsheets using MS Excel, Presentations using MS PowerPoint, Creating web pages and web applications with HTML, Business functionalities using Tally software.



## UNIT-II

Electronic Data Processing: An introduction; Data processing cycle; data hierarchy; data file structure; file organization, Data Base Management Systems

## UNIT-III

Telecommunication and Networks: Types of Telecommunication Networks, Telecommunications Media, Network Topologies, Network Architectures-The OSI Model. The Internet, Intranet and Extranets: Operation of the Internet, Services provided by Internet, World Wide Web, Intranet and Extranets.

## UNIT-IV

Cyber Security: Perspective of Cyber security, Application security, Information security, Network security, End-user education, Cryptography / Encryption, Security issues in wireless, Security Threats and Vulnerabilities, Ethical Responsibility - Business Ethics, Technology Ethics; Cyber Crime and Privacy Issues. Brief introduction to Information Technology Act, 2000, IT (Amendment) Act

### Suggested Readings:

1. Ram, B., *Computer Fundamentals*, New Age Publications.
2. Rajaraman, V., *Introduction to Information Technology*, PHI.
3. Shrivastava., *Fundamental of Computer & Information Systems* , Wiley Dreamtech.
4. Chwan-Hwa (John) Wu, J. David Irwin, *Introduction to Computer Networks and Cybersecurity*, CRC Press.
5. Aparna Viswanathan, *Cyber Law*, LexisNexis Butterworths

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of four short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry 8 marks each. The maximum time allotted for the major test is 03 (three) hours.

**OE-309**

**DISASTER MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to understand the framework for evaluating disaster management regarding the capital expenditure proposals, their planning, finance, appraisal and management in the review of the projects undertaken.*

**Course Outcomes:**

- CO1:** Students will be able to explain the importance, scope and functions of Disaster Management.
- CO2:** Students will be able to illustrate the Life Cycle of any given disaster management project.
- CO3:** Students will be able to sketch estimation of Guidelines for Time, Costs and Resources required for Disaster Management by applying different methods.
- CO4:** Students will be able to examine the Scheduling Resources and Reducing Disaster Duration.
- CO5:** Students will be able to evaluate Role and Responsibilities of the Disaster Manager, Planning, Organizing, Controlling, Skills of the Disaster Manager.
- CO6:** Students will be able to formulate strategies for risk reduction in Disaster.

**Course Contents:**

**UNIT-I**

**Introduction to Disasters:** Concepts, and definitions (Disaster, Hazard, Vulnerability, Resilience, Risks) **Disasters: Classification, Causes, Impacts** (including social, economic, political, environmental, health, psychosocial, etc.), Differential impacts- in terms of caste, class, gender, age, location, disability, Global trends in disasters, urban disasters, pandemics, complex emergencies, Climate change

## UNIT-II

**Approaches to Disaster Risk reduction:** Disaster cycle its analysis, Phases, Culture of safety, prevention, mitigation and preparedness community based DRR, Structural- nonstructural measures, roles and responsibilities of- community, Panchayati Raj Institutions/Urban Local Bodies (PRIs/ULBs), states, Centre, and other stake-holders.

### UNIT-III

**Inter-relationship between Disasters and Development:** Factors affecting Vulnerabilities, differential impacts, impact of Development projects such as dams, embankments, changes in Land-use etc. Climate Change Adaptation. Relevance of indigenous knowledge, appropriate technology and local resources

### UNIT-IV

**Disaster Risk Management in India** Hazard and Vulnerability profile of India, Components of Disaster Relief: Water, Food, Sanitation, Shelter, Health, Waste Management Institutional arrangements (Mitigation, Response and Preparedness, DM Act and Policy, Other related policies, plans, programmes and legislation), Contemporary issues in Disaster Management including COVID-19.

#### Suggested Readings:

1. Alexander David, Introduction in 'Confronting Catastrophe', Oxford University Press
2. Andharia J. Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Papers
3. Blaikie, P, Cannon T, Davis I, Wisner B At Risk Natural Hazards, Peoples' Vulnerability and Disasters, Routledge.
4. Coppola P Damon, Introduction to International Disaster Management,
5. Carter, Nick Disaster Management: A Disaster Manager's Handbook. Asian Development Bank, Manila Philippines.
6. Cuny, F. Development and Disasters, Oxford University Press.
7. Document on World Summit on Sustainable Development.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FOURTH  
SEMESTER**

**MBAIB-401**

**COMPREHENSIVE VIVA-VOCE**

**M.M: 100**

**(Compulsory for all the Students)**

**Course Objective:** *The objective of the course is to enable students to get a thorough understanding of what conceptual knowledge they have acquired and how they will be able to express it unambiguously in a demanding situation.*

**Course Outcomes:**

- CO1:** Student will be able to recall the important terms related to core and general courses of management.
- CO2:** Students will be able to explain their understanding about learnings from the programme.
- CO3:** Students will be able to demonstrate their soft and hard skills.
- CO4:** Students will be able to examine their own spontaneity, mannerisms and presence of mind which will help them in introspection for future such events (Job Interviews).
- CO5:** Students will be able to defend the knowledge about their respective field.
- CO6:** Students will be able to assemble their experiences gained during the programme.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The Programme Coordinator will announce in the class in the beginning of the semester regarding the significance of the Comprehensive Viva-Voce Examination and the expectations of the Panel of Examiners from the passing out students of MBA Programme.
- The Panel of Examiners duly constituted by the COE/Director/Principal will conduct an oral viva-voce examination to assess the overall programme objectives and overall course outcomes achieved by the students, during the programmes, on the basis of communication skills, course contents, analytical ability and question-answer handling skills of the student on a proforma duly notified to the students in advance.





**MBAIB-402**

**RESEARCH PROJECT**

**(Optional in lieu of one paper)**

**Time Allowed: 1 Hour**

**M.M: 100**

**Course Objective:** *The objective of this course is to make students understand the scientific and systematic way of solving organizational problems by making valuable choices.*

**Course Outcomes:**

- CO1:** Students will be able to draw a management problem in a scientific manner.
- CO2:** Students will be able to recognize the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Student will be able to distinguish the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO5:** Students will be able to evaluate the procedure for the scientific and systematic research in solving pragmatic problems of any organization.
- CO6:** Student will be able to construct and formulate research problems objectively thus enabling themselves to make effective decisions.

**Instructions for Research Project:** The following instructions will be followed:

1. Research project, which is optional, should be from major or core area of specialization of the student and shall be in lieu of one paper of his/her major or core area of specialization.
2. Students opting for MBAIB-402 Research Project in the 4th semester will have to register for the project in Semester III itself by submitting a synopsis along with consent of the supervisor in the Office of HSB and to the office of Director/ Principal in case of affiliated institutes by 15th November.
3. Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, (HSB) in case of HSB and Director/ Principal in case of affiliated institutes.
4. The external examiner, appointed by the COE/Director, will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the internal out of 40 marks separately.
5. The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva voce will be appointed by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes.

**Course Objective:** *To acquaint the students with the mechanism of the foreign exchange markets, measurement of the foreign exchange exposure, and hedging against exposure risk. Upon successful completion of this paper, Students should expect to learn the nature and purposes of foreign exchange management under the new financial order evolving higher degree of vulnerability in a highly borderless financial world.*

**Course Outcomes:**

- CO1:** Students will be able to state appropriate formats and technologies to financial communication.
- CO2:** Students will be able to identify market conventions on exchange rate quotation and correctly calculate those quotations.
- CO3:** Students will be able to apply information within the global financial environment of foreign exchange to solve problems and make informed decisions.
- CO4:** Students will be able to appraise forward exchange rates given spot exchanges rates and rationale behind it.
- CO5:** Students will be able to evaluate the problems of dealing in foreign currency and the advantages and disadvantages of overseas funding.
- CO6:** Students will be able to develop an integrative understanding of the foreign exchange market and the relationships between interest rates, spot and forward rates and expected inflation rates.

**Course Contents:****UNIT-I**

Foreign Exchange Market: Function and Structure of the Forex markets, Foreign exchange market participants, Types of transactions and Settlements Dates, Exchange rate quotations, Nominal, Real and Effective exchange rates, and Determination of Exchange rates in Spot

markets. Exchange rates determinations in Forward markets. Exchange rate behavior-Cross Rates Arbitrage profit in foreign exchange markets, Swift Mechanism.

## UNIT-II

International Parity Relationships & Forecasting Foreign Exchange rate:- Measuring exchange rate movements-Exchange rate equilibrium – Factors effecting foreign exchange rate- Forecasting foreign exchange rates .Interest Rate Parity, Purchasing Power Parity & International Fisher effects.

## UNIT-III

Foreign Exchange exposure:-Management of Transaction exposure (**Case Study: Airbus Dollar Exposure**); Management of Translation exposure- Management of Economic exposure (**Case study: Exporter's/Importer's Position: Hedge or Hedge Not**).

## UNIT-IV

Foreign exchange risk Management: Hedging against foreign exchange exposure – Forward Market- Futures Market- Options Market- Currency Swaps-Interest Rate Swap. Cross currency Swaps-Hedging through currency of invoicing- Hedging through mixed currency invoicing.

### Suggested Readings:

1. Eun and Resnick, *International Financial Management*, Tata McGraw Hill.
2. Eiteman, Moffett and Stonehill, *Multinational Business Finance*, Pearson.
3. Jeff Madura, *International Corporate Finance*, Cengage Learning.
4. Alan C. Shapiro, *Multinational Financial Management*, Wiley India
5. Apte, P. G *International Financial Management*, TMH.
6. Maurice Levi *International Finance* , Routledge.
7. Paul Einzip, *A Textbook on Foreign Exchange*
8. Paul Roth, *Mastering Foreign Exchange and Money Markets*, Pitman.

**Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The objective of the course to familiarize the students with the theoretical framework of the theory of economic integration, and its impact on trade and investment flows among the region and on the global economy.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms related to regional blocks.

**CO2:** Students will be able to describe the various functions of regional blocks.

**CO3:** Students will be able to interpret the various economic issues among the regional blocks vis-à-vis world trade.

**CO4:** Students will be able to appraise and distinguish between the strong and weak regional blocks and their reasons.

**CO5:** Students will be able to distinguish the role of regional economic blocks as building blocks in the world trade.

**CO6:** Students will be able to construct and develop a link between regional blocks, WTO and world trade partners.

**Course Contents:****UNIT-I**

Regionalism in the World Economy, Theory of Economic Integration, Levels of economic integration

**UNIT-II**

Selected Regional Blocks - NAFTA, EU, ASEAN, SAARC

**UNIT-III**

Globalization Vs. Regionalization; Building Blocks or Stumbling Blocks, Benefits and cost of economic integration, Economic integration schemes

**UNIT-IV**

Ongoing challenges - Environment Volatility, Rise of Global Mania; Regional Alternatives; India's Free Trade Agreements

### **Suggested Readings:**

1. Gerber James, *International Economics*, Pearson Education.
2. Balassa, Bela., *Theory of Economic Integration*, George Allen & Unwin Ltd..
3. Bhalla, V.K., *World Economy in 90s: A Portfolio Approach*, Anmol Pub. Pvt. Ltd..
4. Dreze, Jean & Sen, Aamrtya, *Indian, Development: Selected Regional Perspective*, Oxford University Press
5. Jackson, J., *The World Trading System*, Mass: MIT Press.
6. Krugman, Paul R. & Obstfeld, M., *International Economics*, Harper Collins Pub.
7. Machlup, F. A., *History of Thought on Economic Integration*, Macmillan.
8. Trivedi, Sonu, *Regional Economic Cooperation and Integration*, New Century Publications.
9. Chhibber, Bharti, *Regional Security and Regional Cooperation*, New Century Publications

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The objective of this paper is to give students an overall view of the international financial system and how multinational corporations operate.*

**Course Outcomes:**

- CO1:** Students will be able to describe the environment of international finance.
- CO2:** Students will be able to compare domestic financial management with international financial management
- CO3:** Students will be able to apply various mathematical formulas in financial decisions.
- CO4:** Students will be able to examine issues related to various finance functions of MNCs.
- CO5:** Students will be able to evaluate issues related to financial management in different MNCs.
- CO6:** Students will be able to create financial management guidelines for organizations operating at international level.

**Course Contents:****UNIT-I**

Finance function in multinational firm; Institutional structure of international financial markets; cost and availability of international financial flows; international financial instruments.

**UNIT-II**

International Working Capital Management: Aspects of international cash management; Investment criteria and borrowing decisions; centralized versus decentralized cash management; international receivables management; securitization of receivables.



### **UNIT-III**

International investment factors and benefit; direct portfolio investment; international CAPM; capital budgeting for foreign direct investment; assessing and management political risk.

## UNIT-IV

International aspects of raising capital; determining financial structure of foreign subsidiaries of MNCs; financial choices for an MNC and its foreign affiliates; costs and risks of financing

### Suggested Readings:

1. Maurice D. Levi, *International Finance*, McGraw-Hill.
2. Buckley, *Multinational Finance*, Prentice-Hall of India.
3. Shapro, A.C., *Multinational Financial Management*, Prentice-Hall.
4. Apte, P. G., *International Financial Management*, Tata McGraw-Hill.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-406**

**GLOBAL STRATEGIC MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at imparting knowledge of Formulation, Implementation and evaluation of Strategies in International Business.*

**Course Outcomes:**

**CO1:** Students will be able to define various concepts, terms related to global strategic management.

**CO2:** Students will be able to explain the various problem areas of global strategic management.

**CO3:** Students will be able to apply the acquired knowledge to understand global environment, emerging issues in the world trade.

**CO4:** Students will be able to compare the economies of the countries, their strengths & weaknesses and strategic issues.

**CO5:** Students will be able to select and defend the different strategies which they adopt in the given situations.

**CO6:** Students will be able to construct and design the strategies independently according the environmental factors and strength of company as a part of global strategic management.

**Course Contents:**

**UNIT – I**

Introduction: Definition, Phases of global strategy, Difference between international strategy and global strategy, Drivers of global strategy, CSR Strategies.

**UNIT – II**

Global Strategic Analysis: External macro environment – PEST analysis, Diamond model, Industry environment – Five force model, phases of international product life cycle, Analysis of internal environment – analyzing firm resources and capabilities, global value chains and value systems, comparative analysis.

### UNIT – III

Global strategic Development: Managing the internationalization process, international strategic alliances through partnership and cooperation, strategy at subsidiary level, headquarter level strategy.

### UNIT - IV

Global strategic Implementation: Global structures and designs, managing change in global context, global management of innovation and knowledge, Global R&D Networks.

#### Suggested Readings:

1. Dunning, J.H., *Explaining International Production*, Harper Collins.
2. Garpand. J. and Farmer, R. N., *International Permissions of Business Policy and Strategy*, Kent Publishing Co.
3. Ansoff, H. I. *Corporate Strategy*, McGraw Hill.
4. Porter, M. E., *Competitive Strategy*, Free Press.
5. Frynas, J.G. and Mellahi, K., *Global Strategic Management*, Oxford University Press.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition,

eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The objective of this course is to develop a diagnostic and conceptual understanding of the cultural and related behavioral variables in the management of global organizations.*

**Course Outcomes:**

- CO1:** Students will be able to recall different terms used in cross-cultural management.
- CO2:** Students will be able to explain conceptual framework of cross-cultural management.
- CO3:** Students will be able to demonstrate the process of global management.
- CO4:** Students will be able to examine cultural aspects in global management.
- CO5:** Students will be able to evaluate practical solutions of problems in cross-cultural management.
- CO6:** Students will be able to develop his own model of cross cultural and global management.

**Course Contents:****UNIT – I**

Human and Cultural Variables in Global Organizations; Cross Cultural Differences and Managerial Implications, Complexities of international firms, staffing policy, Process of recruitment and training.

**UNIT – II**

Cross Cultural Research Methodologies and Hofstede's Study, Structural evolution of Global Organizations; Cross Cultural Leadership and Decision Making.

### **UNIT – III**

Cross Cultural Communication and Negotiation, Human Resource Management in Global Organizations, Management of industrial relations.

### **UNIT – IV**

Ethics and social responsibility in international business, Western and Eastern Management thoughts in the Indian Context, Management of cultural diversity

### Suggested Readings:

1. Adler, N J., *International Dimensions of Organizational Behaviour*, Kent Publishing.
2. Bartlett, C and Ghoshal, S., *Transnational Management: Text, Cases and Readings in Cross Border Management*, Irwin.
3. Dowling. P J., *International Dimensions of Human Resource Management*, Wadsworth.
4. Hofstede, G., *Cultures Consequence: International Differences in Work Related Values*, Sage.
5. Marcie, D and Puffer, M., *Management International: Cases, Exercises and Readings*, West Publishing.
6. Mead, R., *International Management: Cross Cultural Dimensions*, Blackwell, Camb., Mass.
7. Mendenhall, M., *Global Management*, Massachusetts, Blackwell.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAIB-408**

**INTERNATIONAL TRADE LAWS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop a diagnostic and conceptual understanding and implications of legal framework of international business.*

**Course Outcomes:**

- CO1:** Students will be able to describe the regulatory framework of International Trade Laws vis-à-vis WTO and International Business Treaties
- CO2:** Students will be able to discuss basic legal knowledge to International Trade Laws, International Sales Agreement and International Trade Enforcement
- CO3:** Students will be able to interpret the international regulatory framework relating to business and commerce.
- CO4:** Students will be able to examine the Indian laws and regulations governing international business and international taxation assessment.
- CO5:** Students will be able to judge the international commercial arbitrations and settlements relating to international trade laws.
- CO6:** Students will be able to develop the analytical ability to comprehend the international trade laws relating to WTO and Foreign Investment Practices.

**Course Contents:**

**UNIT-I**

Legal Framework of International Business: Nature and complexities; Major laws and their

implications to business; International business contract- legal provisions; Payment terms; International sales agreements; Rights and duties of agents and distributors; Contract of Affreightment (carriage of goods by sea, air and overland).

## UNIT-II

Enforcement and Settlement: Enforcement of contracts and dispute settlement; International commercial arbitration.

Regulatory Framework of WTO: Basic principles and charter of WTO; Provisions of WTO relating to preferential treatment of developing countries, custom valuation and dispute settlement; Implications of GATS, TRIPs and TRIMs.

## UNIT-III

Regulations and Treaties relating to Technology Transfer: Licensing; Franchising, joint ventures, patents and trademarks; Regulatory framework relating to commerce.

## UNIT-IV

Indian laws and regulations governing international transactions; Taxation of foreign income; Foreign investments; setting up offices and branches abroad.

### Suggested Readings:

1. Daniels, John, Ernest W. Ogram and Lee H. Redebungh: *International Business. Environments and operations*
2. GATT/WTO, various publications.
3. Journal of World Trade Law.
4. Kapoor ND; *Commercial Law*; Sultan Chand & Co., New Delhi.
5. Lew, Julton D. M. and Clive Standbrook: (eds.), *International Trade Law and Practice*, Euromoney Publications, London.
6. *Ministry of Commerce, (Govt. of India) Handbook of Import- Export Procedures.*
7. Motiwal OP, Awasthi HIC: *International Trade –the law and practice*; Bhowmik and Company, New Delhi.
8. Patrick, H., *International Business Agreements*, Gower Publishing Co. Pvt.
9. Rao, S., *Joint Ventures*, Vikas Publication, New Delhi
10. Schmothoff C.R., *Export Trade- The Law and Practice of International Trade*

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition,

eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-409      INTEGRATED MARKETING COMMUNICATION STRATEGY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:**    *The aim of this paper is to acquaint the students with the concepts, techniques and developing skills regarding application of effective advertising programmes.*

**Course Outcomes:**

**CO1:**    Students will be able to define various terms associated with the field of integrated marketing communication.

**CO2:**    Students will be able to explain the components of integrated marketing communication.

**CO3:**    Students will be able to interpret the impact of business environmental factors on the marketing communication strategy.

**CO4:**    Students will be able to distinguish the utility of various promotional tools.

**CO5:**    Students will be able to evaluate the effectiveness of marketing communication strategy.

**CO6:**    Students will be able to develop a marketing communication strategy.

**Course Contents:**

**UNIT-I**

The growth of advertising and promotion, the evolution of IMC and a contemporary perspective, Promotional Mix: a tool for IMC, Analysis of the communication process, Role of IMC in the marketing process, Developing Marketing Planning Programme, Role of Advertising and Promotion.

## **UNIT-II**

Participants in the IMC process: The clients Role, Role of advertising agencies, Types of Ad agencies, Agency compensation, evaluating agencies; An Overview of Consumer Behavior: Consumer decision-making process, Environmental influences on consumer behavior, Alternate approaches to consumer behavior

## **UNIT-III**

Analyzing the communication process: A basic model of Communication, cognitive response approach, elaboration likelihood model; Source message and channel factors; Objectives and budgeting for IMC programmes: Establishing objectives and budgeting for promotional programmes; DAGMAR: An approach to setting objectives, problems in setting objectives, Establishing and allocating the promotional budget; Developing the IMC programme: Creative Strategy: Planning & development, Implementation and evaluation.

## **UNIT-IV**

Media planning and Strategy: Developing the media plan, Establishing media objectives, Developing and implementing media strategies, Evaluation and follow-up; Evaluation of media: television & Radio, Evaluation of Print Media: Support Media, Direct Marketing, Direct Selling, The internet and interactive media, sales promotion, public relation, publicity and corporate advertising. Measure the effectiveness of the promotional programme. International advertising and promotion, regulation of advertising and promotion, evaluating the social, ethical and economic Aspects of advertising and promotion

### **Suggested Readings:**

1. Blakeman, R. *Integrated Marketing Communication: Creative Strategy from Idea to Implementation*, Rowman & Littlefield
2. Dutta, K., *Integrated Marketing Communication*, Oxford Higher Education
3. Belch, G. E., Belch, M. A. and Purani, K., *Advertising and Promotion*, McGraw Hill Education.
4. Batra, R., Myers, J. G. and Aaker, A.D. *Advertising Management*, Pearson Education
5. Percy, L. and Elliot, R., *Strategic Advertising Management*, Oxford publishing
6. Sissors, J. Z. and Baron, R.B. *Advertising Media Planning*, McGraw Hill.
7. Jethwaney, J. and Jain, S., *Advertising Management*, Oxford publishing

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAIB-410**

**IN-COMPANY-PROJECT-WORK**

**(Optional in lieu of 3 Elective Courses)**

**Time Allowed: 1 Hour**

**M.M: 300**

**Course Objective:** *The objective of this course is to make the already placed students to understand the procedural scientific and systematic way of solving organizational problems by making valuable choices.*

**Course Outcomes:**

- CO1:** Students will be able to outline the real issues faced by the organization.
- CO2:** Students will be able to convert their learning of research methods into a realistic research design for their topic of research.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Students will be able to examine the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO5:** Student will learn to evaluate and select the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO6:** Students will be able to assemble and present the findings in a report.

**Instructions for In-Company-Project-Work:**

The following instructions will be followed:

- If any student gets placement offer from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work-Report for which detailed guidelines will be

notified separately, from time to time, after taking necessary approval of competent authority of the university.

- However, such In-Company-Project-Work-Report will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes) and Industry Guide (to be appointed by the competent authority of the concerned Organization, who has offered appointment to our student and any pressing hard to join immediately). The Academic Guide will get two hour per week credit per students maximum up to ten credits in his or her teaching workload.
- The evaluation process will be along with detailed guidelines in this connection.



# **MBA (MARKETING)**

**TWO YEARS (FOUR SEMESTERS) PROGRAMME**

**Choice Based Credit System on Outcome Based Education**

**(Effective from Session 2020-21)**



**HARYANA SCHOOL OF BUSINESS**

**GURU JAMBHESHWAR UNIVERSITY OF SCIENCE**

**AND TECHNOLOGY HISAR-125001, HARYANA**

**(YEAR-2020)**

# **THE CURRICULUM BOOK**

## **OF**

### **MASTER OF BUSINESS ADMINISTRATION- MARKETING (MBA- Marketing)**

#### **1.1. Vision and Mission of the Haryana School of Business**

##### **1.1.1 Vision**

The school shall strive to achieve the vision of a globally respected institution engaged in generation of knowledge and dissemination of the same through teaching, research and collaboration with leading business schools, the industry, government and society in the fields of business management studies for the benefits of the economy, nation and the world.

##### **1.1.2 Mission**

- i)** Striving to contribute its best in transforming raw brains into effective business leaders ready to contribute towards the emerging frontiers of economic and societal growth.
- ii)** Imparting state-of-the-art knowledge in the field of business and management keeping into the changing requirements of the industry.
- iii)** Ensuring that our students graduate with a sound theoretical basis and wide-ranging practical business cases and problem solving experience.
- iv)** Fostering linkages between the academics, business and industry.
- v)** Promoting ethical research of high quality in the field of business and management.
- vi)** Adopting the best pedagogical methods in order to maximize knowledge transfer to ensure outcome based education in business and management.
- vii)** Inculcating a culture of free and open discussions in the School thereby engaging students in evolving original business ideas and applying them to solve complex business problems.

- viii) Inspiring an enthusiasm into students for lifelong learning thereby infusing scientific temper, enthusiasm, professionalism, team spirit and business leadership qualities in the students.
- ix) Sensitizing students to look for environmentally sustainable vis-à-vis globally acceptable business solutions.
- x) Upholding democratic values and an environment of equal opportunity for everyone vis-à-vis preparing the students as global humane citizens.

## 1.2. Vision Programme Educational Objectives (PEOs) of the MBA Marketing Programme

The Programme Educational Objectives of the MBA Marketing Programme are:

- PEO1.** To prepare responsible and ethical management professionals to be successfully employed in public and private sector especially in the corporate sectors at national and global levels, who will be able to apply the principles of business and management to evolve, develop and deploy best possible solutions for real world business and management problems after assessing their economic, environmental, cultural and societal implications.
- PEO2.** To groom the budding professionals for analyzing, evaluating and designing complex business and management solutions individually or in teams by doing a methodical and in-depth research and analysis in the related business and management problem domains, by using embryonic modern tools and by communicating effectively among the various stakeholders about due awareness of such business and management solutions.
- PEO3.** To mentor the budding professionals and entrepreneurs of tomorrow with global business leadership qualities and deep economic and societal concerns who can move up in their business professional career or start their own ventures as well.
- PEO4.** To guide the management graduates to develop a positive attitude towards ethical and value based learning and motivate them to take up higher studies and research in the field of business and management.
- PEO5.** To groom budding professional to make them sensitive human beings who can keep due emotions towards humanity and global diversities.

### 1.3 Programme Outcomes (POs) of MBA Marketing Programme

The MBA Marketing is a highly prestigious management course of modern times and prepares the participants for taking up middle and top level challenging executive assignments in private and public sectors. Accordingly, they are imparted adequate conceptual knowledge and practical training in core and allied areas of marketing field. MBA Marketing at HSB is a two years programme divided into four semesters. The programme is aimed at following outcomes:

- PO1. Business Management Knowledge:** Apply knowledge of business management theories and practices to solve business problems.
- PO2. Critical Thinking and Problem Analysis:** Foster Analytical and critical thinking abilities for databased decision-making.
- PO3. Leadership and Business Solutions:** Ability to develop Value based Leadership ability that offers business solutions.
- PO4. Communication and Other Skills:** Ability to understand, analyze and communicate global, economic, legal, and ethical aspects of business.
- PO5. Team Dynamics and Management:** Ability to lead themselves and others in the achievement of organizational goals, contributing effectively to a team environment.

### Programme Specific Outcomes (PSOs) of MBA Marketing Programme

- PSO1. Environmental Awareness for Sustainability:** Understand the impact of the professional business solutions in economic, societal and environmental contexts, and demonstrate the business knowledge for sustainable global business development.
- PSO2. Business Ethics and Values:** Apply ethical principles and commit to business professional ethics and values for discharging all responsibilities within the laid norms of the business and management practices.
- PSO3. Social Responsibility and Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of global business environment dynamics.



**1.4 Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA Marketing Programme**

	PO1	PO2	PO3	PO4	PO5	PSO1	PSO2	PSO3
CO1								
CO2								
CO3								
CO4								
CO5								
CO6								
	<b>Overall Mapping Result: .....</b>							

**Note :** The Mapping of Programme Outcomes (POs) and Course Outcomes (COs) of MBA Marketing Programme will be done every year independently by the Committee constituted by the Board of Studies and Research by making 360 degree feedback including auditing of previous years question-papers and answer-sheets as well. It will be part of the annual Academic Audit of the Haryana School of Business.

**1.5 Important Instructions-cum-Ordinance for Implementing the Outcome based Education Scheme and Syllabus of MBA Marketing Programme**

- i) The MBA Marketing programme will be divided into four semesters (two semesters in the first year and two semesters in the second year). Every semester, generally, shall be of 21 weeks of duration inclusive of teaching and examination. Since, University is in five-days a week functioning mode, hence, allotted credits to each and every course of the programme would be duly compensated with extra hours to essentially fulfill the objective of minimum

working days, per semester, as prescribed by the UGC/AICTE for the Universities in this connection.

- ii) The course of 05 (five) credits shall be of 100 marks in the ratio of 60% external and 40% internal. If otherwise not specifically mentioned against each course, each course of study, ordinarily, consists of five hours lectures per week per semester and one-hour tutorial per week, per group, per semester.
- iii) Unless and otherwise specified at appropriate places, the division and distribution of marks is as under:

Final/Major Test (External) : 60 Marks

Internal Assessment (Internal) : 40 Marks

Distribution of weightage of 40 marks of Internal Assessment will be as per following details:

**Minor Tests** : 15 Marks

**Attendance & Co-curricular Activities** : 25 Marks (Attendance: 05)

(To be announced by the teacher or course coordinator, in the light of expected Course Outcomes in the concerned course, in the beginning of the semester, which may include Attendance, Home-Assignment, Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc. However, a teacher or course coordinator will choose at any five components and announce to the class in the beginning of the semester)

- iv) Each individual course will consist of Maximum Marks as 100 Marks and Passing Marks will be 40 Marks only. However, the aggregate passing marks in a semester will be 50 per cent of the total marks per semester.
- v) A wide range of assessment types for evaluating students is available for the teachers/ institutions to use for internal assessment. Each assessment type has its distinct utility, advantages and limitations. A suitable compendium of such

types needs to be carefully chosen for a particular course depending on its nature, objectives and available resources.

- vi)** The Internal Assessment awarded to a student in any particular course will be based on performance of the students in Two Minor Tests, Attendance and Co-Curricular Activities (which may include Attendance, Home-Assignment, Presentations, Live Assignment, Brainstorming, Role Playing, Book Review, Field-Visit, Industrial Visit, Exhibition, Case-Study, Mock-Test, Surprise Test, Rapid-Round Session, Open-Book Test, Live Assignment, Quiz, Business-Game, Group Discussion, Declamation, Extempore, Viva-Voce, etc.)
  
- vii)** The internal assessment should be designed with learner attributes in mind. These attributes, which have clear linkages to Programme Education Objectives and Course Outcomes, stem from the taxonomy, should be clearly told to the students in the beginning of the semester.
  
- viii)** At least, one or two activities of the internal assessment should focus to achieve the 5<sup>th</sup> or 6<sup>th</sup> Course Outcome in each course of study in every semester.
  
- ix)** The students who fail in internal assessment as well as in aggregate will have the option to improve their score in the internal assessment giving a special chance to such students. However, no student will be allowed to improve his/her score of internal assessment, if he/she has already scored 50% marks in aggregate as well as in external examination.
  
- x)** A student who could not secure 40% marks in external examination of the particular course will have to reappear in the external examination of the respective paper as per university rules in this connection.
  
- xi)** Unless and otherwise specified at appropriate place for specific course, the instructions to the examiners and students for the External Exam/Major Test of 60 marks will be given as under:
  - a)** The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus.
  - b)** In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.
  - c)** The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the External Exam/Major Test is 03 (three) hours.



- xii)** All courses in 1<sup>st</sup> and 2<sup>nd</sup> semesters will be compulsory, whereas, the courses in 3<sup>rd</sup> and 4<sup>th</sup> semesters will be compulsory, optional-elective, project-work-report and open-elective as well.
  
- xiii)** The specific instructions have been given at appropriate places regarding compulsory, optional-elective, project-work-report and open-elective courses depending upon the specializations opted by the students.
  
- xiv)** At the end of the second semester, all the students will have to undergo online/offline summer summer training of 6-8 weeks with an industrial, business or service or academic organization, either through offline or online modes, under the supervision of Training and Placement Office (TPO) in case of Haryana School of Business (HSB) and Director/Principal in case of affiliated institutes.
  
- xv)** Each student will be required to submit a training report, on a prescribed proforma, in the beginning of third semester along with a certificate issued by the concern where he/she has undertaken the summer training either with an industrial, business or service or academic organization to the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes up to 31st August without late fees, for the purpose of evaluation in the third semester. However, the guidelines along with prescribed proforma for the purpose will be notified at the end of second semester.

- xvi)** Each student shall present a seminar on the summer training, during third semester, before a committee of teachers constituted by the Director, HSB in case of HSB and Director/Principal in case of affiliated institutes.
- xvii)** The distribution of marks of Summer Training Report would be 25 marks for the seminar on training report and 25 marks for the written training report.
- xviii)** The Committee of Examiners to be appointed by the Director HSB will evaluate this written training report, the Committee will be coordinated by the Programme Coordinator.
- xix)** If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the university.
- xx)** This new Scheme and Syllabus of MBA Marketing Programme shall be effective from the academic session 2020-21.
- xxi)** In case of any slip-up in above instructions, the general rules of university ordinance will be applicable if the same is in the interest of students.

## **1.6 General Course Structure and Credit Distribution in Various Components of Teaching-Learning in the MBA Marketing Programme**

### **1.6.1 Definition of a Credit may be further classified as under:**

<b>Type of Teaching Learning Activity and Workload</b>	<b>o. of Credits</b>
5 Hours Lecture (L) per week per semester	4 Credit
1 Hour Tutorial (T) per week per semester but maximum two groups irrespective of number of students in the classes	1 Credit
2 Hours Practical (Lab) per week per semester	1 Credit
1 Hour Seminar per week per semester	1 Credit
1 Hour Training Seminar per week per semester	1 Credit
1 Student Guidance for In-Company-Work-Project	2 Credit
2 Hours per week per semester if a teacher is asked to act as Programme Coordinator	2 Credit
1 Hour per week per semester if a teacher is asked to act as Convener of any Standing Committee for discharge of Departmental work during the semester	1 Credit

6 Hours per week for Preparing Students for Training and Placement Activities through mock assessment, group discussion, personal interviews and workshops/seminars per Semester, if officially assigned to a teacher by the Director during the particular semester.	5 Credit
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### 1.6.2 Credits for Different Curriculum Components

<b>Semester-Wise Credit Distribution of MBA Marketing Programme</b>			
<b>Sr No</b>	<b>Semester-Wise</b>	<b>Number of Courses</b>	<b>Total No of Credits</b>
1.	1 <sup>st</sup> Semester	7 Courses	33 Credits
2.	2 <sup>nd</sup> Semester	7 Courses	35 Credits
3.	3 <sup>rd</sup> Semester	8 Courses	38 Credits
4.	4 <sup>th</sup> Semester	4 Courses	20 Credits
		<b>Total</b>	<b>126 Credits</b>
<b>Core and Elective Courses Wise Credit Distribution</b>			

Sr No	Core Courses-Wise	Elective and Open-Elective Courses Wise	Total Number of Credits
1.	96	30	126
		<b>Total</b>	<b>126 Credits</b>

**1.7 For the purpose of enhancing the current knowledge base, students can also access various online resources (supported by MHRD, Government of India) for their respective courses. These resources are available at:**

- <http://nptel.ac.in/courses>
- [www.mooc.org](http://www.mooc.org)
- <https://eggp.inflibnet.ac.in>

## 1.8 : Scheme and Syllabus of MBA Marketing Programme

The Master of Business Administration- Marketing is a two-year full time programme, which is divided into four semesters. The course structure, viz, the scheme and syllabus of the MBA Marketing Programme is given as under:

<b>SEMESTER-I</b>			
<b>Course Code</b>	<b>Course Title</b>	<b>Workload L-----P-----T</b>	<b>Number of Credits</b>
MBAM-101	Management Process and Organisational Behaviour	5-----0-----1	05 Credits
MBAM-102	Business Statistics	5-----0-----1	05 Credits
MBAM-103	Managerial Economics	5-----0-----1	05 Credits
MBAM-104	Accounting for Managers	5-----0-----1	05 Credits
MBAM-105	Business Environment	5-----0-----1	05 Credits
MBAM-106	Marketing Management	5-----0-----1	05 Credits
MBAM-107	Seminar  (On Indian Ethos, Computer Applications in Business, Contemporary Issues in Cyber Security and Modern Business)* (Internal)		03 Credits
		<b>Total</b>	<b>33 Credits</b>

\* Seminar will be organized by a committee of not less than three teachers.

## SEMESTER-II

<b>Course Code</b>	<b>Course Title</b>	<b>Workload</b> <b>L-----P-----T</b>	<b>Number of Credits</b>
MBAM-201	Consumer Behaviour	5-----0-----1	05 Credits
MBAM-202	Marketing Research	5-----0-----1	05 Credits
MBAM-203	Sales and Distribution Management	5-----0-----1	05 Credits
MBAM-204	Business Communication	5-----0-----1	05 Credits
MBAM-205	Human Resource Management	5-----0-----1	05 Credits
MBAM-206	Financial Management	5-----0-----1	05 Credits
MBAM-207	Management Science	5-----0-----1	05 Credits
		<b>Total</b>	<b>35 Credits</b>

SEMESTER-III			
Course Code	Course Title	Workload L-----P-----T	Number of Credits
MBAM-301	Strategic Management	5-----0-----1	05 Credits
MBAM-302	Entrepreneurship Development	5-----0-----1	05 Credits
MBAM-303	Business Legislation	5-----0-----1	05 Credits
MBAM-304	Summer Internship and Seminar (Internal)		03 Credits
	Elective-I*	5-----0-----1	05 Credits
	Elective-II*	5-----0-----1	05 Credits
	Elective-III*	5-----0-----1	05 Credits
	Elective-IV*	5-----0-----1	05 Credits
	Open Elective-I**	5-----0-----1	05 Credits
		<b>Total</b>	<b>38 Credits</b>

\* The students are required to choose 04 (four) Elective Courses offered in Semester III.

\*\* In addition to above 04 (four) Elective Courses, the students are also required to choose one course from the list of Open Elective Courses (other than his/her core area of specialization).

**The List of Elective Papers for Semester III is as follows:**

Course Code	Course Title	Workload L-----P-----T	Number of Credits
MBAM-305	Marketing of Services	5 0 1	5 Credits
MBAM-306	Logistics Management	5 0 1	5 Credits
MBAM-307	Retail Management	5 0 1	5 Credits

MBAM-308	Global Marketing	5	0	1	5 Credits
MBAM-309	Product and Brand Management	5	0	1	5 Credits
MBAM-310	Customer Relationship Management	5	0	1	5 Credits
MBAM-311	Competitive Marketing Strategy	5	0	1	5 Credits
MBAM-312	Integrated Marketing Communication Strategy	5	0	1	5 Credits



**The List of Open Elective Papers for Semester III is as follows:**

Course Code	Course Title	Workload			Number of Credits
		L-----	P-----	T	
OE-301	Counseling Skills for Managers	5	0	1	5 Credits
OE-302	Fundamentals of Econometrics	5	0	1	5 Credits
OE-303	Personal Finance	5	0	1	5 Credits
OE-304*	Applications of Marketing	5	0	1	5 Credits
OE-305	Export Import Procedures and Documentation	5	0	1	5 Credits
OE-306	Corporate Governance and Business Ethics	5	0	1	5 Credits
OE-307	Indian Ethos and Values	5	0	1	5 Credits
OE-308	Computer Application in Business and Cyber Security	5	0	1	5 Credits
OE-309	Disaster Management	5	0	1	5 Credits

**\*The open elective OE-304 Applications of Marketing is not open for MBA Marketing**

SEMESTER-IV					
Course Code	Course Title	Workload		Number of Credits	
		L-----	P-----		T
MBAM-401	Comprehensive Viva- Voce (External)			05 Credits	
MBAM-402	Research Project (optional in lieu of one paper)**	05-----	0-----	1	05 Credits
	Elective-I*	5-----	0-----	1	05 Credits
	Elective-II*	5-----	0-----	1	05 Credits

	Elective-III*	5-----0-----1	05 Credits
	Or		
MBAM-410	In-Company-Project-Work***		15 Credits
		<b>Total</b>	<b>20 Credits</b>

\* The students are required to choose 3 (three) Elective Courses offered in Semester IV. In any case, if the nomenclature of the paper is same/similar as opted by the student in any semester that cannot be opted again.

\*\* Instructions for Research Project: The following instructions will be followed:

1. Research project, which is optional, should be from major or core area of specialization of the student and shall be in lieu of one paper of his/her major or core area of specialization.
2. Students opting for MBAM-402 Research Project in the 4th semester will have to register for the project in Semester III itself by submitting a synopsis along with consent of the supervisor in the Office of HSB and to the office of Director by 30th November.
3. Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, (HSB).
4. External examiner will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the internal awards out of 40 marks separately on the basis of overall performance of the student in the project.
5. The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva voce will be appointed by the Director, HSB.

\*\*\* Instructions for In-Company-Project-Work: The following instructions will be followed:

1. If any student gets placement offer, through on-campus placement drive, from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the University.
2. However, such In-Company-Project-Work will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB) and Industry Guide (to be appointed by the competent authority of the concerned organization, who has offered appointment letter to the student and the organization requires joining immediately). The Academic Guide will get two hours per week credit per student maximum up to ten credits in his or her teaching workload during the semester.

**The List of Elective Papers for Semester IV is as follows:**

<b>Course Code</b>	<b>Course Title</b>	<b>Workload</b>			<b>Number of Credits</b>
		<b>L</b>	<b>P</b>	<b>T</b>	
MBAM-403	Industrial Marketing	5	0	1	5 Credits
MBAM-404	Digital and Social Media Marketing	5	0	1	5 Credits
MBAM-405	Rural Marketing	5	0	1	5 Credits
MBAM-406	Social Marketing	5	0	1	5 Credits
MBAM-407	Direct Marketing	5	0	1	5 Credits

**The Detailed Syllabus of MBA Marketing Programme as follows...**

**FIRST  
SEMESTER**

**MBAM-101 MANAGEMENT PROCESS AND ORGANISATIONAL BEHAVIOUR**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this paper is to familiarize the students with basic management concepts and behavioral processes in the organization.*

**Course Outcomes:**

- CO1:** Students will be able to recall the concepts of management process and organizational behavior.
- CO2:** Students will be able to understand individual and group behavior, and understand the implications of organizational behavior on the process of management.
- CO3:** Students will be able to employ different motivational theories and evaluate motivational strategies used in a variety of organizational settings.
- CO4:** Students will be able to appraise the basic design elements of organizational structure and evaluate their impact on employees.
- CO5:** Students will be able to evaluate how organizational change and culture affect working relationships within organizations.
- CO6:** Students will be able to design strategies to manage individual, group and organizational behaviour.

**Course Contents:**

## **UNIT-I**

Introduction to management: Meaning, nature and scope of management; Evolution of management thoughts: School of management thoughts, Approaches to management; Managerial skills; Managerial functions; Social Responsibility of managers and business; Challenges before modern managers

## **UNIT-II**

Managerial functions: Planning, Decision Making, Management by Objectives; Organizing, Organizational Design, Organizational Structure, Authority and Responsibility, Power, Decentralization; Staffing; Directing, Leading, Motivating, Communicating; Controlling; Co-ordinating.



### UNIT-III

Organizational Behavior: concepts, determinants, challenges and opportunities of OB; contributing disciplines to the OB; Organizational culture and climate, Impact of organizational structure on OB; Understanding and managing individual behavior: Personality; Perception; Values; Attitudes; Learning.

### UNIT-IV

Understanding and managing group processes: Interpersonal and Group Dynamics; Understanding Self: Transactional Analysis; Applications of Emotional Intelligence in organizations; Conflict Management; Stress Management.

#### Suggested Readings:

1. Chandan, J.S., *Organizational Behaviour*, Vikas Publications
2. Koontz, H & Wehrich, H., *Management*, Tata McGraw Hill.
3. Luthans, F., *Organizational Behaviour*, Tata McGraw Hill.
4. Robbins, S.P., *Management*, Prentice Hall Ins.
5. Robbins, S., Judge, T. & Sanghi, S., *Organizational Behaviour*, Prentice Hall of India.
6. Stoner, J., *Management*, Prentice Hall of India.
7. Davis, K., *Organisational Behaviour*, Tata McGraw Hill.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.

- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-102**

**BUSINESS STATISTICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to make students learn about the applications of statistical tools and techniques for decision making.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in statistics.

**CO2:** Students will be able to understand the different methods used in statistics.

**CO3:** Students will be able to apply the knowledge of statistics in their future studies as well as in corporate sector also.

**CO4:** Students will be able to analyze the importance of statistics in business.

**CO5:** Students will be able to evaluate the proficiency of statistical methods in an industry or business.

**CO6:** Students will be able to assemble the different methods of statistics for the well being of business

**Course Contents:**

**UNIT-I**

Univariate analysis: central tendency, dispersion (theoretical concept); Probability: Introduction, addition theorem, multiplication theorem, conditional probability, Bayes

Theorem. Theoretical probability distributions: Binomial, Poisson, Normal Distribution; their characteristics and applications.

## **UNIT-II**

Sampling: probability and non probability sampling methods; Sampling distribution and its characteristics; Hypothesis testing: hypothesis formulation, and testing; Statistical Tests: z-test, t-test, F-test, Analysis of variance, Chi-square test, Wilcoxon Signed-Rank test, Kruskal-Wallis test.

## **UNIT-III**

Correlation analysis: simple, partial and multiple correlations; Regression analysis: simple linear regression model, ordinary least square method. Time series analysis: components of a time series and their measurements and uses.

## UNIT-IV

Index numbers: meaning and types, methods for measuring indices, adequacy of indices;  
Statistical quality control: causes of variation in quality, Control Charts, Acceptance sampling.

### Suggested Readings:

1. Gupta, S.P., *Statistical Methods*, Sultan Chand & Sons
2. Anderson, Sweeney and Williams, *Statistics for Business and Economics*, Cengage Learning.
3. Ken Black, *Business Statistics*, Wiley.
4. Levin, Richard I and David S Rubin, *Statistics for Management*, Prentice Hall, Delhi.
5. Aczel and Sounderpandian, *Complete Business Statistics*, Tata McGraw Hill, New Delhi.
6. Hooda, R.P., *Statistics for Business and Economics* Macmillan, New Delhi.
7. Heinz, Kohler, *Statistics for Business & Economics*, Harper Collins, New York.
8. Lawrence B. Morse, *Statistics for Business & Economics*, Harper Collins, NY

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-103**

**MANAGERIAL ECONOMICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to acquaint the students with concepts and techniques used in the field of economics and to enable them to apply this knowledge in business decision-making. Emphasis is given to changes in the nature of business firms in the context of globalization.*

**Course Outcomes:**

**CO1:** Students will be able to define the terms associated with managerial economics.

**CO2:** Students will be able to explain different theories of managerial economics.

**CO3:** Students will be able to apply the models of managerial economics in business decisions.

**CO4:** Students will be able to examine the demand and supply forces and their effect on pricing and output related decisions.

**CO5:** Students will be able to evaluate the effectiveness of various models and theories of managerial economics in demand, supply, production and costs related decision making procedures.

**CO6:** Students will be able to create the competitive strategies to ensure optimum utilisation of resources.

**Course Contents:**

## **UNIT-I**

Theory of demand and consumer equilibrium-utility and indifference curve approach; Demand function; Elasticity of demand and its significance in managerial decision-making; Demand forecasting and its techniques.

## **UNIT-II**

Theory of Cost: Types of cost: production cost, selling cost, R&D Cost, short run and long run cost curves, relation between cost and revenue, break-even point; Economies and diseconomies of scale and scope; Production function : Short term and long run production function, law of variable proportion and return to scale, Iso-quant curves.

### UNIT-III

Market Structure and Competition: Price and output determination under perfect competition, monopoly, monopolistic competition and oligopoly.

### UNIT-IV

Modern theories of firm: Bamoul's theory of sales maximization, Managerial Theory, Behavioral Theory; National Income: Concept and Measurement.

#### Suggested Readings:

1. Ferguson, P. R. Rothschild, R. Ferguson G.J. , Business Economics, Palgrave Macmillan.
2. Dwivedi,D.N., Managerial *Economics*, Vikas Publication.
3. Salvatore, *Managerial Economics in Global Economy*, Thomson Learning.
4. Thomas, C.R. & Maurice S.C., *Managerial Economics*, Tata McGraw Hill.
5. Koutsoyiannis, A., *Modern Economics*, Macmillan

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Objective:** *The basic purpose of this course is to develop an insight of postulates, principles and techniques of accounting and application of financial and accounting information for planning, decision-making and control.*

**Course Outcomes:**

- CO1:** Students will be able to describe various accounting concepts, principles, techniques associated with decision making.
- CO2:** Students will be able to recognize the usefulness of costing to manager and its applications in the business.
- CO3:** Students will be able to apply the principles, postulates and techniques of accounting for planning and decision making.
- CO4:** Students will be able to differentiate between various types of accounting practices being followed within the organisation.
- CO5:** Students will be able to appraise the performance of organisations with the help of financial statements presented at the end of the year.
- CO6:** Students will be able to formulate advanced policy structure comprising of all accounting information required for controlling deviations in the performance.

**Course Contents:**

## **UNIT-I**

Financial Accounting- Meaning, scope and importance; Accounting concepts and conventions; Accounting process: Journal, Ledger and Trial Balance, Depreciation accounting and policy, Preparation of Final Accounts of Joint-stock Companies, Understanding and Analyzing Published Financial Statements of Companies.

## **UNIT-II**

Cost Accounting: Nature and scope of costing; Cost concepts and Classifications; Usefulness of Costing to Managers; Preparation of Cost sheet. Budgeting: Types of budgets and their preparation

### UNIT-III

Management Accounting: Nature, scope and tools of Management Accounting; Management Accounting vs. Financial Accounting; Financial analysis: Ratio analysis, Cash Flow Statement.

### UNIT-IV

Marginal costing: CVP analysis, break-even analysis, Decision involving alternative choices: fixation of selling price, exploring new markets, make or buy decision and product mix decision. An overview of Standard Costing

#### Suggested Readings:

1. Anthony, R.N. & Reece J.S., *Accounting Principles*, Homewood, Illinois, Rd Irwin.
2. Bhattacharya, S.K. & Dearden, J., *Accounting for Management: Text and Cases*, Vikas Publishing House
3. Gupta, R.L. & Ramaswmy, *Advanced Accountancy*, Volume I&II, Sultan Chand & Sons.
4. Hingorani, N.L. & Ramanathan, A.R., *Accounting*, Sultan Chand & Sons.
5. Jawahar Lal, *Cost Accounting*, Vikas Publishing House.
6. Maheshwari, S.N., *Advanced Accounting*, Vikas Publishing House.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only.

The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-105**

**BUSINESS ENVIRONMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the micro and macro environment of business in coherent and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to define and trace all the indicators of micro and macro environment affecting business organizations
- CO2:** Students will be able to identify and illustrate the impact, challenges and opportunities of all environmental indicators on business organizations
- CO3:** Students will be able to apply and demonstrate the gathered knowledge about how the various laws and other national and international policies influence the organizations in order to take proactive measures so that organizational effectiveness is maintained.
- CO4:** Students will be able to distinguish and examine the necessary techniques and skills that help them in handling the organization's global and national issues efficiently.
- CO5:** Students will be able to evaluate and value the importance of environment within which a business organization has to sustain itself successfully
- CO6:** Students will be able to design and develop their approaches and systems in maintaining coherence both at micro and macro level

**Course Contents:**

## **UNIT-I**

Indicators of Internal and External Business environment; Environmental scanning and risk assessment; Concepts of Economic systems; New Industrial Policy-1991 and Recent Financial and Economic Reforms, Recent Monetary and Fiscal Policy and their impact on Business Environment.

## **UNIT-II**

Impact of Political, Economic, Social and Technological Environment on the Emerging Sectors of Indian Economy: Public Sector, Private Sectors, Services Sector and SME Sector; Privatization in India; Public Private Partnership; Challenges and Opportunities in the Rural sector.

### UNIT-III

Globalization Business Environment; Opportunities and challenges for MNCs in India; Foreign investment in India; Indian Foreign Trade and its Impact on Balance of Payment, Exchange rate Movements and India's Competitiveness in the world economy; World Trade Trends and Economic Integration. Contemporary Issues: Climate change, Food security, Geopolitics Sustainable Development and De-Globalization.

### UNIT-IV

Legislations for Social Responsibilities- Consumer protection Act, 1986 and its Amendments, Competition Act, 2002 and its Amendments and Environmental Protection Act, 1986; Foreign Exchange Management Act, 1999 (FEMA) and their influences on the Business Environment.

#### Suggested Readings:

1. Faisal Ahmed and M. Absar Alam. Business Environment: Indian and Global Perspective, PHI, New Delhi.
2. Cherunilam, Francis, *Business Environment*, Himalya Publishing House.
3. Misra, S.K. & Puri, V.K., *Indian Economy*, Himalya Publishing House.
4. Aswath Thapa, K., *Business Environment*, Excel Books.
5. Bedi S.K., *Business Environment*, Excel Books.
6. Khujan Singh, *Business Environment – Theory and Practice*, IAHRW Publications
7. Paul Jastin, *Business Environment*, Tata Mc Graw Hill.
8. Economic Survey, Govt. of India.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**Course Objective:** *The purpose of this course is to develop an understanding of the underlying concepts, strategies and issues involved in the marketing of products and services.*

**Course Outcomes:**

- CO1:** Students will be able to recall and describe the fundamental concepts related to marketing.
- CO2:** Students will be able to describe the different approaches of marketing and environment in which marketing systems operate.
- CO3:** Students will be able to demonstrate an understanding of the 4Ps used by the marketers.
- CO4:** Students will be able to examine the upcoming trends of marketing in the ever dynamic business world.
- CO5:** Students will be able to evaluate the marketing strategies and programmes of different products in real world.
- CO6:** Students will be able to design a marketing plan for real world market offering (product/ service).

**Course Contents:**

## UNIT 1

Nature, scope and concept of marketing; Corporate orientations towards the marketplace; Marketing Mix; Understanding 4 A's of Marketing; Marketing Environment and Environment Scanning; Marketing Information System and Marketing Research; Understanding Consumer and Industrial Markets; Market Segmentation, Targeting and Positioning

## UNIT II

Product decisions: Product concept and classification, product mix, product life cycle, new product development; Product branding, packaging and labeling decisions; Pricing decisions: Factors affecting pricing decisions, setting the price, Pricing strategies and methods.

## UNIT III

Distribution Channels and Logistics Management: nature, types and role of intermediaries; Channel design decisions, Channel behavior and organization, Channel management decisions, Logistics management decisions. Marketing communication and promotion decisions: Factors influencing promotion mix; Advertising decisions; Personal Selling; Sales force management; Sales promotions; Publicity and Public relations.

## UNIT IV

Holistic marketing: Trends in marketing practices, Internal marketing, Socially responsible marketing, Marketing implementation and control; New issues in marketing-Globalization, Consumerism, Green Marketing, Direct Marketing, Network Marketing, Event Marketing, Ethics in Marketing.

### Suggested Readings:

1. Kotler, Philip and Keller, Kevin, *Marketing Management*, Prentice Hall of India
2. Kotler, Philip and Armstrong, G., *Principles of Marketing*, Prentice Hall of India
3. Czinkota & Kotabe, *Marketing Management*, Thomson Learning

4. Ramaswamy, V.S. & Namakumari,S., *Marketing Management: Planning, Control*, Macmilian
5. Kotler, Lane, Keller., *Marketing Management*, Pearson
6. Rajan Saxena, *Marketing Management*, McGraw Hill
7. R. Srinivas, *Case Studies in Marketing- Indian Context*, PHI Learning
8. Stanton, *Fundamentals of Marketing*, McGraw Hill
9. Sontakki, C.N. et al., *Marketing Management*, Kalyani Publishers
10. Kumar, A and Meenakshi, N, *Marketing Management*, Vikas Publishing House Pvt. Ltd.
11. C.K. Prahalad, *The Fortune at the Bottom of Pyramid*, FT Press
12. Matt Haig, *100 Brand Failures*, Kogan Page
13. W. Chan Kim & Renee Mauborgne, *Blue Ocean Strategies*, Harvard Business Review Press

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

MBAM-107

SEMINAR

(On Indian Ethos, Computer Applications in Business,  
Contemporary Issues in Cyber Security and Modern Business)

(Internal)

**Time Allowed: 1 Hour**

**M.M. : 50**

**Course Objective:** *The objective of this course is to acquaint the students with existing issues pertaining to Indian Ethos and Marketing. Also, inculcating in them the ability of expressing themselves to an audience with poise and self- belief.*

**Course Outcomes:**

- CO1:** Students will be able to define the concept and scope of the seminar topic of their interest relating to Indian ethos or contemporary issues in marketing.
- CO2:** Students will be able to review an existing issue related to marketing that can help them to get ahead.
- CO3:** Students will be able to illustrate the possible managerial relevance and implications of the specific issue they have approached.
- CO4:** Students will be able to appraise the relevance of arguments prepared for the topic under consideration.
- CO5:** Students will be able to defend difference in opinion towards a topic.
- CO6:** Students will be able to develop their presentation skills.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The list of contemporary topics will be announced in the class and at least one topic will be allotted to each student by the Programme Coordinator.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student and the evaluation will be done on the basis of communication skills, contents, delivery, body-language and question-answer handling skills of the student on a proforma duly notified to the students in advance.



SECOND  
SEMESTER

**MBAM-201**

**CONSUMER BEHAVIOUR**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic objective of this course is to develop an understanding about the consumer decision making process and its applications in marketing function of firms.*

**Course Outcomes:**

- CO1:** Students will be able to define various terms associated with the field of consumer behaviour.
- CO2:** Students will be able to explain different components of consumer behaviour.
- CO3:** Students will be able to interpret the impact of consumer behaviour while framing marketing strategies.
- CO4:** Students will be able to distinguish the individual and group aspects of consumer behaviour for devising marketing strategy.
- CO5:** Students will be able to select the most suitable consumer behaviour for understanding consumer psyche.
- CO6:** Students will be able to design a comprehensive marketing strategy based on consumer behaviour.

**Course Contents:**

**UNIT – I**

Consumer Behaviour- Introduction to consumer behaviour; Its Roots in Various Disciplines, Interrelationship between Consumer Behaviour and Marketing Strategy, Consumer Research; Process, Research Methods & Tools, Types and its Relevance.

## **UNIT – II**

Consumer as an Individual -Consumer Needs and Motivation; Goals, Dynamics of Motivation, Measurement of Motives, Personality and Consumer Behaviour; Nature, Theories of Personality and Self Concept, Consumer Perception and Information Processing; Dynamics of Perception, Consumer Imagery, and Perceived Risk, Learning & Consumer Involvement; Meaning, Behavioural & Cognitive Learning Theories and application to marketing, Consumer Attitude; Meaning, Attitude Formation & Change, Relationship in Behaviour & Attitude Formation, and Structural Models.



### UNIT – III

Group Dynamics and Consumer Behaviour - Reference Groups; Meaning, Types, Affects, Relevance and Applications, The Family; Functions, Decision Making and Family Life Cycle, Social Class; Meaning, Types of Status, Lifestyle Profiles and Mobility in Social Classes, Measurements, Influence of Culture; Characteristics, Measurements & Core Values of Culture, Sub Cultural Aspects on Consumer' Mind Set; Meaning, Types & Understanding of Multiple Sub cultural Membership Interaction & Influence.

### UNIT – IV

Consumer Decision Making Process- Personal Influence and the Opinion Leadership; Meaning and Dynamics of Opinion Leadership Process, Measurement of Opinion Leadership, Diffusion of Innovations; Process of Diffusion & Adoption, Profile of Consumer Innovator, Consumer Decision Making; Meaning of Decision, Levels of Decision Making. Consumer Behaviour Models, Current trends and ethical issues in Consumer Behavioural Studies.

#### Suggested Readings:

1. Assael, H., *Consumer Behaviour and Marketing Action*, Asian Books Private Limited, New Delhi.
2. Engel, J. F., Kollat, D.T., Roger D. Blackwell, R.D. '*Consumer Behaviour*, Holt McDougal.
3. Hawkins, D., Mothersbaugh D., *Consumer Behavior: Building Marketing Strategy*, McGraw-Hill Education.
4. Schiffman, L. and Kanuk, L., *Consumer Behavior*, Prentice Hall.
5. Schiffman, L., & Wisenblit, J., *Consumer Behaviour*, Prentice Hall PTR.
6. Loudon, *Consumer Behavior: Concepts and Applications*, Tata McGraw-Hill Education Private Limited, Noida, Uttar Pradesh, India.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition,

eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-202**

**MARKETING RESEARCH**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to enable students to learn the process, tools and techniques of marketing research.*

**Course Outcomes:**

**CO1:** Students will be able to tell the significance and process of marketing research.

**CO2:** Students will be able to identify skills to conduct professional marketing research.

**CO3:** Students will be able to use appropriate research approaches including sampling, data collection and questionnaire design for specific marketing situations.

**CO4:** Students will be able to appraise a marketing research proposal.

**CO5:** Students will be able to defend a marketing research proposal.

**CO6:** Students will be able to assemble the findings in the form of a report.

**Course Contents:**

**UNIT-I**

Introduction to Marketing Research: Importance, Nature and Scope of Marketing Research, Types of Marketing Research; Introduction to Marketing Research Industry; Marketing Intelligence: Marketing Information Systems, Decision Support Systems

## **UNIT-II**

Marketing Research Process: Problem Identification and Definition; Research Designs; Exploratory: Qualitative Research; Descriptive: Survey and Observation; Data Collection: Primary and Secondary Data; Questionnaire Design.

## **UNIT-III**

Attitude Measurement and Scaling Techniques - Introduction to Measurement Scales, Sampling Plan: Universe, Sample Frame and Sampling Unit, Sampling Techniques, Sampling and Non-sampling errors, Sample size determination.

## UNIT-IV

Data Analysis: Univariate, Bivariate and Multivariate Data Analysis; Report Writing; Market Research Applications: Product Research, Advertising Research, Sales and Market Research; International Marketing Research.

### Suggested Readings:

1. Malhotra N., K. & Dash S., *Marketing Research: An Applied Orientation*, Pearson.
2. Churchill, Lacobucci & Israel, *Marketing Research: A South Asian Perspective*, Cengage Learning
3. Donald S. Tull & Del I. Hawkins, *Marketing Research: Measurement and Method*, Prentice Hall.
4. Boyd. H.W. , Westfall, R.,& Starsh, S.F.,*Marketing Research: Text and Cases*, Richard D. Irwin, Boston
5. Chisnall, P. M.,*The Essence of Marketing Research*, Prentice Hall, New Delhi.
6. Churchill, Gilbert A.,*Basic Marketing Research*, Dryden Press, Boston.
7. Beri, G.,C., *Marketing Research*, Tata McGraw Hill, New Delhi.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-203**

**SALES AND DISTRIBUTION MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To provide an understanding of the concepts, attitudes, techniques and approaches required for effective decision making in the areas of Sales and Distribution Management.*

**Course Outcomes:**

**CO1:** Students will be able to define the concepts of sales management and distribution.

**CO2:** Students will be able to explain the role, functions, and methods of selling and distribution process.

**CO3:** Students will be able to apply the concepts to solve practical sales and distribution problems.

**CO4:** Students will be able to compare different methods used for sales and distribution related decisions.

**CO5:** Students will be able to appraise their sales management skills.

**CO6:** Students will be able to develop the strategies that help in taking strategic decisions.

**Course Contents:**

**UNIT-I**

Sales Management: Role of Sales Management in Marketing, Nature and Responsibilities of Sales Management, Modern Roles and Required Skills for Sales Managers. Theories of Selling.

Sales Planning: Importance, approaches and process of sales planning; Sales forecasting; Sales budgeting. Sales Organization: Purpose, principles and process of setting up a sales organization; Sales organizational structures; Field sales organization; Determining size of sales force.

## **UNIT-II**

Territory Management: Need, procedure for setting up sales territories; Time management; Routing. Sales Quotas: Purpose, types of quotas, administration of sales quotas. Managing the Sales-force: Recruitment, selection, training, compensation, motivating and leading the sales-force; Sales meetings and contests

### UNIT-III

Control Process: Analysis of sales, costs and profitability; Management of sales expenses; Evaluating sales force performance; Ethical issues in sales management.

### UNIT-IV

Distribution Channels: Role of Distribution Channels, Number of Channels, Factors Affecting Choice of Distribution Channel, Channel Behavior and Organization, Channel Design Decision; Channel Management Decisions; Distribution Intensity; Partnering Channel Relationship.

#### Suggested Readings:

1. Still, Cundiff, Govoni , *Sales Management: Decisions, Strategies & Case*,– Prentice Hall, India.
2. Anderson R, *Professional Sales Management*, Englewood Cliff, New Jersey, Prentice Hall, India.
3. Spiro, Rosann L., Gregory A. Rich, and William J. Stanton, *Management of a Sales Force*, McGraw-Hill Irwin, Boston.
4. Dalrymple, Douglas J., and William L., *Sales Management: Concepts and Cases*, New York, NY: John Wiley and Sons.
5. Panda, T. K., Sahadev , S., *Sales And Distribution Management*, Oxford Publishing, India
6. Hughes, G. David, Daryl McKee, Charles H. Singler, *Sales Management: A Career Path Approach*, Cincinnati, OH: South-Western College Publishing
7. Peppers, D. & Rogers, M., ‘*The short way to long-term relationships*’. *Sales and Marketing Management*

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-204**

**BUSINESS COMMUNICATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course is aimed at equipping the students with the necessary techniques and skills that help them in communicating effectively for handling inter as well as intra organizational issues.*

**Course Outcomes:**

- CO1:** Students will be able to define and outline all four business communication skills i.e. reading, writing, speaking and listening
- CO2:** Students will be able to identify and illustrate communication abilities to face corporate challenges.
- CO3:** Students will be able to apply and demonstrate the gathered knowledge about the business communication regarding both inter and intra organizational situations
- CO4:** Students will be able to distinguish and examine the necessary techniques and skills that help them in communicating effectively for handling organizational issues.
- CO5:** Students will be able to evaluate and judge which business correspondence is required when and how to use it in order to handle corporate tasks.
- CO6:** Students will be able to design and develop their methods and ways in transmitting information within and outside the organizations in the most effective manner

**Course Contents:**

## **UNIT-I**

Communication: Importance for business organization; Process and associated hurdles; Principles for effective communication; Dimensions of Communication; Network of communication; Grapevine

## **UNIT-II**

Verbal Communication: Oral and Written; Non-Verbal Communication: Kinesics; Paralanguage; Proxemics; Sign Language. Cross Cultural Communication.

### UNIT- III

Essentials of effective business correspondence; Business Letter- Types; Proposal writing  
Report writing- Essentials, Types, and Steps, Introduction to Plagiarism; Notices, Circulars,  
Office Orders, Memos, Agenda and Minutes, Representations, Employee Newsletters.

### UNIT-IV

Presentation Skills; Listening Skills; Small Talks; Public Speaking; Resume' Writing; Meetings;  
Interview; Group Discussion; Electronic Mail and Telephone Etiquettes.

#### Suggested Readings:

1. Raymond V. Lesikar & Marie E. Flatley, *Basic Business Communication*, TMH
2. Murphy H. A. and Hildebrandt H. W. , *Effective Business Communications*, TMH
3. Sinha, K.K. *Business Communication*, Galgotia Publishing Co
4. Courtland L. Bovee, John V. Thill & Barbara E. Schatzman, *Business Communication Today*, Pearson Education.
5. Krishna Mohan & Meera Banerji, *Developing Communication Skills*, Macmillan India Ltd.
6. Taylor, S., *Communication for Business*, Pearson Education.
7. Any leading National English Daily

#### Important Instructions for the Course Coordinator and the Examiner:

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAM-205**

**HUMAN RESOURCE MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize students to the various facets of managing people and to create an understanding of the various policies and practices of human resource management.*

**Course Outcomes:**

**CO1:** Students will be able to recall the terms associated with Human Resource Management.

**CO2:** Students will be able to discuss various HR practices used in the business world.

**CO3:** Students will be able to apply various HR practices.

**CO4:** Students will be able to compare and contrast HR practices across companies.

**CO5:** Students will be able to evaluate the effectiveness of HR practices adopted in the organizations.

**CO6:** Students will be able to create and design the HR strategies related to coping in dynamic business environment.

**Course Contents:**

## **UNIT-I**

Introduction to HRM: Concepts and Perspectives of Human Resource Management; Human Resources Management in a Changing Environment; Managerial and Operative Functions of HRM.

## **UNIT-II**

Recruitment, Placement and Retention Strategies: Human Resource Planning; Job Analysis; Methods of Manpower Search; Attracting, Selecting and Retaining Human Resources; Induction and Socialization.

## **UNIT-III**

Training and Development: Manpower Training and Development; Performance Appraisal and Potential Evaluation; Career and Succession Planning; Talent Management.

## **UNIT-IV**

Employee Relations and Compensation Administration: Job Evaluation and Compensation Management; Incentives and Employee Benefits; Employee Welfare; Industrial Relation; Employee Separation Practices, HR Accounting and audit.

### **Suggested Readings:**

1. Aswathappa, K., *Human Resource and Personnel Management*, Tata McGraw Hill.

2. Dessler, G., *Human Resource Management*, Pearson Education.
3. Venkatesh, D.N. & Jyothi P., *Human Resource Management*, Oxford University Press.
4. Bohlander, G. & Snell, S., *Human Resource Management*, Cengage Learning.
5. Patnayak, B., *Human Resource Management*, PHI Learning.
6. Rao, V.S.P., *Human Resource Management*, Excel Books.
7. Cascio, W.Y., *Managing Human Resources*, Irwin-McGraw Hill.
8. Noe, Hollenbeck, Gerhart & Wright, *Human Resource Management*, McGraw-Hill Higher Education

#### **Important Instructions for the Course Coordinator and the Examiner:**

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**MBAM-206**

**FINANCIAL MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The purpose of this course is to acquaint the students with the broad framework of financial decision-making in business.*

**Course Outcomes:**

- CO1:** Students will be able to outline the basic framework of financial management.
- CO2:** Students will be able to explain the role of financial management for financial decision making in business.
- CO3:** Students will be able to apply various theories of capital structure and dividend policy.
- CO4:** Students will be able to examine risk in capital budgeting decisions.
- CO5:** Students will be able to select various sources of finance with evaluation of their cost.
- CO6:** Students will be able to create working capital policy for organization.

**Course Contents:**

**UNIT-I**

Financial Management: meaning, objectives and scope; types of financial decisions, risk-return framework for financial decision-making, time value of money.

Capital Budgeting Decisions: nature, importance and types of investment decision; techniques of evaluating capital budgeting decisions, risk analysis in capital budgeting.

## UNIT-II

Capital Structure Decisions: optimum capital structure; theories of capital structure; factors determining capital structure. Sources of long term and short term finance.

Cost of Capital: concept and importance; computations of cost of various sources of finance; weighted average cost of capital.

## UNIT-III

Working Capital Management: Concept and types of working capital; operating cycle, determinants of working capital, estimation of working capital requirement; working capital policy; Management of cash, accounts receivables and inventories; financing working capital.

## UNIT-IV

Dividend Policy: Dividend and its forms, theories of dividend policy and their impact on the value of a firm; types of dividend policy. An overview of Corporate Restructuring

### **Suggested Readings:**

1. Van Horne, James C., *Financial Management and Policy*, Prentice Hall of India.

2. Pandey I. M., *Financial Management*, Vikas Publishing.
3. Damodaran, A, *Corporate Finance: Theory and Practice*, John Wiley & Sons.
4. Hampton, John. *Financial Decision Making*, Englewood Cliffs, Prentice Hall Inc.
5. Khan, M.Y. & Jain, P.K., *Financial Management*, McGraw Hill.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-207**

**MANAGEMENT SCIENCE**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to develop an understanding of basic management science techniques and their role in managerial decision making.*

**Course Outcomes:**

**CO1:** Students will be able to define the basic concepts in the field of Management Science.

**CO2:** Students will be able to recognize the contribution of Management Science in quality decision making.

**CO3:** Students will be able to apply various methods and techniques to optimize the utilization of the resources.

**CO4:** Students will be able to appraise the utility of different methods in finding optimal solutions of the managerial problems.

**CO5:** Students will be able to evaluate the performance and suitability of different methods used for efficient utilization of the resources.

**CO6:** Students will be able to formulate the problems and interpret the results produced by the applied models.

**Course Contents:**

## **UNIT-I**

Management Science - Basic concepts and its role in decision-making. Linear programming: meaning, scope & assumptions, Formulation of linear programming problem & solution by graphical & simplex methods and some special cases.

## **UNIT-II**

Duality and Sensitivity analysis: change in objective function coefficient and availability of resources with simplex method. Transportation - Some special cases like maximization, unbalanced problems, degeneracy in transportation models, Assignment models (HAM).

### UNIT-III

Queuing theory (single channel poisson arrivals with exponential service time, infinite population model); Inventory management techniques (Deterministic Model), special techniques of inventory management; PERT/CPM - Network analysis, determining the critical path, calculation of float.

### UNIT-IV

Game theory: Pure and mixed games, dominance and graphical method. Decision theory: one stage and multi stage decision trees; Introduction to Integer programming, Goal programming, Dynamic programming.

#### Suggested Readings:

1. Vohra, N.D. *Quantitative Techniques in Management*, Tata McGraw Hill.
2. Budnik, Frank S. Dennis Mcleavey, Richard *Principles of Operations Research*, Richard Irwin, Illinois - All India Traveller Bookseller
3. Sharma, J K. *Operations Research: Theory and Applications*, New Delhi, Macmillan India Ltd.
4. Taha, H A., *Operations Research - An Introduction*, New York, Mc-Millan.
5. Narang, A S. *Linear Programming and Decision Making*, Sultan Chand.

#### Important Instructions for the Course Coordinator and the Examiner:

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**THIRD SEMESTER**

**MBAM-301**

**STRATEGIC MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The course aims at imparting knowledge of formulation, implementation and evaluation of Business Strategies.*

**Course Outcomes:**

- CO1:** Students will be able to outline the type of decisions taken at different levels of organisation.
- CO2:** Students will be able to explain the process of strategic decision making in an organisation.
- CO3:** Students will be able to apply various tools to assess business environment.
- CO4:** Students will be able to differentiate among various stages of strategic management starting from strategy formulation to its evaluation.
- CO5:** Students will be able to evaluate the strategy which best fits in achieving the organisational goals.
- CO6:** Students will be able to develop a framework of how an organisation actually works by developing policies and strategies.

**Course Contents:**



## **UNIT-I**

An introduction to business policy - Nature, Objective and importance of business policy; An overview of strategic management; Strategic decision making; Process of strategic decision making.

## **UNIT-II**

Strategy formulation: Company's vision, mission and objectives; Environmental and organizational appraisal, Strategic alternatives and choice; Types of strategies; Business ethics and corporate strategy, Concept of value chain, core competency, resource base theory and competitive advantage.

### UNIT-III

Strategy implementation: Designing organizational structure and activating strategies; Matching structure and corporate strategy, Structural, Behavioral and Functional implementation.

### UNIT-IV

Strategy Evaluation: Strategic evaluation and Control, Strategic and Operational Control; Techniques of evaluation and control.

#### Suggested Readings:

1. Jauch & Glueck, *Business Policy and Strategic Management*, McGraw-Hill Publications.
2. Thompson A.A. and Stickland A.J, *Strategic Management- Concept and cases*, Pearson
3. Michael Porter, *Competitive Advantage of Nations*, Free Press.
4. Azhar Kazmi, *Business Policy and Strategic Management*, Thomson Learning
5. Kenneth, A. Andrews, *Concepts of corporate Strategy*, Irwin/McGraw-Hill
6. Melvin J. Stanford, *Management Policy*, Prentice-Hall
7. Pearce, J. A., II, and R. B. Robinson, Jr. *Strategic Management: Strategy Formulation, Implementation, and Control*, Chicago, IL: R. D. Irwin, Inc
8. Jean-Louis Schaan, & Micheál J. Kelly *Cases in Alliance Management: Building Successful Alliances*, SAGE Publications

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**MBAM-302**

**ENTREPRENEURSHIP DEVELOPMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to expose the students to the growth of entrepreneurship in developing countries with special reference to India.*

**Course Outcomes:**

**CO1:** The students will be able to list various constituents of entrepreneurship development.

**CO2:** The students will be able to identify the various environmental factors affecting entrepreneurship development

**CO3:** The students will be able to demonstrate skills to develop business plan at individual level.

**CO4:** The students will be able to examine the feasibility of a business.

**CO5:** The students will be able to evaluate the funding alternatives available for entrepreneurs.

**CO6:** The students will be able to develop and implement a business plan.

**Course Contents:**

## **UNIT-I**

Concept of Entrepreneur and Entrepreneurship, Entrepreneur vs. Manager, Significance of Entrepreneurship in Economic Development; Economic, Social and Psychological needs for Entrepreneurship; Characteristics, Qualities and Pre-requisites of Entrepreneur; Rural Entrepreneurship.

## **UNIT-II**

The Function of the Entrepreneur in Economic Development of a Country; Methods and Procedures to start and expand one's own Business; Achievement Motivation; Environmental Factors affecting success of a new Business.

## **UNIT-III**

Feasibility Study -Preparation of Feasibility Reports: Selection of factory location, Economic, Technical, Financial and Managerial Feasibility of Project.

## UNIT-IV

Government support to new Enterprises; Role of Government and Promotional agencies in Entrepreneurship Development; Entrepreneurship Development Programmes in India

### Suggested Readings:

1. Clifton, Davis S& Fyfe, David E., *Project Feasibility Analysis*, John Wiley.
2. Desai, A N., *Entrepreneur & Environment*, Ashish Publications.
3. Drucker, Peter., *Innovation and Entrepreneurship*, Heinemann.
4. Jain R., *Planning a Small Scale Industry: A Guide to Entrepreneurs*, S.S. Books.
5. Kumar, S A., *Entrepreneurship in Small Industry*, Discovery.
6. McClelland, D C & Winter, W G., *Motivating Economic Achievement*, Free Press.
7. Pareek, Udai and Venkateswara Rao, T., *Developing Entrepreneurship -A Handbook Learning Systems*, Learning Systems

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**MBAM 303**

**BUSINESS LEGISLATION**

**Time Allowed: 3 Hours**

**M.M: 60**

**Course Objective:** *The aim of the paper is to acquaint the students with the Business law and Company law in their future role as managers.*

**Course Outcomes:**

- CO1:** Students will be able to define laws applicable to a business.
- CO2:** Students will be able to classify different laws and explain their specific purpose.
- CO3:** Students will be able to illustrate cases of law and interpret own manner to solve the problems of business class
- CO4:** Students will be able to examine company laws and compare it with previous laws before amendment of 2013
- CO5:** Students will be able to evaluate the existing business laws in India and analyse their importance
- CO6:** Students will be able to formulate guidelines according to regulatory framework of an organisation

**Course Contents:**

**UNIT-I**

The Indian Contract Act, 1872: Meaning of a Contract, Classification of Contracts, Essentials of a Valid Contract; Performance of a Contract; Discharge of a Contract; Breach of Contract; Quasi Contracts; Contract of Indemnity and Guarantee, Bailment and Pledge, Contract of Agency.

**UNIT-II**

The Sales of Goods Act, 1930: Meaning and essentials of a valid contract of sale, Distinction between sale and agreement to sell, Meaning of goods and their classification, Conditions and warranties, Doctrine of Caveat Emptor, Rights of an unpaid seller, Rights of buyer; Negotiable Instruments Act, 1881: Meaning and characteristics of negotiable instrument, Types of negotiable instruments and their characteristics, Holder and Holder-in-due-course, Discharge and Dishonour of negotiable instruments, Negotiation and Assignment.



### UNIT-III

The Companies Act, 2013; Meaning and Characteristics of a Company; Objects and Applications of Companies Act, 2013; Landmark provisions of new Companies Act, 2013; Classification of companies, Concept of One Person Company; Formation of a company, Memorandum and Articles of association, Prospectus, Allotment of shares and share capital, Membership in companies.

### UNIT-IV

Meetings of Companies: General principles of meetings, Types of meetings; Prevention of Oppression and Mismanagement; Winding up of a Company; Consumer Protection Act: Define consumer rights, provisions regarding complaints in consumer courts, Unfair Trade Practices and Restrictive Trade Practices, Consumer Protection Council, Consumer forum.

#### Suggested Readings:

1. Gulshan, S.S. and Kapoor, G.K., *Business Law including Company Law*, New Age International Publication.
2. Macintyre, E., *Business law*, Pearson Education.
3. Tulsian, *Business law*, Tata McGraw Hill.
4. Majumdar A.K. and Kapoor G.K., *Company Law and Practices*, Taxmann Publication.
5. Kothari, V., *Understanding Companies Act, 2013*, Taxmann Publication.
6. Pathak, A., *Contract Law in India*, Oxford University Press.
7. Gogna, P.P.S., *A Textbook of Company Law*, S. Chand Publishing.
8. Nolakha, R.L., *Company Law and Practice*, Vikas Publishing House Private Limited.

#### Important Instructions for the Course Coordinator and the Examiner:

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**MBAM-304**

**SUMMER INTERNSHIP AND SEMINAR**

**(Internal)**

**Time Allowed: 1 Hour**

**M.M: 50**

**Course Objective:** *The objective of this course is to enable students to explore a career path and give themselves an edge in job market.*

**Course Outcomes:**

- CO1:** Students will be able to describe organizational structure and its functions with all the theoretical aspects learned in class room settings and simulated environment
- CO2:** Students will be able to identify (through understanding and learning the routine tasks within the organization) which work they would prefer to do after completion of programme.
- CO3:** Students will be able to interpret the organizational dynamics in terms of organizational behavior, culture, competition, future strategies and change initiatives of the organization.
- CO4:** Students will be able to appraise the practical exposure and knowledge related to the job of their interest by working as an intern in any organization.
- CO5:** Students will be able to evaluate their learning during the internship phase and report it in form of a seminar.
- CO6:** Students will be able to assemble and present the learnings from internship.

### **Important Instructions for the Programme Coordinator and the Examiner:**

- The list of students will be notified by the Programme Coordinator in the class along with the schedule of seminar presentation by each student during the semester.
- The Evaluation Committee duly constituted by the Director/Principal will invite a seminar presentation from each student on his/her summer training and the evaluation will be done on the basis of exposure to industry/academics, problem undertaken, communication skills, contents, delivery, body-language and question-answer handling skills of the student on a proforma duly notified to the students in advance.

**MBAM-305**

**MARKETING OF SERVICES**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this paper is to explicate the cutting edge service concepts to the students through bridging the gaps between theory and real world by incorporating practical management applications.*

**Course Outcomes:**

- CO1:** Students will be able to relate service and technology.
- CO2:** Students will be able to classify services and recognize service challenges.
- CO3:** Students will be able to use marketing research as a tool to understand customers and to deploy employees for service delivery.
- CO4:** Students will be able to examine the reasons of service failure and implementing strategies to recover it.
- CO5:** Students will be able to evaluate delivery and performance of services.
- CO6:** Students will be able to construct service design and standards.

**Course Contents:**

**UNIT I**

Introduction to Services: Service and Technology, Goods versus Services, Service Marketing Mix, Gap model of Services, important service industries-Hospitality and Tourism, Transportation, Telecom, Banking and Insurance, Education and Entertainment, Healthcare. Service classification and challenges in Service Business.

**UNIT II**

Focus on the Customer: Consumer behaviour in Services, Customer Expectation of Services, and

Customer perception of services Elements in an effective services marketing research programme, Building customer relationship, Relationship development strategies, Reasons of Service failure, Service recovery and strategies.

### **UNIT III**

Aligning Service design and standards: Challenges of Services Innovation and design, new service development process Service Blueprinting, Customer-defined service standards and its types, Physical evidence and types of servicescape, Strategic roles of servicescape

## UNIT IV

Delivering and performing services: Employees role in service delivery, Customers role in service delivery, Delivering services through intermediaries and electronic channels, Strategies

for matching capacity and demand, Key service communication challenges, Approaches to pricing services, Financial and Economic impact of services.

### Suggested Readings:

1. Zeithaml, V., Bitner, M.J., Gremler, D.D.&Pandit, A., *Service Marketing*. McGraw Hill.
2. Lovelock, C., Wirtz, J.&Chatterjee, J., *Services Marketing*. Pearson Education.
3. Srinivasan, *Service marketing: Indian Context*, PHI
4. Swartz, T., Iqobucci, D., *Handbook of Service Marketing and Management*, Sage Publication

### Important Instructions for the Course Coordinator and the Examiner:

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**MBAM-306**

**LOGISTICS MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to enable students understand the importance and dynamics of a firm's physical distribution functions and management of its supply chain.*

**Course Outcomes:**

- CO1:** Students will be able to recall the terms used in logistics.
- CO2:** Students will be able to describe the importance of logistics.
- CO3:** Students will be able to apply the concepts of logistics for marketing.
- CO4:** Students will be able to appraise the components related to logistics.
- CO5:** Students will be able to evaluate the dynamics of physical distribution functions.
- CO6:** Students will be able to create an efficient logistics system for an organization.

**Course Contents:**

**UNIT-I**

Introduction to Logistics Management: Nature, Role, Scope and Evolution of Logistics Management, Operational Objectives of Logistics; Concept of Supply Chain Management; Marketing and its Interface with Logistics; Total Cost Analysis and Trade off; Concept of Customer Service: Components of Customer Service, Customer Service Cost, Customer Service Measurement; Major Components/Decisions of Logistics Management; Integrated Logistics System; Distribution related issues and Challenges for Logistics.

**UNIT-II**



Transportation Decisions: Role of Transportation in Logistics, Elements of Transportation Cost, Selection of Transportation Mode, Multi-Decision Areas of Transportation: Containerization, Transportation Network and Tariffs; Third Party Logistics; Inventory Management: Role of Inventory Management in Logistics, Elements of Inventory Costs, Decision Areas of Inventory Management, Techniques of Inventory Control, Economic Order Quantity Under Conditions of Certainty and Uncertainty.

### **UNIT-III**

Modern Concept of Warehousing: Role and Types of Warehouses, Warehouse Functions, Planning Warehousing Operations, Site Selection, Warehouse Layout, Operational Mechanism and Automation in Warehousing; Information and Order Processing: Role of Information System in Logistics Management; Order Processing: Nature and Concept, Functions of Order Processing; Elements of Ordering cost.

## UNIT-IV

Packaging: Role of Packaging in Logistics, New Emerging Packaging Alternatives, Packaging operations, Factors affecting packaging decisions; Material Handling: Objectives of Material Handling, Material Handling considerations; Equipments for Material Handling, Factors affecting Material Handling decisions. Distribution Control and Performance Evaluation: Integration of Logistics with Distribution System, IT-enabled Distribution and Logistics Management, Distribution Control and Performance Measurement.

### Suggested Readings:

1. Bowersox and Others: *Physical Distribution Management*, Tata McGraw Hill, New Delhi.
2. Stern, Louis W. Adel, I.E.L. – Ansary, Annee T. Coughlan: *Marketing Channels*, Prentice Hall, New Delhi.
3. Ballu, Ronald H, *Business Logistics Management*, Englewood Cliffs, New York, Prentice Hall Inc.
4. Martin, Christopher and Gordon Wills: *Marketing Logistics and Distribution Management*
5. Khanna, K.K. *Physical Distribution Management*, Himalaya Publishing House, New Delhi.
6. Lambert, D. et. al., *Strategic Logistics Management*, Tata McGraw Hill, New Delhi.
7. Chopra, S and Meindl, P, *Supply Chain Management- Strategy, Planning and Operation*, Pearson Education.
8. Simchi-Levi, D et al., *Designing and Managing the Supply Chain*, The McGraw Hill Companies
9. Sharma, S, *Supply Chain Management-Concepts, Practices and Implementation*, Oxford University Press.

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**Course Objective:** *The objective of this course is to familiarize the students with the basic concepts of retailing and understanding retail business so as to make them ready for future roles as managers*

**Course Outcomes:**

- CO1:** Students will be able to define the different terms used in the retail sector.
- CO2:** Students will be able to identify the current retail structure in India.
- CO3:** Students will be able to demonstrate the insights of retailing and related key activities.
- CO4:** Students will be able to appraise the importance of retailing and its role in the success of modern businesses.
- CO5:** Students will be able to evaluate the current marketing scenario and identify retail opportunities thereof.
- CO6:** Students will be able to develop a retail plan for opening up a retail store.

**Course Contents:****UNIT-I**

Introduction to Retail- Evolution of Retail, Organised Vs Unorganised retailing, Retail Mix, theories of retail development, Types of Retailers; Careers in Retailing; Understanding Consumers.

## **UNIT-II**

Retail Locations- Planned and Unplanned, Retail Site Location- Site Characteristics, Trade Area Characteristics, Location and Site Evaluation; Store Layout and Design; Space Management; Visual Merchandising; Atmospheric

## **UNIT-III**

Managing Merchandise - Merchandise Planning, Process, Forecasting Sales, Developing Assortment Plans, National Brands and Private Labels; Retail Pricing- Setting Retail Prices, Price Adjustments, Pricing Strategies; Retail Communication Mix.

## **UNIT-IV**

Information and Supply Chain Management- Information Flows, Logistics, Distribution Centre. Contemporary issues in Retail-Significance of retail as an industry, Retail scenario at International and National Level, Technology in Retailing, Multi-channel Retailing, E-Retailing: Future of e-retailing, Challenges for traditional retail and e-retail, FDI in Retail.

### **Suggested Readings:**

1. Pradhan, S., *Retailing Management Text and Cases*, Mc Graw Hill Education, New Delhi
2. Levy, Micheal, Weitz, Barton, A. and Pandit, Ajay, *Retailing Management*, Tata McGraw Hill, New Delhi

3. Berman, Barry and Evans, Joel, R.,*Retail Management; A Strategic Approach*; PHI/Pearson Education; New Delhi
4. Newman, Andrew, J. & Cullen, Peter,*Retailing: Environment & Operations*, Vikas Publishing House; New Delhi.
5. Gilber, David,*Retail Marketing Management*, Pearson Education, New Delhi.

#### **Important Instructions for the Course Coordinator and the Examiner:**

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM- 308**

**GLOBAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Objective:** *The basic objective of this course is to acquaint the students with environmental, procedural, institutional and decisional aspects of global marketing.*

**Course Outcomes:**

- CO1:** Students will be able to describe basic global market entry strategies.
- CO2:** Students will be able to identify the emerging issues and developments in global marketing.
- CO3:** Students will be able to interpret the marketing environment at global level.
- CO4:** Students will be able to differentiate the marketing practices at domestic and global level.
- CO5:** Students will be able to evaluate the marketing mix strategy of a company competing at global level.
- CO6:** Students will be able to create global marketing strategies.

**Course Contents:**

**UNIT-I**

Global Marketing- Introduction, Drivers towards globalization, Global marketing objectives; Initial modes of entry; Process of international marketing. Culture and Global Marketing- Cultures across countries, Culture and negotiations

## UNIT –II

Country Attractiveness- Environmental research, Entry evaluation procedure, Country data sources, Forecasting country sales and market share. Local Marketing- Understanding local customers, Local marketing in mature markets and growth markets.

## UNIT-III

Global Segmentation and Positioning- Global market segment, Targeting segments, Global product positioning. Global products- Standardization versus Adaptation, Developing new global products, Global brand management.

## UNIT-IV

Global Pricing- Pricing policy and strategy, Transfer pricing, Counter trade. Global Distribution-Local channels, Wholesaling and retailing, Global logistics, Effects of parallel distribution. Global Advertising and Promotion- Global advertising decision, Elements of global advertising, Global sales promotion; E-commerce as a tool of global marketing.

### Suggested Readings:

1. Warren, J. Keegan, *Global Marketing Management*, Pearson Edu/PHI, New Delhi
2. Johansson Johny, *Global Marketing: Foreign Entry, Local Marketing and Global Management*, McGraw Hill.
3. Sak Onkvisit and John Shaw, *International Marketing (analysis and Strategy)*, PHI.
4. Phillip R. Cateora, *International Marketing*, Tata McGraw Hill.



5. Vern Terpestra and Ravi Sarathy, *International Marketing*, Thomson
6. R. L. Varshney and B. Bhattacharya, *International Marketing*, Sultan Chand Publications.

#### **Important Instructions for the Course Coordinator and the Examiner:**

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**MBAM-309**

**PRODUCT AND BRAND MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to impart in depth knowledge to the students regarding the theory and practices of brand management.*

**Course Outcomes:**

**CO1:** Students will be able to define basic branding concepts and outline major branding issues.

**CO2:** Students will be able to identify branding challenges and opportunities.

**CO3:** Students will be able to apply marketing programme to build brand equity.

**CO4:** Students will be able to examine and implement different branding programmes.

**CO5:** Students will be able to evaluate brand performance and evaluating brand extension opportunities.

**CO6:** Students will be able to design and implement different branding strategies.

**Course Contents:**

**UNIT-I**

Branding terminology, basic branding concepts- brand awareness, brand personality, brand image, brand identity, brand loyalty, brand equity, major branding decisions: selecting a brand name, brand extension decision, family versus individual brand names, multiple branding, private versus national branding, importance of branding

## **UNIT II**

Branding challenges and opportunities, concept of brand equity, sources and benefits of brand equity, customer based Brand equity, designing marketing programme to build brand equity, measurement of brand equity, Strategic brand management process, concept of Brand positioning and repositioning, Identifying and establishing brand positioning and values.

## **UNIT III**

Planning and implementing brand marketing programmes, designing marketing programmes, measuring and interpreting brand performance, Legal aspects of Branding, Copyright, Trademarks and IPR, designing and implementing branding strategies; Brand building and communication, E- Branding, handling brand name changes.

## UNIT IV

New products and brand extension, evaluating brand extension opportunities, reinforcing brands, revitalising brands, managing brands over geographic boundaries and market segments, rationale for going international, global marketing programmes- advantage and disadvantage, standardisation versus customisation, global brand strategy. Branding in rural marketing, branding in specific sectors: retail, industrial, service brands

### Suggested Readings:

1. Kevin Lane Keller, *Strategic Brand Management*, Pearson Education.
2. David A Aaker, *Managing Brand Equity*, New York, Free Press.
3. Don Cowley, *Understanding brands*, Kogan page
4. J.N. Kapferer, *Strategic Brand Management*, Free Press.

### Important Instructions for the Course Coordinator and the Examiner:

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**MBAM-310**

**CUSTOMER RELATIONSHIP MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this course is to acquaint the students with concepts, techniques and give experience in the application of concepts for developing effective Customer Relationship programme.*

**Course Outcomes:**

- CO1:** Students will be able to describe the customer equity.
- CO2:** Students will be able to identify the benefits of value creation for retaining customers.
- CO3:** Students will be able to interpret the role of appropriate business process and technology management capabilities in managing customer relationship.
- CO4:** Students will be able to compare different processes.
- CO5:** Students will be able to evaluate CRM implementation Strategies.
- CO6:** Students will be able to design the strategies framework for the CRM integration in the existing function of the organisation.

**Course Contents:**

**UNIT-I**

Prerequisites to Customer Relationship Management (CRM): Changing face of Indian market, Customer ownership and customer values, Customer life cycle (CLC) and Customer lifetime value (CLV), Customer relationship. Relationship Marketing- From traditional marketing approach to relationship marketing organizational pervasive approach, Service level agreements (SLA)

## **UNIT- II**

Understanding CRM, Technology and CRM, Levels of CRM, Loyalty Management, Loyalty programmes, reasons of failure of loyalty programmes.

Service quality and service capacity planning: service capacity planning process; Customer driven quality and Quality Management System (QMS)

## **UNIT-III**

Planning and implementation of CRM, CRM and Sales Force Automation (SFA): Objectives, Strategic advantage of SFA, Key factor for successful SFA. eCRM: Benefits, Data handling, eCRM systems/applications in market, specifications of eCRM solutions, Scope and Significance of a CRM project, CRM implementation process.

## UNIT-IV

Making CRM a success: Success factors for CRM, Business Process Reengineering (BPR) for CRM implementation, Data Quality Management (DQM).Securing Customer Data: Information security management system, Ethical issues in CRM, IT solutions of CRM and its Integration, Future of CRM.

### Suggested Readings:

1. Makkar, U. & Makkar, H. K., *Customer Relationship Management*, McGraw Hill Education.
2. Dyche, Jill., *The CRM Handbook-A Business Guide to CRM*, Pearson Education Asia.
3. Anton, J., Petouhoff, N.L. & Kalia, S., *Customer Relationship Management*, Pearson.
4. Kumar, V. & Reinartz, W.,*Customer Relationship Management: Concept, Strategy, and Tools*, Springer, 2nd Ed.
5. Brown, A. Stanly, *Customer Relationship Management*, John Wiley.
6. Gosney, John W. and Thomas P. Boehm,*Customer Relationship Management Essentials*, Prentice Hall.
7. Seth, Jagdish N., *Customer Relationship Management*, Tata McGraw Hill Publishing Co.

### Important Instructions for the Course Coordinator and the Examiner:

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**MBAM-311**

**COMPETITIVE MARKETING STRATEGY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this course is to make the students understand the intricacies of competitive marketing situations and ways to handle each situation.*

**Course Outcomes:**

- CO1:** Students will be able to describe competition.
- CO2:** Students will be able to identify the competitors in the market.
- CO3:** Students will be able to interpret the role of various competitive strategies.
- CO4:** Students will be able to contrast the suitability of a competitive strategy.
- CO5:** Students will be able to appraise marketing mix related competitive strategies.
- CO6:** Students will be able to assemble the competitive knowledge for taking strategic marketing decisions.

**Course Contents:**

**UNIT-I**

Strategy, Market Strategy, Understanding Competition. Market Situation Analysis; Analysis of Competitor's Strategies and Estimating their Reaction Pattern and Competitive Position

**UNIT- II**



Market Leader Strategies – Expanding the Total Market, Protecting Market Share, Expanding Market Share; Market Challenger Strategies – Choosing and Attack Strategy, Market Follower Strategies; Market Nicher Strategies

### **UNIT-III**

Competitive Market Strategy for Emerging Industries, Declining Industries and Fragmented Industries; Balancing Customer and Competitor Orientations, Industry Segmentation and Competitive Advantage

.

## UNIT-IV

Product Differentiation and Brand Positioning, Competitive Pricing, Competitive Advertising, Role of Sales Promotion in Competitive Marketing. Analysing Strategies of top Select Companies.

### Suggested Readings:

1. Walker, C.W., Mullins, J. & Boyd, H.W.- Marketing Strategy: A Decision Focused Approach, Tata Mc Graw Hill
2. Kotler, Keller, Koshi and Jha, Marketing Management : A South Asian perspective Prentice Hall
3. Singh, Narendra, Strategic Management & Marketing , Himalaya Publication 2004
4. Hooley , Marketing Strategy, Pearson, 2008
5. David Cravens, Strategic Marketing , Tata Mc Graw Hill, 9th Edition 2008

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
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**MBAM-312**

**INTEGRATED MARKETING COMMUNICATION STRATEGY**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of this paper is to acquaint the students with the concepts, techniques and developing skills regarding application of effective advertising programmes.*

**Course Outcomes:**

- CO1:** Students will be able to define various terms associated with the field of integrated marketing communication.
- CO2:** Students will be able to explain the components of integrated marketing communication.
- CO3:** Students will be able to interpret the impact of business environmental factors on the marketing communication strategy.
- CO4:** Students will be able to distinguish the utility of various promotional tools.
- CO5:** Students will be able to evaluate the effectiveness of marketing communication strategy.
- CO6:** Students will be able to develop a marketing communication strategy.

**Course Contents:**

**UNIT-I**

The growth of advertising and promotion, the evolution of IMC and a contemporary perspective, Promotional Mix: a tool for IMC, Analysis of the communication process, Role of IMC in the

marketing process, Developing Marketing Planning Programme, Role of Advertising and Promotion.

## **UNIT-II**

Participants in the IMC process: The clients Role, Role of advertising agencies, Types of Ad agencies, Agency compensation, evaluating agencies; An Overview of Consumer Behavior: Consumer decision-making process, Environmental influences on consumer behavior, Alternate approaches to consumer behavior

## **UNIT-III**

Analyzing the communication process: A basic model of Communication, cognitive response approach, elaboration likelihood model; Source message and channel factors; Objectives and budgeting for IMC programmes: Establishing objectives and budgeting for promotional programs; DAGMAR: An approach to setting objectives, problems in setting objectives, Establishing and allocating the promotional budget; Developing the IMC programme: Creative Strategy: Planning & development, Implementation and evaluation.

## **UNIT-IV**

Media planning and Strategy: Developing the media plan, Establishing media objectives, Developing and implementing media strategies, Evaluation and follow-up; Evaluation of media: television & Radio, Evaluation of Print Media: Support Media, Direct Marketing, Direct Selling, The internet and interactive media, sales promotion, public relation, publicity and corporate advertising. Measure the effectiveness of the promotional programme. International advertising and promotion, regulation of advertising and promotion, evaluating the social, ethical and economic

Aspects of advertising and promotion

**Suggested Readings:**

1. Blakeman, R. *Integrated Marketing Communication: Creative Strategy from Idea to Implementation*, Rowman & Littlefield
2. Dutta, K., *Integrated Marketing Communication*, Oxford Higher Education
3. Belch, G. E., Belch, M. A. and Purani, K., *Advertising and Promotion*, McGraw Hill Education.
4. Batra, R., Myers, J. G. and Aaker, A.D. *Advertising Management*, Pearson Education
5. Percy, L. and Elliot, R., *Strategic Advertising Management*, Oxford publishing
6. Sissors, J.Z. and Baron, R.B. *Advertising Media Planning*, McGraw Hill.
7. Jethwaney, J. and Jain, S., *Advertising Management*, Oxford publishing

#### **Important Instructions for the Course Coordinator and the Examiner:**

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- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OPEN  
ELECTIVES  
FOR  
THIRD SEMESTER**

**OE – 301**

**COUNSELING SKILLS FOR MANAGERS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *To develop basic skills among students to independently handle a wide range of employee counseling and performance counseling.*

**Course Outcomes:**

**CO1:** Students will be able to recall different terms used in counselling.

**CO2:** Students will be able to explain conceptual framework of counselling.

**CO3:** Students will be able to demonstrate the process of counselling.

**CO4:** Students will be able to differentiate between theories of counselling.

**CO5:** Students will be able to evaluate practical solutions to human behaviour related problems in the organization

**CO6:** Students will be able to develop his own model of counselling.

**Course Contents:**

**UNIT-I**

Introduction to Counseling- Emergence, Growth, Definition, Need, Goal, Role and Characteristics of Counselor and Counselee, Difference between Counseling and Psychotherapy, and General Principles of Counseling

## **UNIT-II**

Approaches to Counseling- Psycho-analytical (Sigmund Freud Theory), Therapeutic (Alfred Adler Theory), Behaviouristic (B. F. Skinner Theory), Cognitive (Albert Ellis Model) and Humanistic Approaches (Carl Rogers Approach);

## **UNIT-III**

Counseling Process- 5-D Model, the Phases of Counseling Process, Counseling Environment and Procedure, and the Core Conditions of Counseling; Counselor's Attitude and Skills of Counseling- Verbal and Non-verbal Communication Modalities, Listening Skills, Listening Barriers and Strategies to Overcome Listening Barriers;



## UNIT-IV

Organizational Applications of Counseling Skills- Identifying Problems and Coping Strategies with regard to Occupational Stress and Performance Management; Special Problems in Counseling- Selection of Counseling Strategies and Interventions, Changing Behavior through Counseling; Ethical and Legal Aspects of Counseling, and Current trends in Counseling.

### Suggested Readings:

1. Cormer, L.S., and Hackney, H., *The Professional Counselor's Process Guide Helping*, Englewood Cliffs, Prentice Hall Inc.
2. Moursund, J., *The Process of Counseling and Therapy*, Englewood Cliffs, Prentice Hall Inc.
3. Munro, C A, *Counseling: A Skills Approach*, Methuen.
4. Reddy, Michael, *Counseling at Work*, British Psychological Society and Methuen.
5. Rao, S. Narayana, *Counselling and Guidance*, Tata McGraw Hill.
6. Gladding, S. T, *Counseling- A Comprehensive Profession*, Pearson.
7. Singh, Kavita, *Counselling Skills for Managers*, Prentice Hall of India.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

OE - 302

FUNDAMENTALS OF ECONOMETRICS

Time Allowed: 3 Hours

M.M:60

**Course Objective:** *Econometrics is concerned with quantifying economic relations, with the provision of numerical estimates of the parameters involved and testing hypotheses embodied in economic relationships. This course aims to provide a basic introduction to econometric analysis, to enable students to examine existing theories with empirical data. In doing so, it examines the difficulties inherent in confronting theory with business data in order to quantify relationships, in dealing with errors and problems in variables which can be only observed but not controlled, and the means of compensating for uncertainty in data.*

**Course Outcomes:**

- CO1:** Students will be able to define and memorize the various fundamental terms and concepts of econometrics.
- CO2:** Students will be able to explain the basic assumptions, procedures and properties of various estimators.
- CO3:** Students will be able to apply various data analysis models.
- CO4:** Students will be able to compare the results obtained from various models.
- CO5:** Students will be able to evaluate the results and test their statistical significance.
- CO6:** Students will be able to develop a good quality research paper in finance and economics using the econometric methods

## **Course Contents:**

### **UNIT-I**

Nature, scope and methodology of econometrics; Simple Linear Regression Model: Assumptions, Procedures and properties of OLS estimator, Co-efficient of determination, Tests of significance, Maximum Likelihood Method.

### **UNIT-II**

Multiple Linear Regression Analysis: Method of least squares, Properties of OLS estimator, Test of significance of regression co-efficient,  $R^2$  and adjusted  $R^2$ ; Econometric Problems: Multi co linearity, Autocorrelation and Heteroscedasticity.

### UNIT-III

Dummy variables-Nature and uses, Regression on dummy variables, Regression on Dummy Dependent Variable-The basic idea of the Linear Probability Model (LPM), Probit and Logit Models. Dynamic Econometric Models: Koyck distributed lag model, the adaptive expectation model, and the partial adjustment model.

### UNIT-IV

Simultaneous Equation Models: Structural, Reduced and final forms, Identification-Order and rank conditions, Methods for estimating the simultaneous models-Basic idea of Indirect Least Square (ILS) and Two Stage Least Square (2SLS) methods. Seemingly Unrelated Regressions (SUR), SUR versus OLS

#### Suggested Readings:

1. Greene, William H., *Econometric Analysis*, Macmillan.
2. Johnston, J., *Econometric Methods*, McGraw -Hill.
3. Gujarati, Damodar N., *Basic Econometrics*, McGraw-Hill.
4. Stock J. H. and Watson M.W. *Introduction to Econometrics*, Addison-Wesley Series in Economics.
5. Koutsoyiannis, A., *Theory of Econometrics*, Harper & Row.
6. Kmenta, J., *Theory of Econometrics*, Macmillan.
7. Maddala, G.S., *Introduction to Econometrics*, Macmillan.

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question

from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**OE - 303**

PERSONAL FINANCE

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The main objective of this course is to make students learn the various aspects of personal finance.*

**Course Outcomes:**

**CO1:** Students will be able to describe the different concepts of personal finance.

**CO2:** Students will be able to explain the risk profiling.

**CO3:** Students will be able to demonstrate the skills in selecting financial products.

**CO4:** Students will be able to examine the different financial products according to their risk profile.

**CO5:** Students will be able to evaluate the different financial products on the basis of their cost and benefits.

**CO6:** Students will be able to design the different financial products keeping in mind macro and micro variables.

**Course Contents:**

UNIT-I

Personal Finance: Meaning and importance. Financial planning: meaning, process and role of financial planner. Risk profiling: client data analysis, life cycle, wealth cycle. Asset allocation: Strategic, Tactical, Fixed and Flexible.

UNIT-II

Risk Management: Meaning, process and importance. Distinguish between risk assessment, risk management and risk avoidance. Assessment of requirement of Health Insurance, Life Insurance and General Insurance. Choice of products for risk coverage

#### UNIT-III

Investment Management: meaning and importance. Investment avenues: equity, debt, gold, real estate, mutual funds, exchange traded funds. Portfolio management: meaning, construction, evaluation and revision. Loan management: meaning, types, importance and assessment, personal, car loan, home Loan etc.

#### UNIT-IV

Tax planning: basics terms of income tax, advance tax, tax deduction at source, deductions under section 80C, 80 CCC, 80 D and 80 G. Taxation of investment products. Retirement planning, Management of nomination, power of attorney and will

#### **Suggested Readings:**

1. Kapoor Jack R, *Personal Finance*, The McGraw-Hill companies.
2. Huang. Stanley S C and Randall, Maury R., *Investment Analysis and Management*. Allyn and Bacon.
3. Gaungully, Ashok, *Insurance Management*, New Age Publishers, New Delhi.
4. Ahuja, G K & Gupta Ravi, *Systematic Approach to Income Tax*, Allahabad, Bharat Law House.
5. Pandian, *Security Analysis and Portfolio Management*, Vikas Publishing House, New Delhi.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be

compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.



**OE-305 EXPORT IMPORT PROCEDURES AND DOCUMENTATION**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The aim of the course is to acquaint the students with the export-import procedures and documentation*

**Course Outcomes:**

**CO1:** Students will be able to describe the legal framework and procedure governing international trade.

**CO2:** Students will be able to explain the incorporation of various terms in drafting of an export contract and understand the importance of risk management.

**CO3:** Students will be able to apply the concepts learned in terms of export order, delivery and international trade pricing to actual transactions.

**CO4:** Students will be able to appraise the role and importance of export-import documentation and procedure framework according to commodities and countries.

**CO5:** Students will be able to evaluate the nuances of import and export clearance procedures.

**CO6** Students will be able to develop the skills to export-import various commodities in different countries and avail benefits of various export incentives and promotional schemes given by government.

**Course Contents:**

**UNIT I**

Export Preliminaries, Documentation in international trade: Aligned Documentation System (ADS); Commercial documents, Regulatory documents, Documents related to goods, shipment, payment, inspection and legal regulated documents, Official machinery for consultation.

## **UNIT II**

Export contract: Distinction between domestic sales contract and export sales contract, Major laws for export contracts, Elements in export contracts, Dispute settlement, Role of ICC; INCOTERMS, Containerization.

### UNIT III

Export order processing; shipping and custom clearance of export and import cargo; central excise clearance; Role of clearing and forwarding agents. Types of risks in international trade, Cargo Insurance and claim Procedures

### UNIT IV

Methods of payment in international trade; documentary collection of export bills, UCPDC guideline, Instruments of payments, Pre-shipment and post-shipment finance, Negotiation of documents with banks, Main Provisions of FEMA; Procedure and documentation for availing export incentives.

#### Suggested Readings:

1. C. Rama Gopal, *Export Import Procedures, Documentation and Logistics*, New Age International Publishers, New Delhi.
2. M. D. Jitendra, *Export Procedures and Documentation*, Rajat Publications.
3. Pervin Wadia, *Export Markets and Foreign Trade Management*, Manishka Publications.
4. Paras Ram, *Export: What, Where and How*, Anupam, Publications.
5. Government of India, *Handbook of Import - Export Procedures*.
6. Nabhi's *Exporters Manual and Documentation*.
7. Nabhi's *New Import-Export Policy Procedures*

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**OE-306**

**CORPORATE GOVERNANCE AND BUSINESS ETHICS**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to sensitize the students about the various ethical and corporate governance issues in business management in the current environment.*

**Course Outcomes:**

**CO1:** Students will be able to describe the different concepts of corporate governance.

**CO2:** Students will be able to explain the ethical dimension of doing business.

**CO3:** Students will be able to demonstrate the skills in implementing governance related matters

**CO4:** Students will be able to examine the different issues pertaining to corporate social responsibility of business.

**CO5:** Students will be able to evaluate the regulatory aspects of corporate governance.

**CO6:** Students will be able to design practical ways of inculcating ethics in various functions and operations of business.

**Course Contents:**

**UNIT-I**

Evolution of corporate governance; developments in India; regulatory framework of corporate governance in India; SEBI guidelines on corporate governance; reforms in the Companies Act

## **UNIT-II**

Corporate management vs. governance; internal constituents of the corporate governance; key managerial personnel (KMP); chairman- qualities of a chairman, powers, responsibilities and duties of a chairman; chief executive officer (CEO), role and responsibilities of the CEO.

## **UNIT-III**

Introduction to Business Ethics: The concept, nature and growing significance of Ethics in Business, Ethical Principles in Business, Ethics in Management, Theories of Business Ethics, Ethical Issues in Business, Business Ethics in 21<sup>st</sup> Century.

## UNIT-IV

Ethics in various functional areas of Business: Ethics in Finance, Ethics in HRM, Ethics in Marketing, Ethics in Production and Operation Management.

### Suggested Readings:

1. Mallin, Christine A., *Corporate Governance (Indian Edition)*, Oxford University Press, Delhi.
2. Blowfield, Michael, and Alan Murray, *Corporate Responsibility*, Oxford University Press.
3. Francesco Perrini, Stefano, and Antonio Tencati, *Developing Corporate Social Responsibility-A European Perspective*, Edward Elgar.
4. Sharma, J.P., *Corporate Governance, Business Ethics & CSR*, Ane Books Pvt Ltd, New Delhi.
5. Manuel G. Velasquez, *Business Ethics*, Pearson Prentice Hall.
6. Ravindranath B. & Narayana B., *Business Ethics*, Vrinda Publications Pvt. Ltd

### Important Instructions for the Course Coordinator and the Examiner:

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**OE-307**

**INDIAN ETHOS AND VALUES**

**Time Allowed: 3Hours**

**M.M:60**

**Course Objectives:** *The course aims to help student appreciate the significance of Indian Ethos and Values along with its relevance and implications to managerial decision making.*

**Course Outcomes:**

**CO1:** Students will be able to recall the values related to Indian ethos.

**CO2:** Students will be able to identify how Indian ethos is associated with business organizations.

**CO3:** Students will be able to demonstrate the skills required to develop a holistic approach towards management of organizations

**CO4:** Students will be able to appraise the importance of Indian education system and philosophy behind it.

**CO5:** Students will be able to evaluate the human values thus generating a value-driven management.

**CO6:** Students will be able to develop ways to solve real-life problems related to human behaviour based on his understanding on Indian ethos and values.

**Course Contents:**

**UNIT I**



Indian Ethos: Meaning of Bharat, relevance of Indian ethos, role of Indian ethos in managerial practices; Sources of Indian Ethos in Management: Vedas, Ramayana, Bible, Quran, Kautilya's Arthashastra, Ethics v/s Ethos; Indian Management v/s Western Management

## **UNIT II**

Modern Approach towards Indian Ethos : Introduction, Indian Management Thoughts, Holistic Approach to Management; Sadhana –In Management context, The Tatwas in Indian Ethos; Management Thoughts and Practice: Harmony with Environment, Dharma, Swadharma and Detachment, Holistic approach to Personality, Managerial Purusharth Karma yoga & enlightened leadership

### UNIT III

Learning and Education System in India: Learning concept, Gurukul System of Learning, The beginning of modern education system, Achievements of the Indian education system; Law of Karma, Law of creation, law of humility, law of growth, law of responsibility

### UNIT IV

Human Values: Meaning, significance, Vedic literature and values, formation of values, Aristotle's view on value inculcation, Objectives of value-based system, Interrelation of Values and Skills, Values and the workplace, Value-based Human response management, Need of value-based holistic management, Value-driven management, Indian culture and wisdom, The ethical and spiritual values and Methods of heart and mind purification

#### Suggested Readings:

1. Agarwal, T. & Chandorkar, N., *Indian Ethos in Management*, Himalaya Publishing House
2. Nandgopal, R. & Sankar, R.N.A., *Indian Ethos & Values in Management*, Tata McGraw Hill Education
3. **Ganjre, A.K., Pawar, P. & Laxman R.**, *Indian Ethos - Modern Management Mantra*, Himalaya Publishing House
4. **Bansal, I.**, *Management Concept in ancient India psycho-philosophic thought and their significance in present day organization*, Jaipur, Narayan Publication
5. Sharma. S., *Management in New Age: Western Windows Eastern Doors Management*, New Age International

#### Important Instructions for the Course Coordinator and the Examiner:

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OE-308      COMPUTER APPLICATIONS IN BUSINESS  
AND CYBER SECURITY

**Time Allowed: 3Hours**

**MM: 60**

**Course Objective:** *The Objective of this course is to familiarize the student with basic concepts of information technology, its application in business and make them conscious of cyber security laws and practice.*

**Course Outcomes:**

**CO1:** Students will be able to relate with various software related to office application.

**CO2:** Students will be able to explain and identify electronic data transfer takes place and will be able to handle data base management systems.

**CO3:** Students will be able to use and operate telecommunication networks which are most commonly used in organizations.

**CO4:** Students will be able to question and test the various operations of the internet.

**CO5:** Students will be able to evaluate and examine the perspectives of cyber security hence bearing ethical responsibility.

**CO6:** Students will be able to develop solutions for real-life problems based on computer applications and cyber security.

### **Course Contents:**

#### UNIT-I

Software Packages for Office Applications- Word Processing using MS Word, Spreadsheets using MS Excel, Presentations using MS PowerPoint, Creating web pages and web applications with HTML, Business functionalities using Tally software.

#### UNIT-II

Electronic Data Processing: An introduction; Data processing cycle; data hierarchy; data file structure; file organization, Data Base Management Systems

### UNIT-III

Telecommunication and Networks: Types of Telecommunication Networks, Telecommunications Media, Network Topologies, Network Architectures-The OSI Model. The Internet, Intranet and Extranets: Operation of the Internet, Services provided by Internet, World Wide Web, Intranet and Extranets.

### UNIT-IV

Cyber Security: Perspective of Cyber security, Application security, Information security, Network security, End-user education, Cryptography / Encryption, Security issues in wireless, Security Threats and Vulnerabilities, Ethical Responsibility - Business Ethics, Technology Ethics; Cyber Crime and Privacy Issues. Brief introduction to Information Technology Act, 2000, IT (Amendment) Act

#### Suggested Readings:

1. Ram, B., *Computer Fundamentals*, New Age Publications.
2. Rajaraman, V., *Introduction to Information Technology*, PHI.
3. Shrivastava., *Fundamental of Computer & Information Systems*, Wiley Dreamtech.
4. Chwan-Hwa (John) Wu, J. David Irwin, *Introduction to Computer Networks and Cybersecurity*, CRC Press.
5. Aparna Viswanathan, *Cyber Law*, LexisNexis Butterworths

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of four short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry 8 marks each. The maximum time allotted for the major test is 03 (three) hours.



**OE-309**

**DISASTER MANAGEMENT**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The basic purpose of this course is to understand the framework for evaluating disaster management regarding the capital expenditure proposals, their planning, finance, appraisal and management in the review of the projects undertaken.*

**Course Outcomes:**

- CO1:** Students will be able to explain the importance, scope and functions of Disaster Management.
- CO2:** Students will be able to illustrate the Life Cycle of any given disaster management project.
- CO3:** Students will be able to sketch estimation of Guidelines for Time, Costs and Resources required for Disaster Management by applying different methods.
- CO4:** Students will be able to examine the Scheduling Resources and Reducing Disaster Duration.
- CO5:** Students will be able to evaluate Role and Responsibilities of the Disaster Manager, Planning, Organizing, Controlling, Skills of the Disaster Manager.
- CO6:** Students will be able to formulate strategies for risk reduction in Disaster.

**Course Contents:**

**UNIT-I**

Introduction to Disasters: Concepts, and definitions (Disaster, Hazard, Vulnerability, Resilience, Risks) Disasters: Classification, Causes, Impacts (including social, economic, political, environmental, health, psychosocial, etc.), Differential impacts- in terms of caste, class, gender, age, location, disability, Global trends in disasters, urban disasters, pandemics, complex emergencies, Climate change

## **UNIT-II**

Approaches to Disaster Risk reduction: Disaster cycle .its analysis, Phases, Culture of safety, prevention, mitigation and preparedness community based DRR, Structural- nonstructural measures, roles and responsibilities of- community, Panchayati Raj Institutions/Urban Local Bodies (PRIs/ULBs), states, Centre, and other stake-holders.



### UNIT-III

Inter-relationship between Disasters and Development: Factors affecting Vulnerabilities, differential impacts, impact of Development projects such as dams, embankments, changes in Land-use etc. Climate Change Adaptation. Relevance of indigenous knowledge, appropriate technology and local resources

### UNIT-IV

Disaster Risk Management in India Hazard and Vulnerability profile of India, Components of Disaster Relief: Water, Food, Sanitation, Shelter, Health, Waste Management Institutional arrangements (Mitigation, Response and Preparedness, DM Act and Policy, Other related policies, plans, programmes and legislation), Contemporary issues in Disaster Management including COVID-19.

#### **Suggested Readings:**

1. Alexander David, Introduction in 'Confronting Catastrophe', Oxford University Press
2. Andharia J. Vulnerability in Disaster Discourse, JTCDM, Tata Institute of Social Sciences Working Papers
3. Blaikie, P, Cannon T, Davis I, Wisner B At Risk Natural Hazards, Peoples' Vulnerability and Disasters, Routledge.
4. Coppola P Damon, Introduction to International Disaster Management,
5. Carter, Nick Disaster Management: A Disaster Manager's Handbook. Asian Development Bank, Manila Philippines.
6. Cuny, F. Development and Disasters, Oxford University Press.
7. Document on World Summit on Sustainable Development.

#### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**FOURTH  
SEMESTER**

**MBAM-401**

**COMPREHENSIVE VIVA-VOCE**

**M.M: 100**

**(Compulsory for all the Students)**

**Course Objective:** *The objective of the course is to enable students to get a thorough understanding of what conceptual knowledge they have acquired and how they will be able to express it unambiguously in a demanding situation*

**Course Outcomes:**

**CO1:** Student will be able to recall the important terms related to core and general courses of management.

**CO2:** Students will be able to explain their understanding about learnings from the programme.

**CO3:** Students will be able to demonstrate their soft and hard skills.

**CO4:** Students will be able to examine their own spontaneity, mannerisms and presence of mind which will help them in introspection for future such events (Job Interviews).

**CO5:** Students will be able to defend the knowledge about their respective field.

**CO6:** Students will be able to assemble their experiences gained during the programme.

**Important Instructions for the Programme Coordinator and the Examiner:**

- The Programme Coordinator will announce in the class in the beginning of the semester regarding the significance of the Comprehensive Viva-Voce Examination and the expectations of the Panel of Examiners from the passing out students of MBA Programme.
- The Panel of Examiners duly constituted by the COE/Director/Principal will conduct an oral viva-voce examination to assess the overall programme objectives and overall course outcomes achieved by the students, during the programmes, on the basis of communication skills, course contents, analytical ability and question-answer handling skills of the student on a proforma duly notified to the students in advance.

**MBAM-402**

**RESEARCH PROJECT**

**(Optional in lieu of one paper)**

**Time Allowed: 1 Hour**

**M.M:100**

**Course Objective:** *The objective of this course is to make students understand the scientific and systematic way of solving organizational problems by making valuable choices*

**Course Outcomes:**

- CO1:** Students will be able to draw a management problem in a scientific manner.
- CO2:** Students will be able to recognize the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Student will be able to distinguish the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO5:** Students will be able to evaluate the procedure for the scientific and systematic research in solving pragmatic problems of any organization.
- CO6:** Student will be able to construct and formulate research problems objectively thus enabling themselves to make effective decisions.

**Instructions for Research Project:** The following instructions will be followed:

1. Research project, which is optional, should be from major or core area of specialization of the student and shall be in lieu of one paper of his/her major or core area of specialization.
2. Students opting for MBA-402 Research Project in the 4th semester will have to register for the project in Semester III itself by submitting a synopsis along with consent of the supervisor in the Office of HSB and to the office of Director/ Principal in case of affiliated institutes by 15th November.
3. Research project will be accepted for submission and evaluation when at least one research paper out of the project work has been published or accepted in a research journal, or presented in any national conference/seminar. If a student fails to do so, then he/she has to give the presentation of the research project before a committee constituted by Director, (HSB) in case of HSB and Director/ Principal in case of affiliated institutes.
4. The external examiner, appointed by the COE/Director, will evaluate the Research Project and will conduct viva-voce of 60 marks in the premises of HSB (for HSB students) and in the premises of affiliated institutes (for their respective students). However, the guide will submit the internal out of 40 marks separately.
5. The panel of examiners/experts will be provided by Director, HSB. The internal examiner for assisting the external examiner for evaluation and conducting viva voce will be appointed by the Director, HSB in case of HSB and Director/ Principal in case of affiliated institutes.

**MBAM-403**

**INDUSTRIAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to lay a foundation for an understanding of the complex dimensions of Industrial Marketing.*

**Course Outcomes:**

- CO1:** Students will be able to describe terms, concepts, and nature of industrial marketing.
- CO2:** Students will be able to compare industrial marketing with consumer marketing.
- CO3:** Students will be able to interpret the role of each stakeholder in industrial marketing value chain.
- CO4:** Students will be able to appraise competitor marketing strategy.
- CO5:** Students will be able to evaluate marketing mix strategy for industrial products.
- CO6:** Students will be able to develop an effective marketing strategy for industrial products.

**Course Contents:**

**UNIT-I**

Industrial Marketing: concept, nature and scope of industrial marketing; Difference between industrial and consumer marketing; Economics of industrial demand; Understanding industrial markets and environment: Types of industrial customers, Classification of industrial

products, Marketing implications for different customers and different product types, Purchase practices of industrial customers, Environmental analysis in industrial marketing.

## **UNIT-II**

Organisational Buying and Buyer behavior: Buyer motives, Phases in industrial buying decision process, Types of buying situations, Interpersonal Dynamics of industrial buying behavior, Buyer-Seller relationship, Models of industrial buying behavior, Industrial Marketing Research process; Industrial market segmentation, target marketing and positioning.

## **UNIT-III**

Product Strategy: Meaning and Concept of an industrial product, Determinants of product mix, Industrial Product Life Cycle and strategies, New product development process; Marketing strategies for product related services and pure services; Industrial pricing decisions: Factors influencing pricing decisions, Pricing strategies, Pricing methods.

## **UNIT-IV**

Industrial distribution channels and marketing logistics: Distinctive nature of industrial distribution channels, Factors affecting the nature of industrial channels, Role of intermediaries, Types of industrial intermediaries, Channel design decisions, Role of logistics and customer services in industrial marketing, Major components/Major decision areas of logistics, Total cost approach; Industrial marketing communication: Role of personal selling and direct marketing in industrial marketing, Personal selling process, Importance of advertising, and sales promotion in industrial marketing, Sales force management, Strategic planning, Implementing and Controlling in industrial marketing.



### Suggested Readings:

1. Reeder, Robert R. *Industrial Marketing: Analysis, Planning and Control*. Englewood Cliffs. New Jersey, Prentice Hall Inc.
2. Havalder, Krishna K., *Industrial Marketing*, TMH, New Delhi
3. Havalder, Krishna K: *Text and Cases*, TMH, New Delhi
4. Brennan, R, Canning, L & McDowell, R, *Business to Business Marketing*, Sage Publications Ltd.,
5. Hill, Richard, etc. *Industrial Marketing*, Homewood Illionis, Richard D. Irwin.
6. Webster, F E. *Industrial Marketing Strategy*, New York, John Wiley.
7. Ghosh, P.K, *Industrial Marketing*, Oxford University Press.
8. Mukerjee, *Industrial marketing*, Excel Books India

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**Course Objective:** *The aim of this paper is to acquaint the students with the concepts, techniques and developing skills regarding application of effective digital and social media marketing.*

**Course Outcomes:**

- CO1:** Students will be able to define various terms used in the field of digital and social media marketing.
- CO2:** Students will be able to explain the procedures used in planning and implementation of digital and social media marketing.
- CO3:** Students will be able to illustrate existing digital and social media marketing strategies.
- CO4:** Students will be able to distinguish the utility of various social media platforms for promoting a brand.
- CO5:** Students will be able to select the most suitable social media platform to market a brand.
- CO6:** Students will be able to design a social media marketing strategy for a brand.

**Course Contents:****UNIT I**

Introduction to digital marketing, advantages of digital medium over other media, Impact of internet on consumer buying behaviour. Domain names; Website hosting; Lead generation; Ethical and Legal Issues in the field of digital marketing.

## **UNIT II**

Search Engine Optimisation (SEO): Introduction to SEO; understanding search engines; basics of keyword research; On-page and off-page Search Engine Optimisation.

## **UNIT III**

Search Engine Marketing (SEM): Introduction to SEM; Google Ad words; keywords; bidding and budget; quality score; creating and optimising campaign. Google Analytics; Content marketing; Affiliate marketing; Email marketing; Mobile marketing

## UNIT IV

*Social media marketing*: meaning; approach to social media; types of social media websites; blogging; social media engagement; social media ROI; using social media for branding and promotion. Marketing on Facebook, LinkedIn, Youtube, Instagram, Pinterest

### Suggested Readings:

1. Parkin Godfrey, *Digital Marketing: Strategies for Online Success*, New Holland Publishers.
2. Charlesworth A., *Internet Marketing: A Practical Approach*, BH Publications.
3. Chaffey Dave, *Internet Marketing: Strategy, Implementation and Practice*, Pearson Education.
4. Trengove Alex, Malczyk Anna and Beneke Justin, *Internet Marketing*, GetSmarter under the Creative Commons BY-NC 3.0.

### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-405**

**RURAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

**Course Objective:** *The objective of this course is to analyze the major concepts of rural and agricultural marketing in coherent and critical manner.*

**Course Outcomes:**

- CO1:** Students will be able to recite problems in rural marketing and changing focus of corporate towards rural market.
- CO2:** Students will be able to recognize need of agricultural marketing in economic development and constraints of agricultural marketing.
- CO3:** Students will be able to solve the problems of cooperative sector in India.
- CO4:** Students will be able to appraise role of supply chain in agricultural marketing.
- CO5:** Students will be able to evaluate role of government and financial institution in growth of rural and agricultural marketing.
- CO6:** Students will be able to develop model for rural and agricultural marketing.

**Course Contents:**

**UNIT-I**

Features, Significance, Scope and Limitations of rural markets in India; Environmental factors affecting rural markets; Changing focus of corporate towards rural markets; Demographic and psychographic profile of rural consumer; Classification of products and services in Rural marketing, rural demand and problems in rural marketing,

**UNIT-II**

Agriculture Marketing –Definition, Scope, Concept and Objectives; Differences in Agricultural and Consumer Marketing; Constraints in Agricultural marketing; Role of Agriculture in Economic Development of India; Role of Government in Agricultural Development; Agribusiness; Export potential for farm products -Supporting Services.

### UNIT-III

Cooperative Marketing –Concept, History, Functions – Reasons for slow progress of cooperative sector, Advantages & Limitations of Organized retailing in Agri Inputs and Outputs, Trends in Agri Marketing. Supply Chain Management in Agri Business i.e. Cold Chains, Organized procurement & warehousing.

### UNIT- IV

Marketing Mix for rural products; Role of financial institutions in rural marketing. Rural marketing strategies: Different models and case studies of corporate vis Tata Kisan Seva Kendra, Commodity market functioning etc. Innovative distribution Channels like ITC E-Choupal, Godrej Adhar, HUL Shakti.

#### Suggested Readings:

1. Acharya S. S. and Agarwal N. L., *Agricultural Marketing in India*, Oxford & IBH Publishing Co.
2. Dr. Subhash Bhawe, *Agribusiness Management in India –Text & Cases*.
3. Arora, R C., *Integrated Rural Development*, Scharnd.
4. Desao. Vassal. *Rural Development*, Himalaya Publishing House
5. Mishar, S. N., *Politics and Society in Rural India*, Inter India.
6. Porter, Michael, E. *Competitive Strategy*, Free Press.
7. T.P Gopaldaswamy, *Rural marketing- Environment, problems and strategies*

#### Important Instructions for the Course Coordinator and the Examiner:

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.





**MBAM-406**

**SOCIAL MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

Course Objective: *The objective of the course is to familiarize the students to design social campaigns with a view to bring change in the behavior of the public in the fields of public health and environment.*

**Course Outcomes:**

- CO1:** Students will be able to describe the meaning and nature of social marketing.
- CO2:** Students will be able to recognize the range of stakeholders involved in social marketing programmes and their role as target markets
- CO3:** Students will be able to interpret the marketing mix strategies in social marketing.
- CO4:** Students will be able to appraise social marketing problems and suggest ways of solving.
- CO5:** Students will be able to evaluate the social marketing plan.
- CO6:** Students will be able to develop a social marketing plan for achieving behavioral change.

**Course Contents:**

**UNIT-I**

Social Marketing: Concept, Scope, Comparison with Commercial Marketing, Approaches to influence public Behavior; Social Marketing Planning Process; Elements of Campaign.

**UNIT-II**

Social Marketing Environment: Campaign Focus and purpose, Mapping the Internal and External Environments; Establishing Target Audiences: Target Marketing.

### **UNIT-III**

Setting Campaign Objectives and Goals: Behavior Objective, Knowledge Objective, Belief Objective; Social Marketing Strategies: Product in social marketing, Price of a social marketing product.

### **UNIT-IV**

Promotional Strategies: Types of Media Channels, Choosing Media Vehicles, Timings and Factors Influencing media strategies; Plan Evaluation and Monitoring: Outcome measures, Process Measures; Establishing Budgets and finding Funding Sources.

### **Suggested Readings:**

1. Philip, Kotler, Ned Roberto, Nancy Lee, *Social Marketing: Improving the quality of life*, Sage Publication,
2. Nancy, R., Lee, Philip, Kotler, *Social Marketing; Influencing Behavior for Good*, Sage, R., Kraig, Lefebvre, *Social Marketing and Social Change*, Wiley.
3. Hong, Cheng, Philip Kotler, Nancy R. Lee, *Social Marketing for Public Health: Global Trend and Success Stories*, Jones and Bartlett Publishers, LLC

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-407**

**DIRECT MARKETING**

**Time Allowed: 3 Hours**

**M.M:60**

Course Objective: *The objective of the course is to acquaint the students about the concept and application of direct marketing and understanding its importance and applications.*

**Course Outcomes:**

- CO1:** Students will be able to describe the meaning and nature of direct marketing.
- CO2:** Students will be able to recognize the types of direct marketing activities.
- CO3:** Students will be able to interpret the marketing mix elements in direct marketing.
- CO4:** Students will be able to appraise direct marketing problems and suggest ways of solving.
- CO5:** Students will be able to judge the value of databases.
- CO6:** Students will be able to create a direct marketing plan.

**Course Contents:**

**UNIT-I**

Introduction: meaning, scope and importance; Evolution and growth of direct marketing; Direct marketing: The Indian scenario; Role of technology and media; Problem and challenges and future of direct marketing.

**UNIT-II**

Channels/forms/modes of direct marketing: Telemarketing, Catalogue marketing, Direct mail marketing, Direct response marketing, Kiosk marketing, Online marketing. Media of direct marketing.

### **UNIT-III**

Strategies and objectives: the design use and maintenance of databases, Designing offers, managing lead-generation programme. Managing the creative process: creating direct mail packages, catalogues, print visual and internet advertising.

### **UNIT-IV**

Applications of direct marketing: business to business direct marketing, retail direct marketing. Evaluating effectiveness of direct marketing. Few successful stories of direct marketing.

### **Suggested Readings:**

1. Bob Stone: Successful Direct Marketing Methods, NTC, Chicago.
2. Edwam, Nash: Direct Marketing, TMH, New Delhi.
3. McDonald, William J. Direct Marketing, TMH, New Delhi,
4. Roberts, M.L. & P.O. Berger: Direct Marketing Management, Prentice Hall, New Jersey.
5. Stone Mertin, Derek Davies And Alison Bond: Direct Hit. Macmillan, New Delhi.
6. Edward, Nash: The Direct Marketing Handbook, Tata Mcgrwa Hill, New Delhi.
7. Bird, Dryayton: Common Sense Direct Marketing, Kogan Page London.

### **Important Instructions for the Course Coordinator and the Examiner:**

- The list of cases and specific references including recent articles will be announced in the class at the time of launching of the course by the Course Coordinator.
- The examiner is required to cover all course outcomes framed for a particular course in a balanced manner while setting nine questions in all. The first question will be compulsory consisting of six short questions covering the entire syllabus. In addition, eight more questions will be set comprising two questions from each unit. Wherever possible, the examiner may give a case study that will be equal to one question only. The students shall be required to attempt five questions in all selecting one question from each unit in addition to the compulsory Question No. 1. All questions shall carry equal marks. The maximum time allotted for the major test is 03 (three) hours.

**MBAM-410**

**IN-COMPANY-PROJECT-WORK**

**(Optional in lieu of 3 Elective Courses)**

**Time Allowed: 1 Hour**

**M.M: 300**

**Course Objective:** *The objective of this course is to make the already placed students to understand the procedural scientific and systematic way of solving organizational problems by making valuable choices.*

**Course Outcomes:**

- CO1:** Students will be able to outline the real issues faced by the organization.
- CO2:** Students will be able to convert their learning of research methods into a realistic research design for their topic of research.
- CO3:** Students will be able to apply the conceptual knowledge in a practical situation and learn how to conduct a study and present it in form of a report.
- CO4:** Students will be able to examine the impediments and nuances associated with data requirements and find out the practical techniques of collecting data relevant for a research study.
- CO5:** Student will learn to evaluate and select the appropriate data analysis techniques thus reporting the findings and suggestion associated with the problem at hand.
- CO6:** Students will be able to assemble and present the findings in a report.

**Instructions for In-Company-Project-Work: The following instructions will be followed:**

- If any student gets placement offer from any public or private sector organization during 4<sup>th</sup> semester and willing to join immediately, he or she may opt for In-Company-Project-Work-Report for which detailed guidelines will be notified separately, from time to time, after taking necessary approval of competent authority of the university.
- However, such In-Company-Project-Work-Report will be jointly supervised by the Academic Guide (to be nominated by the Director, HSB and Industry Guide (to be appointed by the competent authority of the concerned Organization, who has offered appointment to our student and any pressing hard to join immediately). The Academic Guide will get two hour per week credit per students maximum up to ten credits in his or her teaching workload.
- The evaluation process will be along with detailed guidelines in this connection.