

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

**TWO YEARS (FOUR SEMESTERS) PROGRAMME**  
Choice Based Credit System on Outcome Based Education  
(Effective from Session 2021-22)



**HARYANA SCHOOL OF BUSINESS**  
GURU JAMBHESHWAR UNIVERSITY OF SCIENCE  
AND TECHNOLOGY HISAR-125001, HARYANA

**(YEAR-2021-22)**

# THE CURRICULUM BOOK

## OF

### MASTER OF BUSINESS ADMINISTRATION

#### (Business Analytics)

## 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 (Business Analytics) Programme

The Programme Educational Objectives of the MBA (Business analytics) 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 (BUSINESS ANALYTICS)

The MBA in Business analytics 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. Business analysts (BAs) are responsible for bridging the gap between IT and the business using data analytics to assess processes, determine requirements and deliver data-driven recommendations and reports to executives and stakeholders. Business Analysts engage with business leaders and users to understand how data-driven changes to process, products, services, software and hardware can improve efficiencies and add value through data analysis. They must articulate those ideas but also balance them against what's technologically feasible and financially and functionally reasonable. Accordingly, they are imparted adequate conceptual knowledge and practical training in various functional areas of management comprising Finance, Marketing and International Business through Business Analytics. MBA (Business Analytics) 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 (Business Analytics) 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 (Business analytics) 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

**If the Final/major Test (External) marks are 30, then internal assessment will be of 20 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 (Business analytics) Programme shall be effective from the academic session 2021-22.
- 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 (Business analytics) Programme

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

| Type of Teaching Learning Activity and Workload   | No. of Credits |
|---|----------------|
| 05 Hours Lecture (L) per week per semester  | 04 Credit      |
| 01 Hour Tutorial (T) per week per semester but maximum two groups irrespective of number of students in the classes | 01 Credit      |
| 02 Hours Practical (Lab) per week per semester (for practical subjects)   | 01 Credit      |
| 01 Hour Seminar per week per semester   | 01 Credit      |
| 01 Hour Training Seminar per week per semester  | 01 Credit      |
| 01 Student Guidance for In-Company-Work-Project   | 02 Credit      |

|  |           |
|--|-----------|
| 02 Hours per week per semester if a teacher is asked to act as Programme Coordinator   | 02 Credit |
| 01 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  | 01 Credit |
| 06 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. | 05 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 | 8 Courses                               | 38 Credits              |
| 3.   | 3 <sup>rd</sup> Semester | 7 Courses                               | 38 Credits              |
| 4.   | 4 <sup>th</sup> Semester | 6 Courses                               | 20 Credits              |
|  |                          | Total                                   | 129 Credits             |
| Core and Elective Courses Wise Credit Distribution |                          |   |                         |
| Sr. No   | Core Courses-Wise        | Elective and Open-Elective Courses Wise | Total Number of Credits |
| 1.   | 94                       | 35                                      | 129                     |
|  |                          | Total                                   | 129 Credits             |

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 (Business analytics) Programme is given as under:

| SEMESTER-I  |   |                           |                      |
|-------------|---|---------------------------|----------------------|
| Course Code | Course Title                                    | Workload<br>L-----P-----T | Number of<br>Credits |
| BA-101      | Management Process and Organizational Behaviour | 5-----0-----1             | 05 Credits           |
| BA-102      | Mathematical Statistics                         | 5-----0-----1             | 05 Credits           |
| BA-103      | Managerial Economics                            | 5-----0-----1             | 05 Credits           |
| BA-104      | Financial Statement Analysis                    | 5-----0-----1             | 05 Credits           |
| BA-105      | Business Analytics                              | 5-----0-----1             | 05 Credits           |
| BA-106      | Relational Database Management Systems          | 3-----3-----1             | 05 Credits           |
| BA-107      | Data Visualization                              | 1-----3-----1             | 03 Credits           |
|             |   | Total                     | 33 Credits           |

| SEMESTER-II |   |                           |                      |
|-------------|---|---------------------------|----------------------|
| Course Code | Course Title                            | Workload<br>L-----P-----T | Number of<br>Credits |
| BA-201      | Mathematics for Business and Economics  | 5-----0-----1             | 05 Credits           |
| BA-202      | Marketing Management                    | 5-----0-----1             | 05 Credits           |
| BA-203      | Financial Management                    | 5-----0-----1             | 05 Credits           |
| BA-204      | Big Data Analytics                      | 5-----0-----1             | 05 Credits           |
| BA-205      | Data Warehousing and Data Mining        | 3-----3-----1             | 05 Credits           |
| BA-206      | Management Science                      | 5-----0-----1             | 05 Credits           |
| BA-207      | Business Research Methods               | 5-----0-----1             | 05 Credits           |
| BA-208*     | Seminar on Topics of Business analytics |                           | 03 Credits           |
|             |   | Total                     | 38 Credits           |

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

| SEMESTER-III |  |                           |                   |
|--------------|--|---------------------------|-------------------|
| Course Code  | Course Title                                       | Workload<br>L-----P-----T | Number of Credits |
| BA-301       | Machine Learning With R Programming                | 3-----3-----1             | 05 Credits        |
| BA-302       | Advanced Machine Learning using Python Programming | 3-----3-----1             | 05 Credits        |
| BA-303       | Fundamentals of Econometrics                       | 5-----0-----1             | 05 Credits        |
| BA-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        |
|              | Open Elective-I**                                  | 5-----0-----1             | 05 Credits        |
|              |  | Total                     | 38 Credits        |

\* The students are required to choose 3 (three) Elective Courses offered in Semester III.

\*\* In addition to above 03 (three) elective courses, the students are also required to choose one course from the list of Open Elective Courses. 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<br>L-----P-----T | Number of Credits |
|-------------|---|---------------------------|-------------------|
| OE-301      | Counseling Skills for Managers                      | 5 0 1                     | 05 Credits        |
| OE-303      | Personal Finance                                    | 5 0 1                     | 05 Credits        |
| OE-304      | Applications of Marketing                           | 5 0 1                     | 05 Credits        |
| OE-305      | Export Import Procedures and Documentation          | 5 0 1                     | 05 Credits        |
| OE-306      | Corporate Governance and Business Ethics            | 5 0 1                     | 05 Credits        |
| OE-307      | Indian Ethos and Values                             | 5 0 1                     | 05 Credits        |
| OE-308      | Computer Application in Business and Cyber Security | 5 0 1                     | 05 Credits        |
| OE-309      | Disaster Management                                 | 5 0 1                     | 05 Credits        |

### The List of Elective Papers for Semester III

3<sup>rd</sup> Semester

| Course Code | Course Title                  | Workload<br>L-----P-----T | Number of Credits |
|-------------|-------------------------------|---------------------------|-------------------|
| BA-305      | Risk Management and Insurance | 5 0 1                     | 05 Credits        |
| BA-306      | Security Analysis             | 5 0 1                     | 05 Credits        |
| BA-307      | Treasury Management           | 5 0 1                     | 05 Credits        |
| BA-308      | Foreign Exchange Management   | 5 0 1                     | 05 Credits        |
| BA-309      | Financial Econometrics        | 5 0 1                     | 05 Credits        |
| BA-310      | Enterprise Resource Planning  | 3 3 1                     | 05 Credits        |
| BA-311      | E-Commerce Applications       | 3 3 1                     | 05 Credits        |
| BA-312      | Marketing Analytics           | 5 0 1                     | 05 Credits        |

### SEMESTER-IV

| Course Code | Course Title  | Workload<br>L-----P-----T | Number of Credits |
|-------------|---|---------------------------|-------------------|
| BA-401      | Comprehensive Viva- Voce (External)                         |                           | 05 Credits        |
| BA-402      | Research Project (optional in lieu of one elective paper)** | 5-----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  |                           |                   |
| BA-412      | In-Company-Project-Work****                                 |                           | 15 Credits        |
|             |   | Total                     | 20 Credits        |

\*

**The students are required to choose 3 (three) Elective Courses offered in Semester IV.**

\*\*

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

- i) Research project, shall be in lieu of one elective paper of his/her choice.
- 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.

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**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 IV**

4th Semester

| Course Code | Course Title                          | Workload<br>L-----P-----T | Number of Credits |
|-------------|---------------------------------------|---------------------------|-------------------|
| BA-403      | Time Series Econometrics              | 5-----0-----1             | 05 Credits        |
| BA-404      | Actuarial Risk Management             | 5 0 1                     | 05 Credits        |
| BA-405      | Portfolio Management                  | 5 0 1                     | 05 Credits        |
| BA-406      | Financial Restructuring and Valuation | 5 0 1                     | 05 Credits        |
| BA-407      | Financial and Commodity Derivatives   | 5 0 1                     | 05 Credits        |

|        |                                     |   |   |   |            |
|--------|-------------------------------------|---|---|---|------------|
| BA-408 | Financial Decisions Analysis        | 5 | 0 | 1 | 05 Credits |
| BA-409 | Behavioral Finance                  | 5 | 0 | 1 | 05 Credits |
| BA-410 | Digital and Social Media Marketing  | 5 | 0 | 1 | 05 Credits |
| BA-411 | Management of International Finance | 5 | 0 | 1 | 05 Credits |

Haryana School of Business

# FIRST SEMESTER

Haryana School of Business

**BA-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 & 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.

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

Descriptive statistics: Central tendency and dispersion, 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

Parametric and Non Parametric test: Paired and unpaired t-test, 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. Index number

#### 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:

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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

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Course Objective: *The basic purpose of this course is to prepare the students to interpret and analyze the financial Statement for effective financial decisions*

**Course Outcomes:**

- CO1: Students will be able to outline the various financial statements.
- CO2: Students will be able to compare the investment, operating activities and methods of income and expenditure.
- CO3: Students will be able to interpret cash flow statements and return on investment.
- CO4: Students will be able to examine the liquidity and working capital position.
- CO5: Students will be able to evaluate the capital structure and equity valuation for taking the future financial decisions.
- CO6: Students will be able to formulate the effective financial and investment policy.

**Course Contents:****UNIT-I**

Overview of financial statement analysis: Types and components Business analysis, basis of analysis, financial statement analysis preview, relevance to business decisions and steps in analyzing financial statements; Financial reporting and analysis: Reporting environment, Form of the financial statements, IFRS framework for the preparation and presentation of financial statements.

**UNIT-II**

Accounting analysis: Analysis of financing activities; Analysis of investing activities; Analysing investing activities and inter-corporate investments; Analysis of operating activities and income: understanding method of revenue and expenses.

**UNIT-III**

Financial analysis: Analysis of cash flow statements; Return on invested capital and profitability analysis; Prospective analysis: Projection process, projecting financial statements, application of prospective analysis in the residual income, valuation model and trends in value drivers; Short

term liquidity analysis: working capital analysis, operating activity analysis

#### UNIT-IV

Credit analysis: Liquidity and working capital, and capital structure and solvency; Equity analysis and valuation: Earning persistence, earning based equity valuation and earning power and forecasting for valuation; Building blocks of financial statement analysis

#### Suggested Readings:

1. Wild, John J, Subramanyam, K.R. and Halsey Robert E., *Financial Statement Analysis*, Ninth edition, McGraw-Hill, New Delhi.
2. Bernstein, Leopold A., *Financial Statement Analysis*, McGraw-Hill International.
3. Foster, George. *Financial Statement Analysis*, Prentice Hall.
4. Penman, Stephen H. *Financial Statement Analysis and Security Valuation*, McGraw-Hill International
5. Stickney, Clyde P. and Brown, Paul R. *Financial Reporting and Statement Analysis*, The Dryden Press.
6. Hampton, John. J., *Financial Decision Making*. Prentice Hall of India Pvt. Ltd., New Delhi.
7. Levy. H. and Sarnat H., *Capital Investment and Financial Decision*, Englewood Cliffs, Prentice Hall Inc.
8. Van Horne, James C. *Financial Management and Policy*. Englewood Cliffs, Prentice hall of India.

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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 illustrate the different techniques used in different area such as finance, Human resource, marketing etc.
- CO4: Students will be able to differentiate the complex problems using advanced analytics tools.
- 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 descriptive, predictive and prescriptive business analytics

**Course Contents:****UNIT-I**

Introduction: Decision making, Business analytics defined, Big data, Business analytics in practice. Descriptive Statistics: Overview of using data: types of data, modifying data in excel, creating distributions from data, measures of location and variability, analyzing distribution and measures of association. Spreadsheet Models: Building good spreadsheet models, excel functions for modeling, auditing spreadsheet models. Linear optimization models: Minimization problem, solving the par. Inc problem, maximization problem, special cases of linear program outcomes, sensitivity analysis, general linear programming notation.

**UNIT-II**

Types of Integer linear optimization models, east borne realty example, solving using excel solver, application involving binary variables, modeling flexibility provided by binary variables, generating alternatives. Nonlinear optimization models: a production application, local and

global optima, a location problem, Markowitz portfolio model, forecasting adoption of a new product.

### UNIT-III

Monte Carlo Simulation: Risk Analysis for Santonics LLC, Simulation modeling for land Shark Inc., Simulation considerations. Decision analysis: Problem Formulation. Importance of Business analytics application: Introduction, business analytics personnel, business analytics data, Descriptive: Visualizing and exploring data, sampling and estimation, Predictive: Logic Driven Models, data driven models, data mining. Prescriptive Analysis: Prescriptive modeling: non-linear optimization

### UNIT-IV

Need for measurement, characteristics of measures, measurement system terminology, Salient attributes of a good metric, SMART test for ensuring metric relevance to business, Supply chain associated with the metric, Fact-based decision making and KPIs, Few sample KPIs used by Human Resource (HR) division, Mapping metrics to business phases KPIs, and Performance Management

#### 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. Camm, J.D., Cochran, J.J., Fry, M.J., Ohlmann, J.W., Anderson, D.R. (2015), *Essentials of Business Analytics*, Cengage Learning, Second Edition.
5. Prasad, R. N., Acharya, S. (2011), *Fundamentals of Business Analytics*, Wiley.
6. Schniederjans, M.J., Schniederjans, D.G., Starkey, C.M. (2014), *Business Analytics: Principles, Concepts and Applications*, Pearson.
7. Liebowitz, J. (2013), *Business Analytics: An Introduction*, Auerbach Publications.
8. Hardoon, D.R., and Shmueli, G. (2016), *Getting Started with Business Analytics*, CRC Press, Taylor & Francis.
9. Rao, P.H. (2014), *Business Analytics: An Application Focus*, Prentice Hall India.
10. Sharma, J.K., Khatua, P.K. (2012), *Business Statistics*, Pearson

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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

Haryana School of Business

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.

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

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Course Objective: *The objective of the course is to implement database system management concepts.*

**Course Outcomes:**

- CO1: Students will be able to describe the elementary and advanced features of data visualisation.
- CO2: Students will be able to explain the stored Procedures and Functions of data Base management system.
- CO3: Students will be able to operate, recovery and update the data base.
- CO4: Students will be able to examine SQL language and advance SQL queries.
- CO5: Students will be able to evaluate the query and Information retrievals
- CO6: Students will be able to develop Database and Relational database through SQL

**Course Contents:****UNIT-I**

Data Visualization: Overview, Tables, Charts, Advanced data visualization, data dashboards, SQL Server Express Setup, Creating a Database, Table: Creation, Deletion, Table Design, Relationships, Normalization, Indexes. Working with SQL Queries, Joins, Set Operators, Modifying Data

**UNIT-II**

Introduction to Stored Procedures and Functions, Database Administration & Maintenance; Creating a stored procedure, controlling its execution, If else, Begin end, while, case, Functions: scalar, table valued, Database administration: setting up maintenance plan in SQL server, running the maintenance plan, emailing the reports

**UNIT-III**

Database recovery and updating; Transaction Logs, Recovery, Recovery Models, Changing the recovery model, backups, backup strategy, performing a backup, restoring a database, Database security and Logins. 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.

**UNIT-IV**

Views and Triggers: Encrypting, Creating, Indexing, Triggers: DDL, Log-on, DML, Trigger Order. Advanced SQL Queries: Sequence, Subqueries, IN Clause, EXISTS Clause

#### Suggested Readings:

1. Mitnick, G. (2017), *SQL: Create Your Own Database FAST! The Most Important and Core Functions to Mastering SQL*, Amazon Asia Pacific Holdings.
2. Fehily, C. (2014) *m SQL: Database Programming*, Questing Vole Press.
3. Elmasai & Narathe, *Fundamentals of Database Systems*, Addison-Wesley
4. Abraham Silberschatz, Henry F. Korth, S. Sudarshan, *Database System Concepts*, McGraw Hill
5. Schneider Robert D & J. R. Garbus, *Optimizing SQL Server 7*, Prentice-Hall.

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# SECOND SEMESTER

Haryana School of Business

Course Objective: *This course aims to provide a basic introduction to the use of mathematical techniques to solve business problems, and how a business organization can create a competitive advantage by developing technical & analytical skills.*

#### Course Contents:

- CO1: Students will be able to recall different concepts, techniques and models used in business Mathematics.
- CO2: Students will be able to illustrate the techniques and models used in business mathematics.
- CO3: Students will be able to illustrate the different techniques of mathematics used in different area such as finance, international business, Human resource and marketingetc.
- CO4: Students will be able to differentiate the complex problems using advanced mathematical tools.
- CO5: Students will be able to select the techniques and models required to analyze a particular business problem.
- CO6: Students will be able to develop necessary competencies expected from descriptive and predictive business mathematics

#### Course Contents:

##### UNIT-I

Set Theory: Venn diagram and its applications, Operations on sets, Cartesian product of sets, applications of set theory in business; Elementary permutations and combinations.

Functions and Limits: Algebraic functions (polynomial - linear, quadratic and rational), transcendental functions (exponential, log and trigonometric functions with identities). Business applications of Functions; Limit of a variable and a function, Implications of Limit of Functions, Continuity of a function of one variable, Business applications of Limits.

Commercial Arithmetic and Mathematical Series: Simple interest, Compound interest, Present value or Present worth, Profit and Loss, Arithmetic progression, Geometric progression, Harmonic progression, relationship among AP, GP and HP.

##### UNIT-II

Vectors, Matrices and Determinants with Business application: Vectors, Operations on Vectors; Introduction of Matrix, types of matrices, Addition of matrices, Subtraction of matrices, Multiplication of matrices, Transpose of matrix, Expansion of determinants, Minor and Cofactors, Properties of determinant, Adjoint and Inverse of matrices, System of linear

equations, Applications of matrix operations in business decision making.

### UNIT-III

Differential Calculus: - Concepts of differentiation, Derivative of a function, Differential coefficient of product and quotient of two functions, Differentiation of different forms of functions – Chain rule, Exponential, Logarithmic, Implicit and Parametric functions and derivatives of higher order, Maxima and Minima, Applications of differentiation in Business.

### UNIT-IV

Integral Calculus & Differential Equations: Concept of integration, Elementary integration, integration by substitution, Integration by parts, Applications of integration in business, Differential equations, Order and degree of differential equations, Solution of differential equations in variable separable form.

#### Suggested Readings:

1. Kapur, J.N. and Saxena, H.C., “Mathematical Statistics”, New Delhi, Sultan Chand and Company Ltd.
2. Reddy, R.J and Reddy, Y.M., “A Text book of Business Mathematics”, New Delhi, Ashish Publishing House.
3. Dutta, K.B., “Matrix and Linear Algebra”, New Delhi, PHI Learning.
4. Gupta, K.L, Agarwal, Ravi Kant & Jain, Praveen, “Business Mathematics”, Nirupam Sahitya Sadan.
5. Sancheti D.C & Kapoor V.K, “Business Mathematics”, Sultan Chand & Sons.
6. Gupta, B.N, “Business Mathematics”, SBPD.
7. Singh, JK, “Business Mathematics”, Himalaya Publishing House.
8. Gupta, Kavita, “Business Mathematics”, Taxmann Publications.

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*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

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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.

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**Course Objective:** The objective of this course is to learn tools and techniques to apply analytics on large information and transaction data to identify various business opportunities, better customer service, more effective marketing, better operational efficiency and a competitive edge over rivals.

**Course Outcomes:**

- CO1: Students will be able to define the concept and challenges of Big data.
- CO2: Students will be able to classify the big data.
- CO3: Students will be able to apply skills and tools to analyze and manage Big data. Learn various Big data frameworks and applications.
- CO4: Students will be able to compare the impact of making Big data decisions on various business problems.
- CO5: Students will be able to judge 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 to handle big data.

**Course Contents:****UNIT-I**

Introduction to Big data and its Value, Issues and challenge in real time Big data, Big data options Team challenge – sources and Nuts and Bolts of Big data. Features of Big Data - Security, Compliance, auditing and protection. Evolution of Big data and Big data characteristics - Volume, Veracity, Velocity, Variety – Data Appliance and Integration tools.

**UNIT-II**

Evolution of analytic scalability, Convergence, parallel processing systems. Cloud computing and grid computing and its methods and tools. Analytic innovation – Traditional approaches – Iterative. Introduction to Streams Concepts – its model, architecture and computing, Sampling data in a stream, Filtering streams, counting distinct elements in a stream and Real Time Analytics Platform(RTAP) applications IBM Info sphere

**UNIT-III**

Predictive Analytics – Supervised and Unsupervised learning. Neural networks – Kohonen models – Deviations from normal patterns. Clustering Techniques – Hierarchical – K- Means –, Clustering. high dimensional data Visualizations - Visual data analysis techniques, interaction techniques; Systems and applications

#### UNIT-IV

IBM for Big Data – Map Reduce Framework, Hadoop, Hive, shading – NoSQL Databases - S3 Hadoop Distributed file systems, Hbase, Impala, Analyzing big data with twitter, Facebook, Instagram – Big data for E-Commerce – Big data for blogs.

#### Suggested Readings:

1. Ohlhorst, F.J. (2013), *Big Data Analytics: Turning Big Data into Big Money*, Wiley and SAS Business Series.
2. Rajaraman, A. & Ullman, J.D. (2014), *Mining of Massive Datasets*, Cambridge University Press.
3. Parjapati, V. (2013), *Big Data Analytics with R and Hadoop*, Packt Publishing. Provost F., Fawcett T. *Data Science for Business: What you need to know about data mining and data-analytic thinking*, O'Reilly Media.
4. Rajaraman, A. & Ullman, J.D. (2014), *Mining of Massive Datasets*, Cambridge University Press.
5. Minelli, M., Chambers, M., Dhiraj, M. (2013), *Big Data, Big Analytics: Emerging Business Intelligence and Analytic Trends for Today's Businesses*, Wiley 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: *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 analysing 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.

#### 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 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 alternatives 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:

2. Zikmund, W. G. *Business Research Methods*. Thomson.
3. Copper, D. R., Schindler P. S. & Sharma, J. K. *Business Research Methods*, McGraw Hill Education.
4. Burns, R. B. & Burns, R. A. *Business Research Methods and Statistics using SPSS*, SAGE Publications Ltd.
5. Bajpai, N, *Business Research Methods*, Pearson.
6. Chawla, D. & Sondhi N., *Research Methodology: Concepts and Cases*, Vikas Publishing House.
7. Panneerselvam, R, *Research Methodology*, Prentice Hall India.
8. 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.

**BA-208**

**SEMINAR**  
**(On Topics of Business Analytics)**  
**(Internal)**

**Time Allowed: 1 Hour**

**M.M.: 50**

Course Objective: *Objective of this course is to acquaint the students with existing issues pertaining to business analysis through some techniques of data analytics. Also, inculcating in them the ability of expressing themselves to the stakeholders with logical reasoning 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 contemporary issues and problems in business analytics.
- CO2: Students will be able to review emerging issue related to business analytics problems.
- 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.

**FINAL YEAR  
(THIRD & FOURTH  
SEMESTERS)  
COMPULSORY PAPERS**

Haryana School of Business

Course Objective: *The objective of the course is to learn applications of various machine learning concepts using R language. The course would enable the ability to understand and critically assess available data using machine learning methods.*

**Course Outcomes:**

- CO1: Students will be able to describe the R tool packages.
- CO2: Students will be able to explain the type of data and able to convert the data in useful table format through R programming.
- 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**

Introduction to R programming: Data types or objects in R, Creating and manipulating objects like factors, vectors and matrices, lists and data frames, Sub-setting matrices and data frames, Vectorized operations for vectors and matrices and data frames. Getting and Installing R, The R user Interface, A short R tutorial, R packages. Overview: Expressions, Objects, Symbols, Functions. Syntax: Constants, Operators, Expressions, Control Structures, Accessing Data Structures. R Objects: Primitive object types, vectors, lists, other object types. Symbols and Environment: Symbols, Global environment, environment and functions, exceptions.

**UNIT-II**

Control structure in R: If-else statements, for and while loops, loop functions like lapply, apply, sapply and mapply etc.; writing user defined functions in R. Getting data in and out of R. Entering Data Within R, Entering Data Using R Commands, Using the Edit GUI, Saving and Loading R Objects, Importing Data from External Files, Exporting and Importing Data from Databases. Preparing Data: Combining Data Sets, Transformations, Binning Data, Subsets, Summarizing Functions, Data Cleaning, An overview of R graphics.

### UNIT-III

Doing basic descriptive statistics: Data types for data analysis and their mapping to R objects, Mean, Median, Mode, Quantiles, Five-point summary, Variance, Correlation and Covariance, Resampling. Probability Distributions: Normal Distribution, Common Distribution-Type Arguments, Distribution Function Families. Statistical Tests for Continuous and Discrete Data, Power Tests: Experimental Design Example, t-Test Design, Proportion Test Design, ANOVA Test Design. Regression Models: A Simple Linear Model, Fitting a Model, Refining the Model, Principal Components Regression and Partial Least Squares Regression.

### UNIT-IV

Exploratory Data Analysis: Visualizing data through various plots and charts (bar charts, histogram, frequency polygon, scatter plot, box plots etc.), Applying KNN and Bayesian predictive models. Machine Learning Algorithms for Regression: Regression Tree Models, MARS, Neural Networks, Project Pursuit Regression, Generalized Additive Models, Support Vector Machines. Classification Models: Linear Classification Models, Logistic Regression, Linear Discriminant Analysis, Log-Linear Models. Machine Learning Algorithms for Classification: k Nearest Neighbors, classification Tree Models, Neural Networks, SVMs, Random Forests.

#### Suggested Readings:

1. Adler, J. (2012), R in a Nutshell: A Desktop Quick Reference, O'reilly publications, Second Edition.
2. Lantz, B. (2013), Machine Learning with R, Packt publishing Ltd.
3. Lesmeister, C. (2015), Mastering Machine Learning with R, Packt Publishing, First Edition.
4. Wickham, H. & Golemund, G. (2016), R for Data Science: Import, Tidy, Transform, Visualize, and Model Data, O. Reilly Media.
5. Gillespie, C., Lovelace, R. (2016), R for Data Science: Import, Tidy, Transform Visualize, and Model Data, O'Reilly Media.

#### 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-302    ADVANCED MACHINE LEARNING USING PYTHON PROGRAMMING****Time Allowed: 3 Hours****M.M:60**

Course Objective:    *The objective of this paper is to teach students how to preprocess, process, visualize and analyze the different type of data using python and create meaningful data prediction for better decision making process.*

**Course Outcomes:**

CO1: Students will be able to define the basic concepts of data science and python for performing data analysis.

CO2: Students will be able to understand the data, performing preprocessing and processing of data.

CO3: Students will be able to illustrate the data visualization to get insights from data.

CO4: Students will be able to analyze different python packages for mathematical and scientific application.

CO5: Students will be able to evaluate the web data.

CO6: Students will be to develop a model for data analysis and evaluate the model performance

**Course Contents:****UNIT-I**

Introduction: Data Science, Artificial Intelligence & Machine Learning, Use Cases in Business and Scope, Scientific Method, Modelling Concepts, CRISP-DM Method.

**UNIT-II**

Python Essentials: Data preprocessing, Programming, Commands and Syntax, Packages and Libraries, Introduction to Data Types, Data Structures in python - Vectors, Matrices, Arrays, Lists, Factors, Data Frames, Importing and Exporting Data, Control structures, and Functions.

**UNIT-III**

Data Processing and Visualization: Data processing using arrays, file input and output with arrays, histograms, bar chart, box plot, line graph, scatter plot, different methods of presenting data in business analytics, Concepts of Size, Shape, Color, Various, Bubble charts, Geo-maps (Chlorpeths), Gauge charts, Treemap, Heat Map, Motion charts, Force Directed Charts, inferential Statistics. Data visualization basic tools, specialized visualization tools, Seaborn Creating and Plotting maps

## UNIT-IV

Inferential Statistics: Understand the data, attributes, distributions, Procedure for statistical testing, Test of Hypothesis Contingency table and their use, Chi-Square test, Fisher's exact test, One-Sample t-test, Independent Samples t-test, Paired Samples t-test, One-way ANOVA (Post hoc tests: Fisher's LSD, Tukey's HSD), z-test and F-test. Model development, model selection and model evaluation

### Suggested Readings:

1. A Python Book: Beginning Python, Advanced Python, and Python, Marianne Williamson, 2013.
2. Advanced Python Programming, Carl Sagan, 2000.
3. Beginning Python: From Novice to Professional, Magnus Lie Hetland, 2017.
4. Data Analysis and Visualization Using Python, Ossama Embarak, 2018
5. Hands-On Data Analysis with NumPy and pandas, Curtis Miller, 2016.
6. Python data analysis, Idris & Ivan, 2014
7. Python 4: Advanced Python - O'Reilly Media, Najwa Zebian, 2015

### 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 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, 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.

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.

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.

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.

Haryana School of Business

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 ELECTIVE COURSES

Haryana School of Business

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.
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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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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 business 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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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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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

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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

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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.

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# ELECTIVE COURSE OF THIRD SEMESTER

Haryana School of Business

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 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:

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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 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 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, 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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Course Objective: *The objective of this course is to aware and teach the best treasury management practices.*

**Course Outcomes:**

- CO1: Students will be able to define the scope and concepts of treasury management.
- CO2: Students will be able to identify the issues involved in public debt management in India
- CO3: Students will be able to interpret the various types of risk.
- CO4: Students will be able to analyze the working capital requirement in the financial institutions.
- CO5: Students will be able to judge the health of assets and liability of the financial institutions.
- CO6: Students will be able to develop best treasury management practice.

**Course Contents:****UNIT-I**

Overview of Corporate Treasury Management; need and benefits, functions and Treasury exposures. Structure of Corporate Treasury (Centralized and Decentralized), Ethics in Treasury Management, Treasury Products for different markets. The Money Market; its types and instruments, Understanding the Money Market and Various Prevalent Rates- MCLR, Base Rate, etc. Money market regulations. RBI and the Foreign Exchange Market - Reserve Bank of India forex management. Capital Market; its type and instruments. Regulation of capital market.

**UNIT-II**

The level and structure of interest rates; Determinants of structure of interest rates, yield curve and term structure, forward rates and determinants of shape of term structure. Operation of Commercial banks; Liquidity and Cash management. Asset and Liability management of commercial banks. Management of commercial banks; profitability, leverage and risk, CMS or cash management systems. Basel III Capital and Liquidity Rules.

**UNIT-III**

Business Risk Management; Business Cycle forecasting, Business risks, Measurement of business risks and mitigation by effective treasury management. Corporate Liquidity Risk Management; Type of risk – liquidity risk, origin of liquidity risk, tactics for mitigating the risk. Interest Rate Risk Management- Treasury risk, interest rate risk, traditional and modern theories of interest rate, management strategies and the role of financial intermediaries. Foreign Exchange Risk Management - risk of forex fluctuations, impacts of global milieu, Foreign exchange rate and interest rate relationship, strategies for managing the risk, comprising policies, procedures and controls.

## UNIT-IV

Working Capital Management; Introduction, need for working capital, cash cycle, management strategies for working capital, Financial Supply Chain, Interest rate and working capital, perspective of the Treasury function. Treasury Risk Management; Treasury risks, function the market risks role of asset-liability management Integrated Treasury; Introduction, responsibilities of Treasury. Accounting risks associated with financial reporting and disclosure of treasury exposures in the balance sheet.

### Suggested Readings:

1. Robert W. Kolb. Financial Institutions, Blackwell.
2. Frank J. Fabozzi, Franco Modigliani, Frank J. Jones and Michael G. Ferri. Foundation of Financial Markets and Institutions, Pearson Education
3. Treasury Management, IIBF
4. The handbook of fixed income securities by Frank J Fabozzi and Stevwn V Mann

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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.

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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:

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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.

#### 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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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.

### 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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Course Objective: *The course aims to provide exposure to the business analyst regarding marketing analytics through various learning tools for generating marketing practices insights on the basis of available data.*

Course Outcomes:

CO1: Students will be able to outline the application area of marketing analytics.

CO2: Students will be able to explain the dynamics involved in a marketing decision.

CO3: Students will be able to solve data driven marketing problems.

CO4: Students will be able to differentiate among various value offers stages for decision-making.

CO5: Students will be able to evaluate the effectiveness of a marketing strategy.

CO6: Students will be able to design a marketing strategy for dynamic settings.

Course Contents:

#### UNIT-I

Introduction to marketing analytics, models and metrics, Market Insight: Market terminology, Understanding marketing data, market data sources, market sizing, pestle market analysis, porter five forces analysis.

#### UNIT-II

Customer preferences: Understanding product, attributes, and levels through conjoint analysis. Customer value: Calculating Customer Lifetime Value (CLV), Customer value and marketing decisions. Market segmentation using Cluster analysis and Collaborative filtering.

#### UNIT-III

Deciding Price and pricing strategies: estimating demand curves, price bundling, price skimming, nonlinear pricing. Forecasting: Forecasting sales and application of forecasting methods. Forecasting new product sales.

#### UNIT-IV

Measuring the effectiveness of Advertising; Media selection models; PPC online advertising. Allocating retail space and Sales resources.

Suggested Readings:

1. Winston, W.L, *Marketing Analytics: Data-Driven Techniques with Microsoft Excel*, Wiley
2. Grisby, M., *Marketing Analytics: A Practical Guide to Improving Consumer Insights Using Data Techniques*, Kogan Page

3. Sorger, S., *Marketing Analytics: Strategic Models and Metrics*.
4. Venkatesan, Farris, Wilcox, *Cutting Edge Marketing Analytics: Real World Cases and Data Sets for Hands on Learning*, Pearson FT 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.

# ELECTIVE COURSES OF FOURTH SEMESTER

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:

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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 aim of this course is to aware the candidate about strategic concepts in the management of the business activities of financial institutions and programmes, including the processes for management of the various types of risk faced, and be able to analyze the issues and formulate, justify and present plausible and appropriate solutions to business problems.*

**Course Outcomes:**

- CO1: Students will be able to define the concept of actuarial risk management.
- CO2: Students will be able to compare different types of risk faced by financial institutions and customers.
- CO3: Students will be able to apply techniques of risk management and control
- CO4: Students will be able to differentiate various types of insurance products and policies.
- CO5: Students will be able to evaluate different insurance products and policies and related risk.
- CO6: Students will be able to develop different financial products for financial institution.

**Course Contents:****UNIT-I**

Stakeholders and their needs: Nature and cope of actuarial risk management. Role of Actuaries' for clients and other stakeholders. Need of Actuaries in pensions and insurance, both in the public and private sectors. Factors and issues accounted by Actuaries, Outline of professionalism framework of the Actuarial Profession and the Board for Actuarial Standards, Actuarial Control Cycle and purpose of its components. Application of Actuarial Control Cycle in a variety of practical commercial situations, including its use as a Risk Management Control Cycle. Actuaries advise and the types, Actuaries demand client's factual information, Subjective attitudes of clients and other stakeholders – especially towards risk

**UNIT-II**

General environment: Risk environment -Risk management process for designing products, schemes, contracts, contingent event and other arrangements, systematic and diversifiable risk, risk appetite and the attainment of risk efficiency, credit risk and the use of credit ratings, liquidity risk, market risk, operational risk, business risk, methods of risk acceptance, rejection, transfer and

management for stakeholders, portfolio approach to the overall management of risk, including the use of diversification and avoidance of risk concentrations, principle of pooling risks and methods of transferring risks. Regulatory environment, External environment –legislation, state benefits,

taxes, accounting standards, capital adequacy and solvency, corporate governance, international practice and technological changes.

### UNIT-III

Capital and Investment environment: Cash flows of simple financial arrangements, Behaviour of market price levels and total returns and their relationships, theoretical and historical relationships between the total returns and the components of total returns, on equities, bonds and cash, and price and earnings inflation. Contingent events capital requirement, implications of the regulatory environment for provisioning and capital requirements, different measures of capital needs, internal models for assessment of economic and regulatory capital requirements. Contract design: determinants of suitable contract design for financial structures e.g. products, schemes, contracts or other arrangements, characteristics of the parties involved, risk appetite or risk aversion of the parties involved, level and form of benefits to be provided, options or guarantees that may be included, benefits payable on discontinuance or transfer of rights, method of financing the benefits to be provided, choice of assets when benefits are funded, levied charges and capital requirements.

### UNIT-IV

Project planning and management: Actuarial techniques for assessment of capital investment projects and cost-benefit analyses, data requirements for determining values for assets, future benefits and future funding requirements. Risk management: Methods of measuring risk to provide benefits on contingent events, scenario analysis, stress testing and stochastic modelling in the evaluation of risk and sensitivity analysis. Investment management: Principles and objectives of investment management, methods for the valuation of individual investments, actuarial techniques and asset/liability modelling for investment strategy. Determining the expected results and Reporting actual results

#### 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:

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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.

Haryana School of Business

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.
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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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- 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 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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- 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 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:

- 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 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. Sulphery. 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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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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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.

**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.