



**Department of Economics**  
**Scheme of Examination and Syllabus for Under**  
**Graduate Programme**  
**Under Multiple Entry and Exit, Internship and CBCS-**  
**LOCF as per NEP-2020**  
**w.e.f. session 2024-25 (in phased manner)**

**Subject: Economics**



**Guru Jambheshwar University of Science  
& Technology Hisar-125001, Haryana**

**(A+ NAAC Accredited State Govt. University)**

**Guru Jambheshwar University of Science and Technology**  
**Hisar-125001, Haryana**  
**(‘A+’ NAAC Accredited State Govt. University)**  
**Scheme of Examination & Syllabus for affiliated Degree Colleges for UG Programme**  
**According to National Education Policy-2020**  
**(Semester III to Semester VI)- Single Major (Scheme-C)**  
**w.e.f. 2024-25 Onwards**

**Subject: Economics**

<b>SEMESTER III</b>								
Type of Course	Course Code	Nomenclature	Credit	Contact Hrs.	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs.)
Discipline Specific Course	C24ECO301T	Advanced Microeconomics	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24ECO302T	Advanced Macroeconomics	4 (3L+1T)	4	30	70	100	3
Minor Course/ Vocational Course	C24MIC306T	Financial Institutions and Markets	4 (3L+1T)	4	30	70	100	3
Multidisciplinary Course	C24MDC309T	Economics of Education	3 (2L+1T)	3	25	50	75	2.5
Skill Enhancement Course	C24SEC306T	Understanding State Budget	2	2	15	35	50	2
	C24SEC306P	State Budget Analysis and Practice	1	2	10	15	25	2
Value Added Course	C24VAC327T	Public Policy and Governance in India	2	2	15	35	50	2
<b>SEMESTER-IV</b>								
Type of Course	Course Code	Nomenclature	Credit	Contact Hrs.	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs.)
Discipline Specific Course	C24ECO402T	Agriculture Economics	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24ECO403T	Industrial Economics	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24ECO404T	Economics of Rural Development	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24ECO405T	History of Economic Thoughts	4 (3L+1T)	4	30	70	100	3
Minor Course/ Vocational Course	C24VOC406T	Indian Statistical System	2	2	15	35	50	2
	C24ECO406P	Indian Statistical System Lab	2	2	15	35	50	2
Value Added Course	C24VAC327T	Public Policy and Governance in India	2	2	15	35	50	2

**PROGRAMME OUTCOMES (POs)**

PO1 To develop skills in graduate students so that they are able to acquire theoretical and practical knowledge about economics, economy, economic behaviour, economic policies and economic institutions and economic problems.

PO2 To inculcate ability in students for critical thinking, lateral thinking about economic phenomena, problems and policies so as to create professional potential in them

PO3 To make students aware of resource optimization at all level.

PO4 To provide learning experience in students that instils deep interest in economic science for the benefit of society.

## **Semester-III**

**Economics**  
**Advanced Microeconomics (Semester-III)**  
**Discipline Specific Course (DSC)-A5**

**Course Code: C24EC0301T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To provide students with advanced analytical tools to understand and critically evaluate individual and firm decision-making under conditions of uncertainty, market imperfections, and strategic interactions. The course focuses on the rigorous foundations of consumer and producer behavior, general equilibrium, welfare economics, and game theory.

**Unit I**

Consumer Theory: Preference relations and utility representation, Expenditure minimization and duality, Slutsky equation and substitution effects, Hicksian and Marshallian demands, Revealed preference theory

**Unit II**

Production and Cost: Production functions and technology sets, Returns to scale and elasticity of substitution, Cost minimization and cost functions, Duality in production, Economies of scope and multiproduct firms

**Unit III**

General Equilibrium and Welfare: Exchange economy and Edgeworth box, Walrasian equilibrium and its existence, Core and competitive equilibrium, Efficiency and the First and Second Welfare Theorems, Social welfare functions and equity-efficiency trade-offs

**Unit IV**

Game Theory and Strategic Behavior: Static games of complete information, Nash equilibrium and mixed strategies, Dynamic games and subgame perfect equilibrium, Repeated games and collusion, Asymmetric information and adverse selection

**Suggested Readings:**

1. Mas-Colell, A., Whinston, M. D., & Green, J. R. (1995). *Microeconomic Theory*, Oxford University Press.
2. Varian, H. R. (2014). *Intermediate Microeconomics: A Modern Approach*, 9th Edition, W.W. Norton.
3. Jehle, G. A., & Reny, P. J. (2011). *Advanced Microeconomic Theory*, 3rd Edition, Pearson.
4. Kreps, D. M. (1990). *A Course in Microeconomic Theory*, Princeton University Press.
5. Nicholson, W. & Snyder, C. (2016). *Microeconomic Theory: Basic Principles and Extensions*, 12th Edition, Cengage.

**Course Outcomes (COs):**

1. CO1: Apply advanced microeconomic tools to analyze consumer and producer decision-making.
2. CO2: Evaluate market outcomes using general equilibrium and welfare economics frameworks.
3. CO3: Analyze strategic interactions and asymmetric information using game-theoretic models.

**Mapping of CO with PO**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	
CO2	S	S	M	S
CO3	S	S	M	M

**S = Strong, M = Medium, W = Weak**

**Economics**  
**Advanced Macroeconomics (Semester-III)**  
**Discipline Specific Course (DSC)-A6**

**Course Code: C24ECO302T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To equip students with an advanced understanding of macroeconomic theories and models, including dynamic analysis of economic growth, business cycles, expectations, and policy effectiveness. The course aims to provide the tools necessary to critically evaluate modern macroeconomic problems and policies through theoretical frameworks.

**Unit I**

Intertemporal Choice and Consumption: Intertemporal consumption: Fisher's model, Life Cycle and Permanent Income Hypotheses, Consumption smoothing and interest rates, Role of uncertainty and expectations, Empirical evidence on consumption behavior

**Unit II**

Investment and Capital Accumulation: Neoclassical theory of investment, q-theory of investment (Tobin's q), Adjustment costs and investment dynamics, Role of uncertainty and expectations in investment, Accelerator models and empirical analysis

**Unit III**

Expectations and Business Cycles: Rational Expectations Hypothesis (REH), Adaptive expectations and learning, New Classical and Real Business Cycle (RBC) Models, Nominal rigidities and New Keynesian Models, Policy effectiveness under different expectations frameworks

**Unit IV**

Advanced Topics in Macroeconomic Policy: Time inconsistency and rules vs discretion, Dynamic inconsistency and credibility in policy, Fiscal and monetary policy interactions, Debt dynamics and sustainability, Macroeconomic stabilization in open economies

**Suggested Readings:**

1. Romer, D. (2018). *Advanced Macroeconomics*, 5th Edition, McGraw-Hill.
2. Blanchard, O., & Johnson, D. R. (2013). *Macroeconomics*, 6th Edition, Pearson.
3. Mankiw, N. G. (2019). *Macroeconomics*, 10th Edition, Worth Publishers.
4. Snowdon, B., & Vane, H. R. (2005). *Modern Macroeconomics: Its Origins, Development and Current State*, Edward Elgar.
5. Barro, R. J., & Sala-i-Martin, X. (2004). *Economic Growth*, 2nd Edition, MIT Press.

**Course Outcomes (COs):**

1. CO1: Understand and critically analyze intertemporal consumption and investment decisions.
2. CO2: Evaluate the impact of expectations and rigidities on business cycles and macroeconomic outcomes.
3. CO3: Analyze and assess macroeconomic policy design and its implications for growth and stability.

**Mapping of CO with PO**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	
CO2	S	S		S
CO3	S	M	M	S

**S = Strong, M = Medium, W = Weak**

**Economics**  
**Financial Institutions and Markets (Semester-III)**  
**Minor Course (MIC3)**

**Course Code: C24MIC306T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To provide comprehensive understanding of the structure, role, and functioning of financial systems, intermediaries, markets, and institutions in the context of economic development, both domestically and internationally.

**Unit I**

Nature and Role of Financial System, Money and finance — Money and near-money, Financial intermediation and financial intermediaries, Structure and functions of the financial system, Functions of the financial sector, Indicators of financial development, Equilibrium in Financial Markets, Financial System and Economic Development

**Unit II**

Criteria to evaluate assets: Risk and financial assets, types of risk, return on assets, Risk — Return trade-off, Valuation of Securities, Structure of Interest Rates, Theories of interest rate determination, Long and short period interest rates, Term structure of interest rates, Spread between lending and deposit rates, Administered interest rates, Appropriate interest rate policy

**Unit III**

The Central Bank, Commercial Banks, Non-bank Financial Intermediaries, Monetary Policy and Functions of Central Bank, Objectives of monetary policy in developed and developing countries, Instruments of monetary policy, Proliferation of banking and non-bank financial intermediaries, Credit creation and its control, Effectiveness and efficiency of monetary policy, Development banks — role and functions, Investment and merchant banking, Financial sector reforms in India

**Unit IV**

International Financial Markets: Nature, organization and participants, Reforms in international monetary system, Lending operation of World Bank and affiliates, Working of IDA and IFC, Theory of optimum currency areas, Growth of regional, financial institutions, Development bank lending, Asian Development Bank, Euro-dollar and Euro-Currency markets, Regulation at the international level

**Suggested Readings:**

1. Bhole, L.M. (1999), *Financial Institutions and Markets*, Tata McGraw Hill
2. Bhole, L.M. (2000), *Indian Financial System*, Chugh Publications
3. Edmister, R.O. (1986), *Financial Institutions, Markets and Management*, McGraw Hill
4. Goldsmith, R.W. (1969), *Financial Structure and Development*, Yale
5. Hanson, J.A., Kathuria, S. (1999), *India: A Financial Sector for the Twenty-first Century*, Oxford
6. Harker, P.T., Zenios, S.A. (2000), *Performance of Financial Institutions*, Cambridge
7. Machiraju, M.R. (1999), *Indian Financial Systems*, Vikas Publishing
8. Prasad, K.N. (2001), *Development of India's Financial System*, Sarup & Sons
9. Robinson, R.I., Wrightman, D. (1981), *Financial Markets*, McGraw Hill
10. Smith, P.F. (1978), *Money and Financial Intermediation*, Prentice Hall

**Course Outcomes (COs):**

1. **CO1:** Explain the structure and function of financial systems and intermediaries.
2. **CO2:** Analyze monetary policy instruments and evaluate banking reforms.
3. **CO3:** Understand international financial markets and development institutions.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	M	M	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**Economics of Education (Semester-III)**  
**Multi-Disciplinary Course (MDC 3)**

**Course Code: C24MDC309T**  
**45 Hrs. (3 Hrs./Week)**  
**Credit : 3 (2Theory+1Tutorial)**  
**Exam Time: 2.5 Hrs.**

**External Marks :50**  
**Internal Marks :25**  
**Total Marks: 75**

**Note:** The maximum time duration for attempting the paper will be of 2.5 hours. The examiner is required to set seven questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 2.5 marks each. In addition to that six more questions will be set, two questions from each unit. The students shall be required to attempt four questions in all selecting one question from each unit consisting of 12.5 marks each in addition to compulsory Question No. 1.

**Course Objective:** To equip students with an understanding of the role of education in economic development, explore investment in education from an economic perspective, and evaluate educational planning and policy using economic tools and principles.

**Unit I**

**Introduction to Economics of Education:** Meaning, nature, scope and significance of Economics of Education, Education as a consumption and investment activity, Education and economic growth, The concept of human capital, Education and human resource development

**Unit II**

**Demand and Supply in Education:** Demand for education: private and social demand, Determinants of demand: cost of education, income, taste, preference, occupation, gender, and region, Concept of cost of education: private cost, social cost, direct and opportunity cost, Supply of education and role of government

**Unit III**

**Education Financing and Cost-Benefit Analysis:** Resource allocation to education: primary, secondary, higher education, Private and public expenditure on education, Cost-benefit analysis of education: rate of return to education (private and social), Educational subsidies, grants, loans, and incentives, Equity in education financing.

**Educational Planning and Policy:** Educational planning: need, objectives, and types, Manpower planning and forecasting, Education and labour market, Issues in educational policy in India, Role of international agencies (like UNESCO, World Bank) in education development

**Suggested Readings:**

1. Blaug, M. (1972). *Introduction to Economics of Education*, Penguin Books.
2. Psacharopoulos, G. (1985). *Human Capital and Investment in Education*, Oxford University Press.
3. Tilak, J.B.G. (2003). *Economics of Human Resource Development in India*, A.P.H. Publishing Corporation.
4. Woodhall, M. (1992). *Cost-benefit Analysis in Educational Planning*, UNESCO: International Institute for Educational Planning.
5. Schultz, T.W. (1961). *Investment in Human Capital*, The American Economic Review.
6. Vaizey, J. (1962). *Economics of Education*, London.
7. Tilak, J.B.G. (Ed.). (2019). *Education and Development in India: Critical Issues in Public Policy*, Palgrave Macmillan.

**Course Outcomes (COs):**

1. **CO1:** Explain the fundamental economic principles applied to education.
2. **CO2:** Analyze educational investment decisions through cost-benefit and financing tools.
3. **CO3:** Evaluate education planning, policies, and their implications for development.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	M	M	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**Understanding State Budget (Semester-III)**  
**Skill Enhancement Course (SEC)**

**Course Code: C24SEC306T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2 (Theory)**  
**Exam Time: 2 Hrs.**

**External Marks : 35**  
**Internal Marks :15**  
**Total Marks:50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to this, four more questions will be set consisting of two questions from each unit. The student/candidate is required to attempt three questions in all selecting one question from each unit consisting of 10 marks each in addition to compulsory Question No. 1.

**Course Objective:** To provide students with foundational knowledge of state budgeting processes and enable them to critically analyze the fiscal priorities, expenditures, and revenue patterns with a specific focus on Haryana's economy.

**Unit I**

**Fundamentals of State Budgeting:** Importance and objectives of a state budget, Constitutional provisions and the budget process in Indian states, Structure and types of budgets: revenue, capital, surplus, deficit, Key components: revenue, receipts, capital receipts, revenue expenditure, capital expenditure, understanding fiscal indicators: fiscal deficit, primary deficit, debt-to-GSDP ratio, Budget formats and documents used in Indian states

**Unit II**

**Haryana State Budget – A Sectoral and Fiscal Analysis:** Overview of Haryana's fiscal profile: trends in revenue and expenditure, Sectoral allocations in Haryana's budget: agriculture, health, education, infrastructure, etc, Analysis of development vs non-development expenditure, Role of Central transfers and devolution in Haryana's budget, Public investment and fiscal responsibility in Haryana.

**Suggested Readings:**

1. Government of Haryana (latest), *Budget Documents*, Finance Department, Govt. of Haryana
2. Reserve Bank of India, *State Finances: A Study of Budgets*
3. Economic and Statistical Organisation, Haryana – *Statistical Abstracts & Economic Surveys*
4. Lekhi, R.K. & Lekhi, Joginder Singh, *Public Finance*, Kalyani Publishers
5. Reports of Haryana State Finance Commission
6. CBGA (Centre for Budget and Governance Accountability) Budget Briefs

**Course Outcomes (COs):**

1. **CO1:** Explain the framework and components of a state budget and its constitutional context.
2. **CO2:** Evaluate the fiscal and sectoral priorities of the Haryana state budget.
3. **CO3:** Interpret and critically assess key budget indicators and public policy in Haryana.

**CO-PO Mapping Table**

Outcomes	P01	P02	P03	P04
CO1	S	M	S	M
CO2	S	S	M	S
CO3	M	S	S	S

S = Strong | M = Medium | W = Weak



**Economics**  
**State Budget Analysis and Practices (Semester-III)**  
**Skill Enhancement Course (SEC)**

**Course Code: C24SEC306P**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 1 (Practical)**

**External Marks : 15**  
**Internal Marks :10**  
**Total Marks: 25**

**Course Objective:** To provide students with foundational knowledge of state budgeting processes and enable them to critically analyze the fiscal priorities, expenditures, and revenue patterns with a specific focus on Haryana's economy.

**Unit I**

**Practical on State Budgeting:** Structure and types of budgets: revenue, capital, surplus, deficit, Key components: revenue, receipts, capital receipts, revenue expenditure, capital expenditure, Analysis of fiscal indicators: fiscal deficit, primary deficit, debt-to-GSDP ratio, Budget formats and documents used in Indian states.

**Unit II**

**Haryana State Budget – A Sectoral and Fiscal Analysis:** Overview of Haryana's fiscal profile: Analysing trends in revenue and expenditure, Analysis with Sectoral allocations in Haryana's budget: agriculture, health, education, infrastructure, etc, Analysis of development vs non-development expenditure, Role of Central transfers and devolution in Haryana's budget, Public investment and fiscal responsibility in Haryana, Case study: Highlights of the latest Haryana State Budget

**Suggested Readings:**

1. Government of Haryana (latest), *Budget Documents*, Finance Department, Govt. of Haryana
2. Reserve Bank of India, *State Finances: A Study of Budgets*
3. Economic and Statistical Organisation, Haryana – *Statistical Abstracts & Economic Surveys*
4. Lekhi, R.K. & Lekhi, Joginder Singh, *Public Finance*, Kalyani Publishers
5. Reports of Haryana State Finance Commission
6. CBGA (Centre for Budget and Governance Accountability) Budget Briefs

**Course Outcomes (COs):**

1. **CO1:** Explain the framework and components of a state budget and its constitutional context.
2. **CO2:** Evaluate the fiscal and sectoral priorities of the Haryana state budget.
3. **CO3:** Interpret and critically assess key budget indicators and public policy in Haryana.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	M	S
CO3	M	S	S	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**Public Policy and Governance in India (Semester-III)**  
**Value Added Course (VAC)**

**Course Code: C24VAC327T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2 (2Theory)**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more question will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit in consisting of 10 marks each in addition to compulsory question No. 1.

**Course Objective:** The course aims to introduce students to the fundamentals of public policy and governance mechanisms in India. It will help them understand how policies are formulated, implemented, and evaluated, with an emphasis on key institutions, challenges, and innovations in governance. The course will also encourage students to think critically about the role of the state, bureaucracy, and civil society in shaping developmental outcomes.

**Unit I**

**Foundations of Public Policy and Governance:** Definition, nature, and scope of public policy, Policy cycle: Formulation, implementation, and evaluation, Key actors: Legislature, Executive, Judiciary, Bureaucracy, Civil Society, Media Principles of good governance: Transparency, accountability, rule of law, participation, Ethical governance and citizen-centric administration

**Unit II**

**Public Policy and Governance in Practice:** Major public policies in India: Health, education, poverty alleviation, digital governance, Role of NITI Aayog and planning in India's policy landscape, E-Governance and use of technology in policy delivery, RTI, Social Audits, and participatory governance, Challenges in policy implementation: Corruption, capacity issues, Center-state relations

**Suggested Readings:**

1. Sapru, R.K. (2019). *Public Policy: Formulation, Implementation and Evaluation*, Sterling Publishers
2. Munger, M. (2000). *Analyzing Policy: Choices, Conflicts and Practices*, W.W. Norton & Co.
3. Birkland, T.A. (2015). *An Introduction to the Policy Process*, Routledge
4. Arora, R.K. & Goyal, R. (2001). *Indian Public Administration*, Wishwa Prakashan
5. Dreze, J. & Sen, A. (2013). *An Uncertain Glory: India and its Contradictions*, Penguin
6. Government reports: NITI Aayog Documents, Economic Survey (latest edition), India Governance Report

**Course Outcomes (COs):**

1. **CO1:** Understand the fundamentals of public policy and its institutional framework in India.
2. **CO2:** Analyze the challenges and innovations in governance in the Indian context.
3. **CO3:** Apply policy thinking to real-world developmental and economic issues.

Mapping of CO with PO

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	M	M	S

S = Strong, M = Medium, W = Weak

## **Semester-IV**

**Economics**  
**Agriculture Economics (Semester-IV)**  
**Discipline Specific Course (DSC)**

**Course Code:**C24ECO402T  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To equip students with a theoretical and practical understanding of the agricultural sector, focusing on its development, intersectoral linkages, structural challenges, and policy interventions, particularly in the context of developing countries like India.

**Unit I**

Economics of agriculture: nature and scope, Interdependence between agriculture and industry, Nature and problems of agricultural development in developing countries

**Unit II**

Transforming Traditional Agriculture, Models by Ranis & Fei, Schultz and Mellor, Lewis model of unlimited supplies of labour

**Unit III**

Land reforms and system of farming, Farm size and productivity relationship, Agricultural price policy and agricultural taxation, (All topics with special reference to India)

**Unit IV**

New agricultural strategy and green revolution, Problems of small farmers and agricultural labourers, Agricultural credit, marketable and marketed surplus, Surplus and its utilization, (All topics with special reference to India)

**Suggested Readings:**

1. R.N. Soni – *Leading Issues in Agricultural Economics*, Sohan Lal Nagin Chand & Co., Jalandhar, 1992
2. Eicher & Witt – *Agriculture in Economic Development*, Vera & Co., Bombay, 1970
3. M. Khusro – *Readings in Agricultural Development*, Allied Publishers, Bombay, 1968
4. P.C. Joshi – *Land Reforms in India: Trends and Perspectives*, Allied Publishers, New Delhi, 1975
5. T.W. Schultz – *Transforming Traditional Agriculture*, Lyall Book Depot, Ludhiana, 1970
6. J.W. Mellor – *The Economics of Agricultural Development*, Vera & Co., Bombay, 1966
7. Michael P. Todaro – *Economic Development in the Third World*, Orient Longman, New Delhi, 1987
8. Francis R. Frankel – *India's Green Revolution: Economic Gains and Political Costs*, Oxford University Press, Bombay, 1971
9. S.K. Misra & V.K. Puri – *Indian Economy*, Himalaya Publishing House, Bombay, 1993
10. A.N. Sadhu – *Agricultural Problems in India*, Himalaya Publishing House, Bombay, 1986

**Course Outcomes (COs):**

1. **CO1:** Understand the structural and developmental challenges in agriculture, especially in developing economies.
2. **CO2:** Analyze the impact of land reforms, pricing, and credit policies on agricultural performance in India.
3. **CO3:** Evaluate strategies like the green revolution and assess their implications for small farmers and labourers.

**Mapping of CO with PO**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	M	M
CO3	S	S	M	S

S = Strong, M = Medium, W = Weak

**Economics**  
**Industrial Economics (Semester-IV)**  
**Discipline Specific Course (DSC)**

**Course Code: C24ECO403T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To provide students with a comprehensive understanding of industrial organization, market structure, firm behavior, and industrial development policy with a focus on the Indian context.

**Unit I**

Scope and methods of industrial economics, Basic concepts of firm, industry, and market, Organisational forms and alternative motives of firms, Industrial structure and economic development

**Unit II**

Market structure: seller concentration, product differentiation, conditions of entry, and economies of scale, Market structure and profitability, Growth of firms: vertical integration, diversification, mergers, innovation, Constraints on growth: demand, financial and managerial

**Unit III**

Theory of industrial location, Contributions of Weber and Sargent Florence, Centralized vs. balanced regional development, Industrial concentration and dispersal in India

**Unit IV**

Industrial policy since independence, Industrial development under plans, Reasons for deceleration of industrial growth, Growth of state industrialization in India

**Suggested Readings:**

1. Barthwal, R. R. (2010) – *Industrial Economics: An Introductory Text Book*, New Age International, New Delhi
2. Datt, Rudra & Sundharam K. P. M. (2012) – *Indian Economy*, S. Chand & Company
3. Devine, P. J. et al. (1974) – *An Introduction to Industrial Economics*, George Allen & Unwin Ltd., London
4. Howe, W. Steward (1978) – *Industrial Economics: An Applied Approach*, Macmillan Press Ltd.
5. Kuchhal, S. C. (1989) – *Industrial Economy of India*, Chaitanya Publishing House, Allahabad
6. Ahluwalia, I. J. (1985) – *Industrial Growth in India: Stagnation Since Mid Sixties*, Oxford University Press
7. Penrose, E. T. (1995) – *The Theory of Growth of Firm*, Oxford: Basil Blackwell
8. Richardson, H. W. (1969) – *Elements of Regional Economics*, Penguin Education
9. Sivayya & Das (1978) – *Indian Industrial Economy*, S. Chand & Co., New Delhi
10. Smith, David M. (1971) – *Industrial Location: An Economic Geographical Analysis*, John Wiley & Sons

**Course Outcomes (COs):**

1. **CO1:** Understand theoretical foundations of firm behavior, market structures, and industrial organization.
2. **CO2:** Analyze industrial location theories and regional development patterns in India.
3. **CO3:** Evaluate industrial policies and development strategies with reference to India's industrial growth.

**Mapping of CO with PO**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	
CO2	S	S	M	M
CO3	S	S	M	S

S = Strong, M = Medium, W = Weak

**Economics**  
**Economics of Rural Development (Semester-IV)**  
**Discipline Specific Course (DSC)**

**Course Code: C24EC0404 T.**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To provide students with an in-depth understanding of the theoretical concepts and practical aspects of rural development, focusing on rural poverty, employment, infrastructure, institutions, and policy frameworks in India.

**Unit I**

Meaning, nature, and scope of rural development, Objectives and importance of rural development, Characteristics of the rural economy, Role of rural development in national development, Approaches to rural development: Gandhian, Integrated, Participatory, and Target Group approaches

**Unit II**

Rural Poverty and Employment: Concept and measurement of rural poverty, Causes and consequences of rural poverty in India, Rural employment: nature, trends, and challenges, Employment generation programs: MGNREGA, SGSY, etc.

**Unit III**

Rural Infrastructure and Institutions: Rural infrastructure: transport, electricity, communication, housing, and sanitation, Role of Panchayati Raj Institutions (PRIs), Self Help Groups (SHGs), and Cooperatives, Rural credit and microfinance institutions, Role of NGOs in rural development

**Unit IV**

Policy and Planning: Five-Year Plans and rural development strategies, Key government programs and schemes for rural development, Evaluation and impact of rural development programs, Sustainable rural development and environmental concerns

**Suggested Readings:**

1. Katar Singh – *Rural Development: Principles, Policies and Management*, Sage Publications
2. Vasant Desai – *Rural Development in India*, Himalaya Publishing House
3. M.L. Dantwala et al. – *Indian Agricultural Development Since Independence*, Oxford & IBH
4. Ruddar Datt and K.P.M. Sundharam – *Indian Economy*, S. Chand & Co.
5. Government of India – *Reports of the Ministry of Rural Development and Planning Commission*
6. P. R. Dubhashi – *Rural Development Administration in India*, National Book Trust
7. NIRD – *Readings in Rural Development*, Hyderabad
8. B. S. Khanna – *Rural Development in India: Policies and Programmes*, Deep & Deep Publications

**Course Outcomes (COs):**

1. CO1: Understand the conceptual and theoretical framework of rural development.
2. CO2: Analyze the issues related to rural poverty, employment, and infrastructure.
3. CO3: Evaluate rural development policies, programs, and institutional interventions.

**Mapping of Cos and Pos**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	S	M	S

S = Strong, M = Medium, W = Weak

**Economics**  
**History of Economic Thoughts (Semester-IV)**  
**Discipline Specific Course (DSC)**

**Course Code:** C24ECO405T.  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To trace the evolution of economic ideas from early to modern times, fostering a deep understanding of how economic thought shaped contemporary economic theories, policies, and institutions. The course encourages critical reflection on diverse intellectual traditions and their historical contexts.

**Unit I**

Ancient and Early Economic Thought: Economic thought in ancient and medieval periods: Plato and Aristotle – doctrines of just cost and just price, Indian economic thought: Kautilya's *Arthashastra*, Tamil thinkers like Thiruvalluvar, Pre-modern Indian thinkers: Dadabhai Naoroji, J.K. Mehta (wantlessness), Gandhian economics: Village economy, Swadeshi, self-reliance

**Unit II**

Mercantilism and Classical Precursors: Mercantilism: policies, objectives, and criticisms, Physiocracy: primacy of agriculture, natural order (Quesnay's *Tableau Économique*), Transition to classical thinking: Locke, Hume, and early liberal ideas, Thomas Mun and others: trade, taxation, and role of state

**Unit III**

Classical and Neoclassical Traditions: Adam Smith: Division of labour, value theory, economic progress, Malthus: Population theory, gluts, Ricardo: Comparative advantage, rent theory, Karl Marx: Historical materialism, surplus value, capitalist crisis, Say's Law and J.B. Say, Marshall: Price determination, partial equilibrium, synthesis, Pigou: Welfare economics, Schumpeter: Entrepreneur, innovation, and creative destruction

**Unit IV**

Modern Economic Thought and Keynesian Revolution: Keynes: Aggregate demand, underemployment equilibrium, fiscal policy, Monetarist response: Milton Friedman, Austrian critique: Hayek – knowledge, competition, and decentralization, Modern developments: Institutional economics, behavioral economics (brief introduction)

**Suggested Readings:**

1. Blackhouse, R. (1985) – *A History of Modern Economic Analysis*, Basil Blackwell, Oxford
2. Ganguly, B.N. (1977) – *Indian Economic Thought: A 19th Century Perspective*, Tata McGraw Hill
3. Gide, C. & Rist, C. (1956) – *A History of Economic Doctrines*, George Harrop & Co.
4. Grey, A. & Thomson, A.E. (1980) – *The Development of Economic Doctrine*, Longman Group
5. Kautilya (1992) – *Arthashastra* (L.N. Rangarajan edition), Penguin Books
6. Roll, E. (1973) – *A History of Economic Thought*, Faber
7. Schumpeter, J.A. (1954) – *History of Economic Analysis*, Oxford University Press
8. Seshadri, G.B. (1997) – *Economic Doctrines*, B.R. Publishing Corporation

**Course Outcomes (COs):**

1. CO1: Understand key economic ideas across different time periods and their historical significance.
2. CO2: Critically evaluate how different schools of thought influenced economic policy and institutions.
3. CO3: Demonstrate awareness of the evolution of economic reasoning from moral philosophy to analytical science.

**CO-PO Mapping Table**

Course Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	W	S
CO2	S	S	M	S
CO3	M	S	M	S

S = Strong, M = Medium, W = Weak

**Economics**  
**Indian Statistical System (Semester-IV)**  
**MIC (VOC)**

**Course Code: C24VOC406T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2 (Theory)**  
**Exam Time: 2 Hrs.**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more question will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit in consisting of 10 marks each in addition to compulsory question No. 1.

**Course Objective:** To familiarize students with the evolution, structure, and functioning of the Indian Statistical System, with a focus on its role in policy-making and socio-economic development. The course integrates theoretical understanding with hands-on training in data sourcing and analysis.

**Unit I**

**Introduction to Indian Statistical System:** Historical background and evolution of official statistics in India, Role and responsibilities of key statistical agencies: MoSPI, CSO (now NSO), NSSO, and other central agencies, Importance of statistics in governance and planning, Institutional framework and coordination among statistical bodies

**Unit II**

**Statistical Systems at State Level and Sectoral Statistics:** Statistical infrastructure at the state level, Role of State Statistical Bureaus (SSBs), District and village-level data systems, Sectoral statistics: education, health, labour, environment, Identifying, extracting, and compiling data from official websites and portals

**Suggested Readings:**

1. Ministry of Statistics and Programme Implementation (MoSPI), *Annual Reports*
2. Mahalanobis, P.C., *Contributions to Indian Statistical System*
3. Mukhopadhyay, P., *Statistical Methods in Social Science Research*, Sage Publications
4. India Statistical Year Book, MoSPI
5. Census of India – *Primary Abstracts and Handbooks*
6. Economic Survey of India & State Statistical Abstracts
7. Selected NSSO and NFHS reports

**Course Outcomes (COs)**

1. **CO1:** Understand the organizational and functional structure of the Indian Statistical System.
2. **CO2:** Identify and use various official datasets for economic and social analysis.
3. **CO3:** Apply basic tools to analyze and interpret public data for research and planning

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	S	S
CO3	S	S	M	S

**S = Strong | M = Medium | W = Weak**



**Economics**  
**Indian Statistical System Lab (Semester-IV)**  
**MIC (VOC)**

**Course Code: C24VOC406P**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 2 (Practical)**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 50**

**Course Objective:** To familiarize students with the evolution, structure, and functioning of the Indian Statistical System, with a focus on its role in policy-making and socio-economic development. The course integrates theoretical understanding with hands-on training in data sourcing and analysis.

**Unit I**

**Data Collection and Statistical Surveys:** National Sample Surveys (NSS): objectives, methods, and periodicity, Census of India: demographic, socio-economic data and its significance, Annual Survey of Industries (ASI), Economic Census, Agricultural statistics, price statistics, labour force surveys, Issues of data quality, reliability, and timeliness.

**Unit II**

**Practical Data Analysis and Interpretation:** Use of official datasets (NSS, Census, ASI, NFHS, etc.), Techniques for basic descriptive statistics and graphical representation, Use of Excel/SPSS/R for statistical summaries and charts, Preparing short data-based reports on socio-economic indicators, Data interpretation for planning and policymaking.

**Suggested Readings:**

1. Ministry of Statistics and Programme Implementation (MoSPI), *Annual Reports*
2. Mahalanobis, P.C., *Contributions to Indian Statistical System*
3. Mukhopadhyay, P., *Statistical Methods in Social Science Research*, Sage Publications
4. India Statistical Year Book, MoSPI
5. Census of India – *Primary Abstracts and Handbooks*
6. Economic Survey of India & State Statistical Abstracts
7. Selected NSSO and NFHS reports

**Course Outcomes (COs)**

**CO1:** Understand the organizational and functional structure of the Indian Statistical System.

**CO2:** Identify and use various official datasets for economic and social analysis.

**CO3:** Apply basic tools to analyze and interpret public data for research and planning

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	S	S
CO3	S	S	M	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**Public Policy and Governance in India (Semester-IV)**  
**Value Added Course (VAC)**

**Course Code: C24VAC327T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2 (2Theory)**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more question will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit in consisting of 10 marks each in addition to compulsory question No.

**Course Objective:** The course aims to introduce students to the fundamentals of public policy and governance mechanisms in India. It will help them understand how policies are formulated, implemented, and evaluated, with an emphasis on key institutions, challenges, and innovations in governance. The course will also encourage students to think critically about the role of the state, bureaucracy, and civil society in shaping developmental outcomes.

**Unit I**

**Foundations of Public Policy and Governance:** Definition, nature, and scope of public policy, Policy cycle: Formulation, implementation, and evaluation, Key actors: Legislature, Executive, Judiciary, Bureaucracy, Civil Society, Media, Principles of good governance: Transparency, accountability, rule of law, participation, Ethical governance and citizen-centric administration

**Unit II**

**Public Policy and Governance in Practice:** Major public policies in India: Health, education, poverty alleviation, digital governance, Role of NITI Aayog and planning in India's policy landscape, E-Governance and use of technology in policy delivery, RTI, Social Audits, and participatory governance, Challenges in policy implementation: Corruption, capacity issues, centre-state relations

**Suggested Readings:**

1. Sapru, R.K. (2019). *Public Policy: Formulation, Implementation and Evaluation*, Sterling Publishers
2. Munger, M. (2000). *Analyzing Policy: Choices, Conflicts and Practices*, W.W. Norton & Co.
3. Birkland, T.A. (2015). *An Introduction to the Policy Process*, Routledge
4. Arora, R.K. & Goyal, R. (2001). *Indian Public Administration*, Wishwa Prakashan
5. Dreze, J. & Sen, A. (2013). *An Uncertain Glory: India and its Contradictions*, Penguin
6. Government reports: NITI Aayog Documents, Economic Survey (latest edition), India Governance Report

**Course Outcomes (COs)**

1. **CO1:** Understand the fundamentals of public policy and its institutional framework in India.
2. **CO2:** Analyze the challenges and innovations in governance in the Indian context.
3. **CO3:** Apply policy thinking to real-world developmental and economic issues.

**Mapping of CO with PO**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	M	M	S

**Legend:** S = Strong, M = Medium, W = Weak

SEMESTER V								
Type of Course	Course Code	Nomenclature	Credit	Contact Hrs.	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs.)
Discipline Specific Course	C24EC0501T	Indian Economy-I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24EC0502T	Mathematics for Economics-I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24EC0503T	Public Economics-I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24EC0504T	International Economics-I	4 (3L+1T)	4	30	70	100	3
Minor Course/ Vocational Course MIC 5 (VOC)	C24VOC506T	Primary Survey and Data Collection	2	2	15	35	50	2
	C24VOC506P	Primary Survey and Data Collection Lab	2	2	15	35	50	2
Skill Enhancement Course	Internship @ 4 Credits							
SEMESTER-VI								
Type of Course	Course Code	Nomenclature	Credit	Contact Hrs.	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs.)
Discipline Specific Course	C24EC0601T	Indian Economy-II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24EC0602T	Mathematics for Economics-II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24EC0603T	Public Economics-II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course	C24EC0604T	International Economics-II	4 (3L+1T)	4	30	70	100	3
Minor Course/ Vocational Course MIC 6 (VOC)	C24VOC506T	Data Analysis	2	2	15	35	50	2
	C24VOC506P	Data Analysis Lab	2	2	15	35	50	2
Skill Enhancement	C24SEC606P	Practices of Village Economy	2	2	15	35	50	2

**Economics**  
**Indian Economy-I (Semester-V)**  
**Discipline Specific Course (DSC)**

**Course Code:**C24ECO501T  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** This course aims to analyse India's economic evolution by examining key reforms, policy frameworks, and sectoral strategies in agriculture, industry, and services, with a special focus on the post-liberalization period. Students will develop the ability to critically assess growth trajectories and evaluate the effectiveness of development policies.

**Unit-I**

**History of Development and Planning:** Major features of the economy since independence; growth and development under Planning-goals, constraints, institutions and policy framework; an assessment of performance, Performance of Indian economy after 1991—sustainability and regional contrasts; structural change, savings and investment. Structure transformation and attendant issues.

**Unit-II**

Major Economic Reforms in Indian Economy: Liberalization, Privatization and Globalization, Fiscal reforms, financial sector reforms, trade reforms.

**Unit-III**

**Agriculture and rural development strategies:** Technology and Institutions, Land relations and land reforms, Rural credit, Modern farm inputs and marketing- price policy and subsidies, Commercialization and diversification, Rural development programmes including poverty alleviation programmes, development of economic and social infrastructure, New rural employment Guarantee scheme.

**Unit-IV**

**Industry as Strategy of development:** Industrial policy reforms, Reservation policy relating to small-scale industries, Knowledge-intensive industries in India, Service sector, Competition policy, Sources of Industrial Finances, Bank, Share market, insurance companies, pension funds, non-banking sources, foreign direct investment, public sector reforms, Privatization and disinvestment

**Course Outcomes:** At the end of the course, the students would be able to

1. **CO1.** Comprehend the Evolution and Structural Transformation of the Indian Economy
2. **CO2.** Evaluate the Impact of Economic Reforms and Policy Measures
3. **CO3.** Analyze Sector-Specific Growth Strategies and Policy Frameworks

**Suggested Readings:**

1. Dhirendra Nath Konar, *Contemporary Issues of Indian Economy*, Akansha Publishing House, Delhi.
2. Uma Kapila, *Indian Economy (25th Edition): 2024-25*, Academic Foundation.
3. Reserve Bank of India, *Handbook of Statistics on Indian Economy 2022-23*.
4. Government of India, Ministry of Finance, *Economic Survey 2023-24*.
5. Government of India, Ministry of Finance, *Union Budget 2024-25*.
6. Government of India, Ministry of Commerce and Industry, *Foreign Trade Policy 2023*.
7. Government of India, Department for Promotion of Industry and Internal Trade, *FDI Fact Sheets*.
8. Timothy Besley, *Contemporary Issues in Development Economics*, Palgrave Macmillan.
9. Kaushik Basu, *The Oxford Companion to Economics in India*, Oxford University Press, New Delhi.
10. S. Mahendra Dev, *Inclusive Growth in India*, Oxford University Press, New Delhi.

**Mapping of CO with PO:**

Outcomes	P01	P02	P03	P04
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	M	M	S
	S = Strong	M = Medium	W = Weak	

**Economics**  
**Mathematics for Economics-I (Semester-V)**  
**Discipline Specific Course (DSC)**

**Course Code: C24ECO502T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To equip students with essential mathematical tools and techniques to understand and analyze economic theories, optimize economic outcomes, and interpret real-world economic issues using quantitative approaches.

**Unit I**

Foundations of Mathematical Logic and Set Theory: Logic: Propositions, truth tables, logical operations, tautologies, Proof techniques: Direct, indirect, contradiction, and contrapositive, Set theory: Sets and set operations, Venn diagrams, Cartesian product, Relations: Types and properties of relations, Functions: Definition, types, domain, co-domain, and properties, Number systems and intervals used in economics

**Unit II**

Functions and Sequences: Functions: Linear, quadratic, polynomial, exponential, logarithmic, piecewise functions, Graphical representation and applications in economics, Sequences and series: Arithmetic and geometric, convergence, Continuous functions: Characterizations and operations, Algebraic properties and applications in modeling economic behavior

**Unit III**

Calculus and Optimization: Limits and continuity of functions, Differentiability: First and second-order derivatives, Applications: Marginal analysis, elasticity of demand and supply, Partial and total derivatives, Constrained and unconstrained optimization using Lagrangian multipliers, Integration: Rules, substitution, and partial fractions, Economic applications of integration: consumer's surplus and producer's surplus

**Unit IV**

Applications to Economic Problems, Total, average, and marginal concepts: revenue, cost, utility, and profit functions, Optimization problems: Maximization of profit, utility; minimization of cost, Elasticity: Price, income, and cross elasticities, Surplus concepts: Measurement and interpretation, Comparative statics and mathematical modeling in economic analysis

**Suggested Readings:**

1. Chiang, Alpha C. (1984) – *Fundamental Methods of Mathematical Economics*, 3rd Ed., McGraw Hill
2. Weber, Jean E. (1976) – *Mathematical Analysis: Business and Economic Applications*, Harper & Row
3. Yamane, Taro (1972) – *Mathematics for Economists*, Prentice-Hall
4. Allen, R.G.D. (1983) – *Mathematical Analysis for Economists*, Brunton Press
5. Koopmans, T.C. (1965) – *Elements of Mathematical Economics*, Houghton Mifflin
6. Bose, D.C. (1996) – *An Introduction to Mathematical Economics*, Himalaya Publishing House

**Course Outcomes (COs):**

1. CO1: Apply basic mathematical concepts and logic to solve fundamental economic problems.
2. CO2: Use calculus tools for analyzing economic relationships and optimization problems.
3. CO3: Translate economic theories into mathematical models and interpret quantitative results.

**CO-PO Mapping Table**

Course Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	S	M
CO3	M	S	M	S

S = Strong, M = Medium, W = Weak

**Economics**  
**Public Economics-I (Semester-V)**  
**Discipline Specific Course (DSC)**

**Course Code: C24ECO503T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** The course aims to equip students with a comprehensive understanding of the role of the public sector in the economy, focusing on the principles and practices of public finance including taxation, public expenditure, public debt, and budgetary policy. Students will learn how government financial policies impact economic development, distribution of resources, and social welfare.

**Unit I**

The principle of public finance – subjective and objective criteria, Theory of public expenditure: maximum social advantage, Theory of social goods; distinction between public, private, and merit goods, Public expenditure types and effects on production, distribution, and economic growth

**Unit II**

Public revenue: approaches of equity in taxation, Benefits principle, cost of service principle, ability to pay theory, Effects of taxation, Analysis of major taxes: income tax, expenditure tax, corporation tax, wealth tax, excise duties, sales tax, and custom duties, Taxable capacity and taxation in a developing economy, Fiscal incidence: theories of tax shifting, concepts of incidence, and its measurement

**Unit III**

Public debt: role and different forms, Burden and redemption of public debt, Debt management, Budgetary policy: functional and economic classification of budgets and their uses

**Unit IV**

Balance and unbalanced budgets, Fiscal federalism: principles of federal finance, Budget as an instrument of mobilization and channelization of resources, Redistribution of income and wealth

**Suggested Readings**

1. Buchanan, J.M. – *Public Finance in the Domestic Process*, Library Fund, USA
2. Musgrave, R.A. & Musgrave, P.B. – *Public Finance in Theory and Practice* (Latest Edition), McGraw Hill
3. Taylor, P.E. (1949) – *The Economics of Public Finance*, Macmillan Publishers, New York

**Course Outcomes (COs)**

1. **CO1:** Understand the principles and impact of public expenditure and taxation on economic growth.
2. **CO2:** Evaluate various forms of public debt, budgetary practices, and fiscal policies.
3. **CO3:** Analyze the role of budget and fiscal federalism in redistribution and resource mobilization.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	M	M	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**International Economics-I (Semester-V)**  
**Discipline Specific Course (DSC)**

**Course Code: C24ECO504T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objectives:** To understand international trade concepts and global economic issues, classical and modern trade theories, and evaluate trade policies, including tariffs, barriers, and protectionism.

**Unit-I**

International economics: introduction, international trade and Nation's standard of living, current international economic problems;

**Unit-II**

Trade theories: concept of international trade, basis for and gains from trade, trade based on Absolute Advantages, Comparative advantages, Comparative advantages and opportunity cost; standard theory of trade: production frontier with increasing costs, community indifference curve, equilibrium in isolation.

**Unit-III**

Factor endowments and Heckscher-Ohlin Theory: factor intensity, factor abundance, factor price equalization, and income distribution, Stolper Samuelson theorem, Leontief paradox; Modern trade theory: economies of scale, imperfect competition, product differentiation.

**Unit-IV**

International Trade Policy: Trade Restrictions; tariffs, partial equilibrium analysis of a tariff, theory of tariff structure, general equilibrium analysis of tariff in small country and large country, optimum tariff; non-tariff barriers: import quotas, other non-tariff barriers and new protectionism, political economy of protectionism.

**Suggested Readings:**

1. Jagdish N. Bhagwati (Ed.), "International Trade: Selected Readings," 2nd Edition, MIT Press, 1987.
2. Dominick Salvatore, "International Economics," 13th Edition, Wiley, 2019.
3. Charles P. Kindleberger, "International Economics," R.D. Irwin, Homewood.
4. Peter G. King, "International Economics and International Economic Policy: A Reader," McGraw-Hill International, Singapore.
5. Bo Sodersten, "International Economics," Macmillan Press Ltd, London.

**Course Outcomes:** At the end of the course, the students would be able to

**CO1.** Explain the role of international trade in economic development and assess trade theories in different economic contexts.

**CO2.** Develop analytical skills to examine factor endowment theories, income distribution effects, and the impact of trade restrictions.

**CO3.** Critically evaluate trade policies, tariff structures, and non-tariff barriers in shaping international economic relations.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
C01	S	S	S	S
C02	M	S	W	M
C03	S	M	M	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**Primary Survey and Data Collection (Semester-V)**  
**MIC 5(VOC)**

**Course Code: C24VOC506T**  
**30 Hrs. (2 Hrs./Week)**  
**Credit : 2 (Theory)**  
**Exam Time: 2 Hrs.**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more question will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit in consisting of 10 marks each in addition to compulsory question No. 1.

**Course Objective:** To equip students with the knowledge and practical skills required to design, conduct, and analyze primary surveys. Emphasis will be placed on data collection techniques, sampling methods, questionnaire design, and ethical considerations involved in fieldwork.

**Unit I**

Fundamentals of Surveys and Sampling: Importance and scope of surveys in socio-economic research, Types of surveys: cross-sectional, longitudinal, census vs. sample surveys, Sampling techniques: random, stratified, cluster, purposive, and snowball sampling, Sample size determination and its implications

**Unit II**

**Fieldwork and Data Collection Techniques:** Tools and modes of data collection: face-to-face interviews, telephone, online, etc, Use of CAPI (Computer-Assisted Personal Interviewing) and mobile apps, Interviewer training and respondent handling, Recording, coding, and storing survey data, Mock surveys in nearby localities.

**Suggested Readings:**

1. Groves, R.M. et al. *Survey Methodology*, Wiley
2. Czaja, R. & Blair, J., *Designing Surveys: A Guide to Decisions and Procedures*
3. Goode & Hatt, *Methods in Social Research*, McGraw-Hill
4. Kothari, C.R., *Research Methodology: Methods and Techniques*, New Age International
5. NSSO Manuals & Fieldwork Guidelines, MoSPI
6. UN Statistical Division Handbook on Designing Household Surveys

**Course Outcomes (COs):**

1. **CO1:** Understand the foundational concepts and types of surveys and sampling techniques.
2. **CO2:** Develop and implement survey tools effectively for primary data collection.
3. **CO3:** Apply basic tools to clean, analyze, and interpret survey data for meaningful insights.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
C01	S	M	S	M
C02	S	S	M	S
C03	S	S	S	S

**S = Strong | M = Medium | W = Weak**



**Economics**  
**Primary Survey and Data Collection Lab (Semester-V)**  
**MIC 5(VOC)**

**Course Code: C24VOC506P**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 2 (Practical)**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 50**

**Course Objective:** To equip students with the knowledge and practical skills required to design, conduct, and analyze primary surveys. Emphasis will be placed on data collection techniques, sampling methods, questionnaire design, and ethical considerations involved in fieldwork.

**Unit I**

Survey Design and Questionnaire Development: Steps in survey planning and execution, Structure and types of questionnaires: open-ended vs. close-ended questions, Scaling techniques: Likert, semantic differential, ranking, etc, Pilot testing and validation of survey instruments, Ethics in survey research: consent, privacy, and neutrality

**Unit II**

**Fieldwork and Data Collection Techniques (Practical-Oriented):** Tools and modes of data collection: face-to-face interviews, telephone, online, etc, Use of CAPI (Computer-Assisted Personal Interviewing) and mobile apps, Interviewer training and respondent handling, Recording, coding, and storing survey data, Mock surveys in nearby localities.

**Data Cleaning, Analysis, and Reporting:** Editing and cleaning of raw data, Entry of survey data using Excel/SPSS/R, Descriptive statistics: frequencies, percentages, averages, Data visualization: bar charts, pie charts, histograms, Writing a basic field survey report

**Suggested Readings:**

1. Groves, R.M. et al. *Survey Methodology*, Wiley
2. Czaja, R. & Blair, J., *Designing Surveys: A Guide to Decisions and Procedures*
3. Goode & Hatt, *Methods in Social Research*, McGraw-Hill
4. Kothari, C.R., *Research Methodology: Methods and Techniques*, New Age International
5. NSSO Manuals & Fieldwork Guidelines, MoSPI
6. UN Statistical Division Handbook on Designing Household Surveys

**Course Outcomes (COs):**

1. **CO1:** Understand the foundational concepts and types of surveys and sampling techniques.
2. **CO2:** Develop and implement survey tools effectively for primary data collection.
3. **CO3:** Apply basic tools to clean, analyze, and interpret survey data for meaningful insights.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	M	S
CO3	S	S	S	S

S = Strong | M = Medium | W = Weak

# **Internship @ 4 Credits**

**Economics**  
**Indian Economy-II (Semester-VI)**  
**Discipline Specific Course (DSC)**

**Course Code:**C24ECO601T  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objectives:** To examine India's foreign trade, balance of payments, and exchange rate policies while analyzing its financial sector, monetary policies, inflation trends, and the demographic and social factors influencing population dynamics.

**Unit-I**

**Balance of payment:** Salient features of India's Foreign Trade, Composition, Direction and Organization of Foreign Trade, Recent changes in Foreign Trade, Balance of Payment, Tariff Policy, India and WTO requirements, Bilateral Trade Agreements and their implications. Capital Account Dynamics: FDI, FPI etc. Foreign exchange market and Exchange rate management in India.

**Unit-II**

**Money and Banking:** Financial sector reforms, Organization of India's money market, Changing role of RBI, Commercial Banks Development Finance Institutions, Foreign Banks and Non-banking financial institutions, Indian capital market and SEBI, Development in Global financial markets and its relationship with Indian financial sector Commodity market in India-spot and future market, role of FMC.

**Unit-III**

**Inflation:** Definition, Trends, Estimates, Consequences and remedies (control), Wholesale price index: components and trends Consumer price index: components and trends.

**Unit-IV**

**Demography of India:** Population structure (age, sex), Population growth trends in India, factors influencing fertility and mortality rates, population policies, and impact of social factors like caste and religion on demographics, analysis of census data related to India regional variations, Indices at global level like Happiness Index, Hunger Index.

**Course Outcomes:** At the end of the course, the students would be able to

**CO1.** Explain India's foreign trade structure, balance of payments, and the implications of trade agreements and exchange rate policies.

**CO2.** Develop analytical skills to assess financial sector reforms, banking structures, and the role of monetary policy in economic stability.

**CO3.** Critically evaluate inflation trends, demographic shifts, and their economic and social implications, using global indices for comparative analysis.

**Suggested Readings:**

1. Uma Kapila (Ed.), *Indian Economy Since Independence: A Comprehensive and Critical Analysis of India's Economy, 1947-2023*, 34th Edition, Academic Foundation, 2023.
2. Reserve Bank of India, *Handbook of Statistics on Indian Economy*, Latest Edition.
3. Government of India, Ministry of Finance, *Economic Survey*, Latest Edition.
4. Government of India, Ministry of Finance, *Union Budget*, Latest Edition.
5. Government of India, Ministry of Commerce and Industry, *Foreign Trade Policy*, Latest Edition.
6. S. Mahendra Dev, *Inclusive Growth in India*, Oxford University Press, New Delhi.

**CO-PO Mapping Table**

Outcomes	P01	P02	P03	P04
CO1	S	M	S	S
CO2	S	S	M	M
CO3	S	M	M	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**Mathematics for Economics-II (Semester-VI)**  
**Discipline Specific Course (DSC)**

**Course Code:** C24ECO602T  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To enhance students' understanding of advanced mathematical techniques such as matrices, differential and difference equations, and linear programming, with specific emphasis on their application in economic theory and problem-solving.

**Unit I**

Matrix Algebra and Input-Output Analysis: Matrices: Types, transpose, trace, adjoint, and inverse, Determinants: Properties and applications, Solution of system of linear equations (2 & 3 variables) using inverse matrix and Cramer's rule, Rank of a matrix and its economic relevance, Application in economics: Leontief Input-Output analysis and productivity models

**Unit II**

Differential Equations and Economic Applications: Introduction to differential equations, Solution techniques: Variable separable, homogeneous, Bernoulli's form, exact equations, Linear differential equations with constant coefficients, Applications in economics: Growth models, price adjustment mechanisms, and dynamic economic systems

**Unit III**

Difference Equations: Basic concepts and formulation of difference equations, First and second order linear difference equations with constant coefficients, Solution methods and stability analysis, Applications: Cobweb models, business cycles, and inventory models

**Unit IV**

Linear Programming: Concept and structure of linear programming problems, Graphical solution method for two-variable cases, Simplex method: Introduction and basic steps, Economic applications: Cost minimization, resource allocation, profit maximization

**Suggested Readings:**

1. Chiang, Alpha C. (1984) – *Fundamental Methods of Mathematical Economics*, 3rd Ed., McGraw Hill
2. Weber, Jean E. (1976) – *Mathematical Analysis: Business and Economic Applications*, Harper & Row
3. Yamane, Taro (1972) – *Mathematics for Economists*, Prentice-Hall
4. Allen, R.G.D. (1983) – *Mathematical Analysis for Economists*, Brunton Press
5. Koopmans, T.C. (1965) – *Elements of Mathematical Economics*, Houghton Mifflin
6. Bose, D.C. (1996) – *An Introduction to Mathematical Economics*, Himalaya Publishing House

**Course Outcomes (COs):**

1. CO1: Apply matrix algebra and input-output models to represent and analyze economic systems.
2. CO2: Solve differential and difference equations to study dynamic economic behavior.
3. CO3: Formulate and solve linear programming problems to optimize economic decision-making.

**CO-PO Mapping Table**

Course Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	M	M
CO3	S	S	S	S

**S = Strong, M = Medium, W = Weak**

**Economics**  
**Public Economics-II (Semester-VI)**  
**Discipline Specific Course (DSC)**

**Course Code: C24ECO603T**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objective:** To provide students with an understanding of the nature, structure, and implications of government budgeting, taxation, public debt, fiscal federalism, and public expenditure in the context of a mixed economy. The course emphasizes both theoretical foundations and real-world policy applications, especially in the Indian context.

**Unit I**

Taxation — Theory and Practice, Principles of taxation: Benefit and ability-to-pay approaches, Types and classification of taxes: Direct and indirect, progressive, proportional, regressive, Incidence and shifting of taxation: Partial and general equilibrium frameworks, Effects of taxation on production and distribution, Laffer Curve and tax buoyancy

**Unit II**

Public Expenditure and Public Debt: Theories of public expenditure: Wagner's Law, Peacock-Wiseman Hypothesis, Structure and growth of public expenditure in India, Classification and economic effects of public debt, Burden of public debt and methods of debt redemption, Debt sustainability and intergenerational equity

**Unit III**

Fiscal Policy and Budgetary Practices: Objectives and instruments of fiscal policy: Stabilization, allocation, redistribution, Budget: Concepts of revenue, capital, surplus, deficit (fiscal, primary), Types of budgeting: Performance-based budgeting, zero-based budgeting, Fiscal deficit and implications for macroeconomic stability, Fiscal Responsibility and Budget Management (FRBM) Act

**Unit IV**

Fiscal Federalism in India: Division of functions and financial powers between centre and states, Horizontal and vertical imbalances, Finance Commissions in India: Role, structure, recommendations (recent focus), Issues in state finances and GST implications, Intergovernmental fiscal transfers and cooperative federalism

**Suggested Readings:**

1. Musgrave, R.A. & Musgrave, P.B. (1989) – *Public Finance in Theory and Practice*, McGraw Hill
2. Hyman, D.N. (2008) – *Public Finance: A Contemporary Application of Theory to Policy*, Cengage Learning
3. Bagchi, A. (2005) – *Readings in Public Finance*, Oxford University Press
4. Mundle, S. (1997) – *Public Finance: Policy Issues for India*, Oxford University Press
5. Government of India – Reports of the Finance Commission (latest editions)
6. Bhatia, H.L. (2021) – *Public Finance*, Vikas Publishing House
7. Goel, D.K. (2020) – *Public Finance and Fiscal Policy*, Himalaya Publishing

**Course Outcomes (COs):**

1. CO1: Understand and analyze taxation systems, incidence, and economic impacts of tax structures.
2. CO2: Evaluate public expenditure and debt dynamics in the context of macroeconomic policy.
3. CO3: Interpret budgetary processes and fiscal federalism with relevance to India's public finance architecture.

**CO-PO Mapping Table**

Course Outcomes	PO1	PO2	PO3	PO4
CO1	S	S	M	M
CO2	S	M	S	M
CO3	S	S	S	S

S = Strong, M = Medium, W = Weak

**Economics**  
**International Economics-II (Semester-VI)**  
**Discipline Specific Course (DSC)**

**Course Code: C24ECO604T.**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 4 (3Theory+1Tutorial)**  
**Exam Time: 3 Hrs.**

**External Marks :70**  
**Internal Marks :30**  
**Total Marks: 100**

**Note:** The maximum time duration for attempting the paper will be of 3 hours. The examiner is required to set nine questions in all. The first question will be compulsory consisting of seven short questions covering the entire syllabus consisting of 2 marks each. In addition to that eight more questions will be set, two questions from each unit. The students shall be required to attempt five questions in all selecting one question from each unit in addition to compulsory Question No. 1. All questions shall carry equal marks.

**Course Objectives:** To understand exchange rate theories and systems, factors affecting exchange rates and trade policies, and evaluate contemporary issues in international trade, economic integration, digital trade, and multinational corporations.

**Unit-I**

Theories of exchange rate determination: Purchasing Power Parity (PPP), Interest Rate Parity (IRP), and the Asset Market Approach, fixed vs. flexible exchange rate systems

**Unit-II**

Factors influencing exchange rates in the short and long run, Exchange rate interventions and their effectiveness, Currency crises: causes and consequences.

**Unit-III**

Trade policies of major economies and their global impact, Contemporary issues in international trade: trade wars, protectionism, and globalization backlash, Economic integration: customs unions, free trade areas, and common markets, World Trade Organization (WTO): principles, agreements, and dispute settlement

**Unit-IV**

Global value chains and their implications for trade and development, Trade and environmental sustainability, Digital trade and the impact of technology on international economics, Labor migration and its economic effects, The role of multinational corporations in the global economy.

**Suggested Readings:**

1. Bhagwati, J. (Ed.) – *International Trade: Selected Readings* (2nd Edition, 1987), MIT Press, Cambridge, Massachusetts.
2. Kindleberger, C.P. – *International Economics* (7th Edition, 1987), R.D. Irwin, Homewood.
3. King, P.G. – *International Economics and International Economic Policy: A Reader* (5th Edition, 2005), McGraw-Hill International, Singapore.
4. Salvatore, D. – *International Economics* (13th Edition, 2020), Wiley, New York.
5. Södersten, B.O., & Reed, G. – *International Economics* (3rd Edition, 1994), Macmillan Press Ltd, London.
6. Reinert, K.A. – *An Introduction to International Economics: New Perspectives on the World Economy* (2nd Edition, 2020), Cambridge University Press.

**Course Outcomes:** At the end of the course, the students would be able to

**CO1.** Explain exchange rate theories, interventions, and their implications for international finance.

**CO2.** Develop analytical skills to assess trade policies, economic integration mechanisms, and challenges in global trade.

**CO3.** Critically evaluate global value chains, digital trade, environmental sustainability, and the economic effects of labor migration.

**CO-PO Mapping Table**

Course Outcomes	P01	P02	P03	P04
CO1	S	M	S	M
CO2	S	S	M	M
CO3	S	S	S	S

S = Strong | M = Medium | W = Weak

**Economics**  
**Data Analysis (Semester-VI)**  
**Minor Vocational Course (MIC6-VOC)**

**Course Code: C24VOC606T**

**30 Hrs. (2 Hrs./Week)**

**Credit : 2 (Theory)**

**Exam Time: 2 Hrs.**

**External Marks :35**

**Internal Marks :15**

**Total Marks: 50**

**Note:** The maximum time duration for attempting the paper will be of 2 hours. The examiner is required to set five questions in all. The first question will be compulsory consisting of five short questions covering the entire syllabus consisting of 3 marks each. In addition to that four more question will be set, two questions from each unit. The students shall be required to attempt three questions in all selecting one question from each unit in consisting of 10 marks each in addition to compulsory question No. 1.

**Course Objective:** To equip students with essential skills in data handling, statistical techniques, and the use of analytical tools to interpret economic data. The course integrates theory with hands-on practice using software to analyze real-world economic datasets and draw meaningful inferences.

**Unit I**

Introduction to Economic Data and Basic Tools: Types of data: Cross-section, Time-series, and Panel data, Sources of economic data: NSSO, CSO, RBI, World Bank, IMF, etc, Introduction to descriptive statistics: Mean, Median, Mode, Variance, Standard Deviation, Introduction to Data Cleaning and Data Structuring.

**Unit II**

Basic Statistical and Econometric Techniques: Correlation and Regression analysis, Hypothesis testing: t-test, chi-square test, Simple linear regression using economic variables, Introduction to time-series analysis.

**Suggested Readings:**

1. Gujarati, D.N. & Porter, D.C. (2009). *Basic Econometrics*, McGraw-Hill Education
2. Wooldridge, J.M. (2012). *Introductory Econometrics: A Modern Approach*, South-Western
3. Field, A. (2013). *Discovering Statistics Using SPSS*, Sage Publications
4. Ramanathan, R. (2002). *Introductory Econometrics with Applications*, Cengage
5. Anderson, Sweeney & Williams (2011). *Statistics for Business and Economics*, Cengage Learning
6. Ghosh, B.N. (1982). *Scientific Method and Social Research*, Sterling Publishers

**Course Outcomes (COs):**

1. **CO1:** Understand and summarize economic data using appropriate statistical tools.
2. **CO2:** Apply basic econometric methods to analyze economic relationships.
3. **CO3:** Demonstrate practical skills in using software for economic data analysis.

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**CO-PO Mapping Table**

Course Outcomes	P01	P02	P03	P04
CO1	S	M	S	M
CO2	S	S	M	M
CO3	S	S	S	S

**S = Strong | M = Medium | W = Weak**

**Economics**  
**Data Analysis Lab (Semester-VI)**  
**Minor Vocational Course (MIC6-VOC)**

**Course Code: C24VOC606P**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 2 (Practical)**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 50**

**Course Objective:** To equip students with essential skills in data handling, statistical techniques, and the use of analytical tools to interpret economic data. The course integrates theory with hands-on practice using software to analyze real-world economic datasets and draw meaningful inferences.

**Unit I**

Data Presentation and Visualization: Tables, charts, and graphs for economic data, Histogram, Pie charts, Bar charts, Line graphs, Cross-tabulations and frequency distributions, Introduction to data visualization tools: Excel, R, Python

**Unit II**

Basic Statistical and Econometric Techniques: Correlation and Regression analysis, Hypothesis testing: t-test, chi-square test, Simple linear regression using economic variables, Introduction to time-series analysis.

Hands-on Data Analysis: Using MS Excel/SPSS/R for basic data analysis, Importing, cleaning, and managing data, Application of descriptive and inferential statistics to real economic data, Mini project: Analyzing a small economic dataset and reporting insights

**Suggested Readings:**

1. Gujarati, D.N. & Porter, D.C. (2009). *Basic Econometrics*, McGraw-Hill Education
2. Wooldridge, J.M. (2012). *Introductory Econometrics: A Modern Approach*, South-Western
3. Field, A. (2013). *Discovering Statistics Using SPSS*, Sage Publications
4. Ramanathan, R. (2002). *Introductory Econometrics with Applications*, Cengage
5. Anderson, Sweeney & Williams (2011). *Statistics for Business and Economics*, Cengage Learning
6. Ghosh, B.N. (1982). *Scientific Method and Social Research*, Sterling Publishers

**Course Outcomes (COs):**

1. **CO1:** Understand and summarize economic data using appropriate statistical tools.
2. **CO2:** Apply basic econometric methods to analyze economic relationships.
3. **CO3:** Demonstrate practical skills in using software for economic data analysis.

**CO-PO Mapping Table**

Course Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	M	M
CO3	S	S	S	S

S = Strong | M = Medium | W = Weak



**Economics**  
**Practices of Village Economy (Semester-VI)**  
**Skill Enhancement Course (SEC)- Practical Only**

**Course Code: C24SEC606P.**  
**60 Hrs. (4 Hrs./Week)**  
**Credit : 2 (Practical)**

**External Marks :35**  
**Internal Marks :15**  
**Total Marks: 50**

**Course Objective:** To provide students with experiential and conceptual knowledge of rural/village economic systems, their practices, challenges, and opportunities, fostering a deeper understanding of grassroots economic structures and their impact on development.

**Unit I**

Structure of Village Economy: Overview of rural economic structure: land, labour, capital, and organization, Agrarian economy and rural livelihoods, Occupational structure: agriculture and allied sectors (livestock, forestry, fisheries), Caste, gender, and class dynamics in village economy.

Village Institutions and Governance: Panchayati Raj Institutions (PRI): structure, functions, and finances, Role of Self-Help Groups (SHGs) and cooperatives in rural development, Rural credit and microfinance institutions, Implementation of rural development programs: MGNREGA, NRLM, PMGSY, etc, Grassroots governance and participatory planning and their impact assessment.

**Unit II**

Fieldwork and Practical Engagement: Exposure to village economy through short field visits, Data collection on local livelihoods, resource use, and institutions, Interaction with PRI members, SHG leaders, farmers, artisans, and rural entrepreneurs, Preparation of village economic profile/project report, Group presentations and discussion

**Suggested Readings:**

1. Dandekar, V. M. (1980). *Poverty in India*, Economic and Political Weekly.
2. Desai, A. R. (Ed.). (1983). *Rural Sociology in India*, Popular Prakashan.
3. Jodhka, S. S. (2002). *Village Society*, Orient BlackSwan.
4. Shah, G. (1990). *Grassroots Movements in India*, Sage Publications.
5. Dreze, J. and Sen, A. (2013). *An Uncertain Glory: India and its Contradictions*, Penguin.
6. Government Reports on Rural Development Schemes (Ministry of Rural Development, Govt. of India)

**Course Outcomes (COs):**

1. **CO1:** Understand the structural and institutional features of village economy.
2. **CO2:** Analyze rural development programs and their functioning at the grassroots level.
3. **CO3:** Apply field-based learning to develop a realistic understanding of rural economic practices.

**CO-PO Mapping Table**

Outcomes	PO1	PO2	PO3	PO4
CO1	S	M	S	M
CO2	S	S	M	S
CO3	S	S	S	S

**S = Strong | M = Medium | W = Weak**