Department of Economics
Scheme of Examination and Syllabus for Post Graduate Programme (For Affiliated Colleges)
Under Multiple Entry and Exit, Internship and CBCS-LOCF as per NEP-2020
w.e.f. session 2025-26 (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 PG Programme
According to National Education Policy-2020
(Semester I to Semester IV)- Post Graduate
w.e.f. 2025-26 Onwards Subject: Economics

SEMESTER I								
Type of Course	**Course Code**	**Nomenclature**	**Credit**	**Contact Hrs.**	**Internal Marks**	**External Marks**	**Total Marks**	**Duration of Exam (Hrs.)**
Discipline Specific Course (Core)	P25ECO101T	Microeconomics -I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO102T	Macroeconomics -I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO103T	Growth and Development-I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Elective)	P25ECO111T	Economic History of India	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Practicum)	P25ECO104P	Computer Applications in Economics	2	4	15	35	50	2
Value Added Course	P25VAC103T(i) P25VAC103T(ii)	Political Economy of India Or History of Economic Thoughts	2	2	15	35	50	2

SEMESTER-II								
Type of Course	**Course Code**	**Nomenclature**	**Credit**	**Contact Hrs.**	**Internal Marks**	**External Marks**	**Total Marks**	**Duration of Exam (Hrs.)**
Discipline Specific Course (Core)	P25ECO201T	Microeconomics -II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO202T	Macroeconomics -II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO203T	Growth and Development-II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Elective)	P25ECO211T P25ECO212T	Statistics Or Mathematics for Economic Analysis	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Practicum)	P25ECO204P	Practices of Microeconomics	2	4	15	35	50	2
Seminar @ 2 credits	P25ECO201S	Seminar	….	….	…..	…...	…..	…..

L-Lecture, T-Tutorial (The tutorial and practical will be conducted in groups of students and one group will comprise of 15-20 students)

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SEMESTER III								
Type of Course	Course Code	Nomenclature	Credit	Contact Hrs.	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs.)
Discipline Specific Course (Core)	P25ECO301T	Indian Economy	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO302T	Public Economics-I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO303T	International Economics-I	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Elective)	P25ECO311T P25ECO312T P25ECO313T	Economics of Agriculture-I Or Economics of Industry-I Or Basic Econometrics	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Practicum)	P25ECO304P	Practices of Macroeconomics	2	4	35	15	50	2
Open Elective Course @ 2credit	P25OEC303T(i) P25OEC303T(ii) P25OEC303T(iii) P25OEC303T(iv)	Demography Economics Or Economics of Human Resource Development Or Economics of Social Sector Or Economics of Money and Banking	2	2	15	35	50	2

SEMESTER IV with Option A

Type of Course	Course Code	Nomenclature	Credit	Contact Hrs.	Internal Marks	External Marks	Total Marks	Duration of Exam (Hrs.)
Discipline Specific Course (Core)	P25ECO401T	Research Methodology	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO402T	Public Economics-II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Core)	P25ECO403T	International Economics-II	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Elective)	P25ECO411T P25ECO412T P25ECO413T	Economics of Agriculture-I Or Economics of Industry-II Or Advanced Econometrics	4 (3L+1T)	4	30	70	100	3
Discipline Specific Course (Practicum)	P25ECO404P	Practices of Agriculture Economics Or Practices of Industrial Economics	2	4	15	35	50	2
Skill Enhancement Course (SEC)	P25SEC403P(i) P25SEC403P(ii)	Field Survey and Report Writing Or Practical of Research Methodology	2	4	15	35	50	2

Students can opt either Option A or Option B in the IV SEM

Semester IV with Option B

Disciplinary Specific @ 4 credits + Disciplinary Elective @4 credits + Dissertation/Project Work @12 Credits in lieu of 03 Papers @12 credits) +SEC/EEC/OEC/VAC/VOC@2credits

Total=4+4+12+2=22 Credits

For (Option B)

The students who opt Option B i.e., Project work they shall be required to submit three hard copies of Dissertation/Project work along with soft copy as PDF file to department by 30th June of the concerned year. The dissertation/Project report will be of total 12 credits (300marks) and evaluation will be done in two components; report (200 marks) and Open Viva-voce (100 marks). The panel of examiners for evaluation will be approved by the respective PGBOSR.

PROGRAMME OUTCOMES (POs)

PO1: Demonstrate advanced knowledge of economic theory, quantitative methods, and their real-world applications.

PO2: Conduct independent research and policy analysis using appropriate empirical tools.

PO3: Apply critical and interdisciplinary thinking to address complex economic challenges.

PO4: Communicate economic insights effectively and ethically for academic, policy, and societal impact.

Semester-I

Economics
Microeconomics-I (Semester-I)
Discipline Specific Course (DSC)

Course Code: P25ECO101T　　　　　　　　　　　　　　　　**External Marks :70**
60 Hrs. (4 Hrs./Week)　　　　　　　　　　　　　　　　　**Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)　　　　　　　　　　　　　**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 rigorously and comprehensively equip students with theoretical concepts, methodologies, and reasoning processes essential for analysing economic behaviour of individuals, firms, and markets, primarily using static and partial equilibrium frameworks.

Unit I

Foundations of Microeconomics and Equilibrium; Central ideas: decision-making, trade-offs, opportunity cost, incentives, Specialization and exchange, coordination tasks, invisible hand, Methodology of economics: positive economics, equilibrium – concept, stability, uniqueness, Static vs. dynamic equilibrium; partial vs. general equilibrium, Stability analysis: Marshallian and Walrasian approaches.

Unit II

Consumer Choice under Certainty: Cardinal utility, demand elasticity, Marshallian and compensated demand curves, Consumer surplus, indifference curve analysis, Hicks' and Marshall's approaches, Applications: subsidies, income-leisure choice, revealed preference theory, consistency of choice.

Unit III

Consumer Choice under Uncertainty: Risk measurement, expected utility, risk-return trade-off, Behavior under asymmetric information: hidden actions, adverse selection, Government responses, market demand effects: externalities, 'bandwagon', 'Veblen', and 'snob' effects.

Unit IV

Production and Cost Theory: Production and input choice with one variable input, Law of returns, cost minimization, short-run and long-run cost derivation, Economies and diseconomies of scale, cost curves, expansion path, Multi-product firms, optimal production techniques, learning curve.

Suggested Readings:

1. Mankiw, G. N. (1998). *Principles of Economics*, 3rd Edition, Thomson.
2. Pindyck, R. S. & Rubinfeld, D. L. (2004). *Microeconomics*, Prentice Hall of India.
3. Maddala, G. S. & Miller, E. (2004). *Micro-Economic Theory and Applications*.
4. Baumol, W. J. & Blinder, A. S. *Macroeconomics: Principles and Policy*, 9th Edition.
5. Salvatore, D. (2003). *Microeconomics: Theory and Applications*, Oxford.
6. Koutsoyiannis, A. (1977). *Modern Micro Economics*, MacMillan Press.
7. Ryan, W. J. L. & Pearce, D. W. *Price Theory*, McMillan India.
8. Ferguson, C. E. & Gould, J. P. *Microeconomic Theory* (6th Edition).
9. Briet, W. & Hochman, H. M. *Readings in Micro Economics* (1977).

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Understand core microeconomic principles and equilibrium concepts in individual decision-making and market behavior.
CO2: Analyze consumer behavior under certainty and uncertainty using advanced theoretical tools.
CO3: Evaluate production and cost structures, and assess optimal resource allocation decisions in various market settings.

Mapping of COs with POs:

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

S = Strong | M = Medium

Course Code: P25ECO102T   External Marks :70
60 Hrs. (4 Hrs./Week)   Internal Marks :30
Credit : 4 (3Theory+1Tutorial)   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 acquaint students with the aggregate behavior of macroeconomic variables, enabling them to understand national income, employment, consumption, investment, and economic fluctuations.

Unit I

National Income and Measurement: National income: concepts of gross, net, national, domestic income; product, income, and expenditure approaches, Market prices and factor cost, value-added concept, Estimation methodology in India; GDP deflator, consumer and producer price indices.

Unit II

Income Determination: Classical macroeconomics and Say's Law, Equilibrium output and employment, New Classical models, Keynesian model of income determination.

Unit III

Consumption and Investment: Consumption function: average and marginal propensity to consume, Theories: permanent income, relative income, life cycle hypotheses, Investment behavior: MEI, MEC, savings, investment functions, Determination of interest rates.

Unit IV

Economic Fluctuations and Policy: Concepts: multiplier, accelerator, business cycle phases, Models: Samuelson, Hicks, Keynes, and Kaldor, Economic fluctuations and time horizons in macroeconomics, Aggregate demand and supply; stabilization policies.

Suggested Readings:

1. Mankiw, N. G., *Principles of Macroeconomics*, 9th Edition, Macmillan Learning.
2. Gupta, G.S., *Macroeconomics: Theory and Application*, 2nd Edition, Tata McGraw-Hill.
3. Romer, D., *Advanced Macroeconomics*, 2nd Edition, McGraw-Hill.
4. Dornbusch, R., Fischer, S., & Startz, R., *Macroeconomics*, 11th Edition, McGraw-Hill.
5. Blanchard, O., *Macroeconomics*, 4th Edition, Prentice Hall.
6. Erol D'Souza (2012), *Macroeconomics*, Pearson Education.

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Understand key macroeconomic concepts and methods of national income estimation.
CO2: Analyze classical and Keynesian models of income determination and employment.
CO3: Evaluate consumption, investment behavior, business cycles, and macroeconomic policy mechanisms.

Mapping of COs with POs:

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

S = Strong | M = Medium | W = Weak

Course Code: P25ECO103T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 understanding of fundamental concepts, models, and theories related to economic growth and development.

Unit I

Meaning and measurement of economic development, Economic growth vs. development, Economic welfare, underdevelopment, Characteristics of underdeveloped economies, Vicious circle of poverty, Measurement of development: conventional, HDI, quality of life indices, Concept of sustainable development.

Unit II

The Big Push Theory, Critical Minimum Effort Thesis, Stages of Economic Growth, Take-off into self-sustained growth, Balanced vs. Unbalanced Growth, Malthusian Theory of Population, Factors in economic development, Theories of development: Lewis Model, Renis-Fei Model

Unit III

Neo-classical model of economic growth, short run vs. long run growth, Three determinants of growth, Basic growth equation, Conditions for steady state growth, Stability of steady state, Sources of growth, Technical progress and neutrality of technical change.

Unit IV

Economic development and planning models, Meaning and mechanism of economic planning, Planning vs. price mechanism Main elements of plans and models, Harrod-Domar Model, Mahalanobis Model, Development plans in India

Suggested Readings:

1. Todaro, M.P. and Smith, S.C., *Economic Development*, 8th ed., Pearson.
2. Thirwall, A., *Growth and Development*, Macmillan Publication.
3. Ray, D., (1998), *Development Economics*, Princeton University Press.
4. Basu, K., (2003), *Analytical Development Economics*, MIT Press.
5. Bardhan, P. and C. Udry, (1999), *Development Microeconomics*, Oxford University Press.
6. Agenor, P.R., and P. J. Montiel, (2008), *Development Macroeconomics*, Princeton University Press. **Course Outcomes (COs):**
7.

Course Outcomes: At the end of the course, the students would be able to:
CO1: Understand the meaning and measurement of economic development and the indicators used.
CO2: Analyze classical and contemporary theories of economic growth and development.
CO3: Evaluate development planning models and their relevance to India's economic experience. 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
Economic History of India (Semester-I)
Discipline Specific Course (Elective)

Course Code: P25ECO111T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 analyze the structural transformation and economic impact of colonialism on India and its legacy on post-independence development.

Unit I

Economic structure of pre-colonial India, Deindustrialization and drain of wealth theories, Land revenue systems: Zamindari, Ryotwari, Mahalwari, Colonial economic policies and their rationale, Cambridge vs. Nationalist Schools of thought

Unit II

Agrarian structure and land relations**,** Commercialization of agriculture and its consequences**.** Famines, food security, and colonial response**,** Peasant movements and rural indebtedness**,** Cooperative credit and rural institutions

Unit III

Early industrialization and British policy, Rise of Indian entrepreneurship: jute, cotton, steel. Trade policies, tariffs, and foreign capital, Indian Railways: cost-benefit analysis, Indigenous banking, British banking, and capital markets

Unit IV

Economic critique of colonialism by Indian nationalists, Role of economic ideas in freedom struggle, Early development planning: National Planning Committee, Bombay Plan, Partition and its economic consequences, Legacy of colonial rule on post-independence policy choices

Suggested Readings:
1. B.R. Tomlinson, *The Economy of Modern India: From 1860 to the Present*, Cambridge University Press (Latest edition)
2. Tirthankar Roy, *The Economic History of India 1857–1947*, Oxford University Press (Latest edition)
3. Irfan Habib, *Colonialization of the Indian Economy (1850–1900)*
4. D.R. Gadgil, *Industrial Evolution of India*
5. R.C. Dutt, *Economic History of India*, Vol. I & II
6. Amiya Kumar Bagchi, *Private Investment in India, 1900–1939*
7. Dharma Kumar (Ed.), *The Cambridge Economic History of India, Vol. II*
8. Daniel Thorner & Alice Thorner, *Land and Labour in India*
9. Bipan Chandra, *Nationalism and Colonialism in Modern India*

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand the evolution of India's economy under British colonial rule and major debates surrounding it.
2. Analyze sectoral developments in agriculture, industry, trade, and finance from a historical perspective.
3. Critically engage with economic institutions, policies, and structural constraints in pre- and post-colonial India.

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
Computer Applications in Economics (Semester-I)
Discipline Specific Course (DSC)-Practicum

Course Code: P25ECO104P   **External Marks :35**
60 Hrs. (4 Hrs./Week)   **Internal Marks :15**
Credit : 02 (Practicum)   **Total Marks: 50**
Note: The Practical exam will be taken by External Examiner.

Course Objective: To develop students' skills in applying computer-based statistical tools to analyze real-world economic data.

Unit I

Statistical processing techniques and methods, Summarizing and analysis of data, Descriptive statistics: mean, correlation, regression, Estimation of growth rates, Trends forecasting, Construction of index numbers, moving averages, Data and information: meaning, types, data storage hierarchy, Database concepts and management, Tables, forms, queries, reports, Advantages and limitations of DBMS, Information technology in business: Internet, Intranet, Extranet, LAN, MAN, WAN, WWW, email, search engines, EDI, ATM.

Unit II

Project appraisal and selection, Estimation of present values, Decision-making with benefit-cost ratio, APR, NPV, IRR, Payback Period, Risk analysis and scenario development, Hillier model, Monte Carlo simulation, Profitability projection, Break-even analysis, Decision tree analysis, Information systems for business organizations, Information flow and requirements, Information system design approaches, Decision Support Systems, Data mining and analytics.

Suggested Readings:
1. David Whiteley, *E-Commerce: Strategy, Technologies and Applications*, Tata McGraw Hill, New Delhi.
2. Lipschutz, M.M. and S. Lipschutz, *Theory and Problems of Data Processing*, Schaum's Outline Series, McGraw Hill, New York.
3. Madan, Sushila, *Information Technology*, Taxmann Allied Services, New Delhi.
4. P.T. Joseph, *E-Commerce: An Indian Perspective*, PHI Learning, New Delhi.
5. Rajaraman, V., *Fundamentals of Computers*, Prentice Hall of India, New Delhi.
6. Sinha, P.K., *Computer Fundamentals*, BPB Publications, New Delhi.
7. Sudalamuthu, S. and Anthony Raj S., *Computer Applications in Business*, Himalaya Publishing House, New Delhi.
   Course Outcomes (COs): At the end of the course, the students would be able to:

CO1: Use spreadsheet software like MS Excel and SPSS for statistical analysis of economic data.
CO2: Interpret outputs of statistical tests including correlation, regression, and hypothesis testing. CO3:
Create and present graphical representations and time-series analysis of economic data.
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

Political Economy of India (Semester-I)
(VAC)

Course Code: P25VAC103T(i)	External Marks :35
30 Hrs. (2 Hrs./Week)	Internal Marks :15
Credit : 02 (VAC)	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 develop a critical understanding of the interplay between political institutions, economic policies, and development outcomes in India.

Unit I
The Indian State and Economic Reforms: Colonial legacy and post-independence economic planning, Role of the state in industrial and agricultural policy, The 1991 economic reforms: context, features, and consequences, Globalization and the changing nature of the Indian state, Public-private partnerships and governance in infrastructure, digital governance.

Unit II
Political Institutions and Development Outcomes: Democratic institutions and fiscal federalism in India, Electoral politics, populism, and public spending, Political economy of welfare schemes, Political capture and corruption: causes and consequences, Inter-state economic disparities and regional development politics, Case discussions: Bihar vs Gujarat model; Centre-State financial relations.

Suggested Readings
1. Bardhan, P. (2005). *The Political Economy of Development in India.* Oxford University Press.
2. Kohli, A. (2012). *Poverty Amid Plenty in the New India.* Cambridge University Press.
3. Sen, A., & Dreze, J. (Latest Ed.). *India: Economic Development and Social Opportunity.* Oxford University Press.
4. Chhibber, P., & Nooruddin, I. (2004). "Do Party Systems Count? The Number of Parties and Government Performance in the Indian States." *Comparative Political Studies.*
5. Frankel, F. R. (2005). *India's Political Economy: 1947–2004.* Oxford University Press.

Course Outcomes: After completing this course, students would be able to:
1. Analyze the role of the Indian state in shaping economic reforms and policies.
2. Evaluate how political factors influence economic inequality, development, and welfare.
3. Interpret contemporary policy debates within the framework of political economy.

Mapping of CO with PO

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

S = Strong, M = Medium, W = Weak

Course Code: P25VAC103T(ii)   **External Marks :35**
30 Hrs. (2 Hrs./Week)   **Internal Marks :15**
Credit : 02 (VAC)   **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 explore the evolution of economic ideas from early mercantilist thought to classical, Marxian, and marginalist frameworks and their relevance to contemporary economic analysis.

Unit I

The economic revolution in social sciences: nature and importance of economic thought, mercantilism: views on trade, money and prices, wages and employment physiocracy: natural order; net product and circulation of wealth. Adam smith: theories of value, distribution and growth. Ricardian economics: value analysis, theories of trade and distribution, views on machinery and employment. Malthus: theory of glut and glut controversy.

Unit II

Neo-Classical: Marginalism; the marginalist revolution, Jevon's theory of value. Walras's theory of general equilibrium. Marshall's scope and method of economics, Pigou's concept of welfare economics, Keynesian School, Neo-Keynesian synthesis.
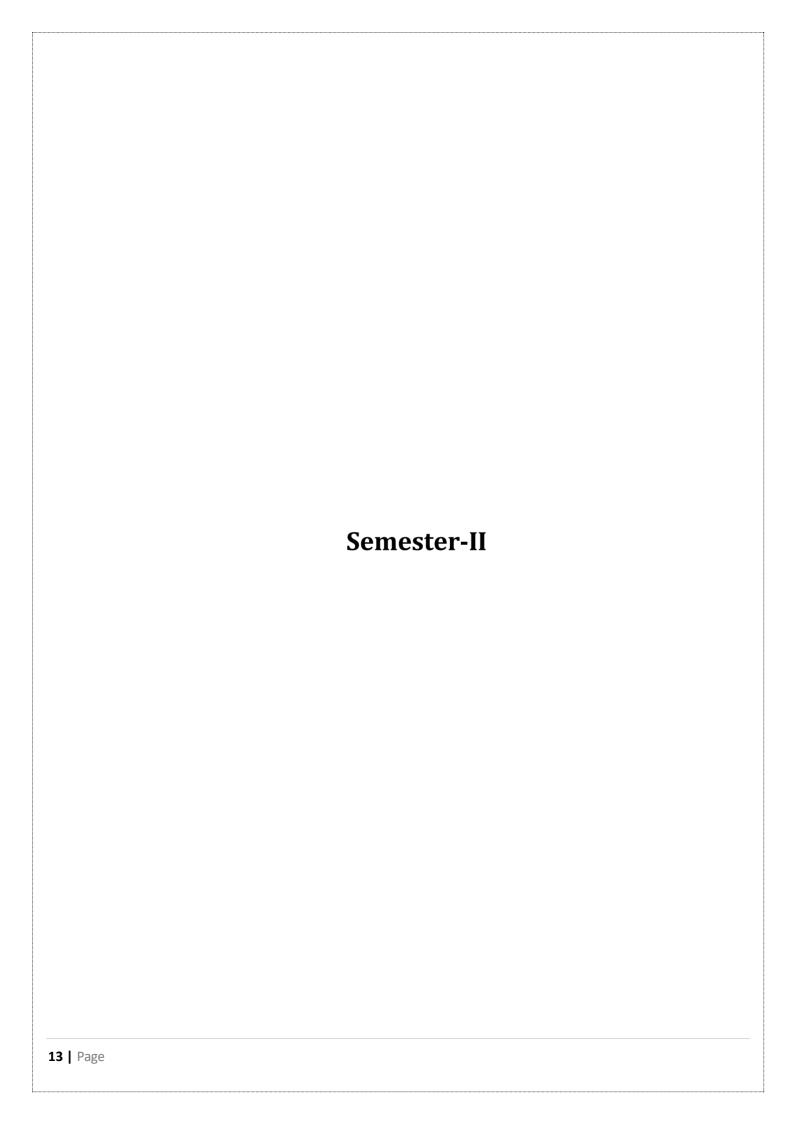
Suggested Readings:
1. Bhardwaj, Krishna (1978): Classical Political Economy and Rise to Dominance of Supply and Demand Theories, University Press, India.
2. Blaug, M (1983): Economic Theory in Retrospect, Vikas PublishingHouse, 3rd Edition (Cambridge University Pub.).
3. Bottomore, Tom (1985): Dictionary of Marxist Thought, Basic Black Well.
4. Brien, DPO (1975): The Classical Economists, Oxford University Press, London.
5. Collander, DC (Ed.): Neo-Classical Economists.
6. Dasgupta, A K (1986): Epochsof Economic Theory, Ox ford University Press, NewDelhi.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand the progression of major economic theories and the context in which they developed.
2. Analyze contributions of classical, Marxian, and marginalist economists to value, distribution, and growth theories.
3. Evaluate the foundational debates in economic thought and their lasting influence on modern economics.

Mapping of CO with PO

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

S = Strong, M = Medium, W = Weak

Semester-II

Course Code: P25ECO201T External Marks :70
60 Hrs. (4 Hrs./Week) Internal Marks :30
Credit : 4 (3Theory+1Tutorial) 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 rigorously train students in analysing individual behaviour of firms and markets using static and partial equilibrium frameworks.

Unit I

Competitive Markets and Monopoly: Profit maximization and firm/industry equilibrium in short and long run under perfect competition, Consumer and producer surplus; efficiency and welfare effects of taxes, tariffs, price control, Monopoly: sources, welfare costs, price discrimination (single and inter-temporal), public policy, Monopoly regulation: peak load pricing, two-part tariffs, public ownership

Unit II

Imperfect Competition – Monopolistic Competition and Oligopoly: Monopolistic competition: characteristics, group equilibrium, advertising debate, Oligopoly: Cournot, Stackelberg, kinked demand, leadership models, Game theory: dominant strategy, Nash equilibrium, prisoner's dilemma, repeated games, public policy toward oligopolies, contestable markets

Unit III

Factor Markets: Pricing under perfect competition; variable inputs and derived demand, Labour supply and demand: work–leisure trade-offs, market supply curve, Imperfect competition: monopolistic and monopsonistic power in input markets, Bilateral monopoly, competitive buyer vs monopoly union.

Unit IV

Welfare Economics: Social welfare functions: utilitarian, Rawlsian, Bergson-Samuelson, Optimization of social welfare, general equilibrium and efficiency, Pareto-optimality, Arrow's impossibility theorem, compensation criteria, Externalities: production/consumption externalities, Coase theorem, public policy.

Suggested Readings:

1. Mankiw, G. N. (1998): *Principles of Economics*, 3rd Ed., Thomson
2. Boumoul, W.J. & Blinder, A. S. (2007): *Macroeconomics: Principles and Policy*, 9th Ed.
3. Salvatore, D. (2003): *Microeconomics: Theory and Applications*, Oxford University Press
4. Pindyck, R. S., Rubinfield, D. L. & Gupta, P. L. (2006): *Microeconomics*, Prentice Hall
5. Ferguson, C.E. & Gould, J.P. (1989): *Micro Economic Theory*, 6th Ed.
6. Maddala, G.S. & Miller, E. (2004): *Microeconomic Theory and Applications*, Tata McGraw Hill
7. Koutsoyiannis, A. (1977): *Modern Microeconomics*, Macmillan

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Understand equilibrium behaviour under various market structures.
CO2: Analyse pricing and input markets in different competitive settings.
CO3: Evaluate welfare and general equilibrium conditions in microeconomic contexts.

Mapping of COs with POs:

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

S = Strong | M = Medium

Macroeconomics-II (Semester-II)
Discipline Specific Course (DSC)

Course Code: P25ECO202T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 familiarize students with the macroeconomic environment, emphasizing Keynesian and New Keynesian theories.

Unit I

Theories of Money: Definition and components of money stock, Demand for money: transaction, precautionary, speculative motives, Quantity theory of money, Cambridge approach, Baumol-Tobin model, Inflation and interest rates: nominal vs real interest rates, Keynesian liquidity preference, Determinants of money stock, money multiplier.

Unit II

IS-LM Framework and Open Economy: IS and LM curves: goods and money market equilibrium, Fluctuations using IS-LM: fiscal and monetary policy, Aggregate demand in open economy; Mundell-Fleming model, Exchange rate determination: flexible vs fixed exchange rate system, Policy tools in different exchange regimes.

Unit III

Inflation and Expectations: Inflation: effects on income distribution, output, employment, growth, Types of inflation: demand-pull, cost-push, structural, Inflation control policies; inflation-unemployment trade-off, Phillips Curve; adaptive vs rational expectations.

Unit IV

New Macroeconomics and Policy: New classical and Keynesian theories: Lucas imperfect information model, Price stickiness, rational expectations, random walk of GDP, Central banking and controls, Objectives of monetary policy: aggregate targeting, interest rate implications.

Suggested Readings:

1. Scarth, W. (2007), *Macroeconomics: An Introduction to Advanced Methods*, 3rd Ed., Thomson
2. Mankiw, G. N., *Principles of Macroeconomics*, 9th Ed., Macmillan Learning
3. Gupta, G.S., *Macroeconomics: Theory and Application*, 2nd Ed., Tata McGraw Hill
4. Romer, D. (2001), *Advanced Macroeconomics*, 2nd Ed., McGraw-Hill
5. Dornbusch, R., Fischer, S. & Startz, R. (2015), *Macroeconomics*, 11th Ed., McGraw Hill
6. Blanchard, O., *Macroeconomics*, 4th Ed., Prentice Hall
7. Erol D'Souza (2012), *Macroeconomics*, Pearson Education

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Understand the structure and theories behind money demand and supply.
CO2: Analyse macroeconomic fluctuations using IS-LM and open economy models.
CO3: Evaluate inflation, monetary policy, and modern macroeconomic perspectives.
Mapping of COs with POs:

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
Growth and Development-II (Semester-II)
Discipline Specific Course (DSC)

Course Code: P25ECO203T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 enrich students with different concepts, theories, and models of economic growth and development.

Unit I

Development Drivers: Education, knowledge, and governance in economic development, Trade and development; trade as an engine of growth, Views of Prebisch, Singer, and Myrdal, Gains from trade for LDCs; role of FDI and MNCs in development

Unit II

Poverty, Inequality, and Policy: Concepts and measures of poverty: headcount ratio, income gap ratio, Sen's index, Inequality: Lorenz curve, Gini coefficient, Growth and new industrial policy, Privatization, disinvestment, labour market reforms, State and market failures; governance issues

Unit III

Environment and Development: Environmental degradation and development, Environmental Kuznets Curve, Preservation and irreversibility of environmental change, Krutilla-Fisher equation, Energy and development links.

Unit IV

Growth Models and Theories: Solow model: basic, technological progress, and with human capital, Economics of ideas, Romer model, Endogenous growth: mechanics and deeper analysis, Growth convergence, population and Malthus, Lessons from Asian Tigers, Natural resources and growth constraints, Neoclassical vs. endogenous growth theory

Suggested Readings:

1. Todaro, M.P. and Smith, S.C., *Economic Development*, 8th Edition, Pearson
2. Thirwall, A., *Growth and Development*, Macmillan
3. Ray, D. (1998), *Development Economics*, Princeton University Press
4. Basu, K. (2003), *Analytical Development Economics*, MIT Press
5. Bardhan, P. and Udry, C. (1999), *Development Microeconomics*, Oxford University Press
6. Agenor, P.R. and Montiel, P.J. (2008), *Development Macroeconomics*, Princeton University Press
7. Chakravarti, S. (1982), *Alternative Approaches to a Theory of Economic Growth*, Oxford University Pre

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Understand the roles of education, trade, and FDI in development processes.
CO2: Analyze poverty, inequality, and policy measures for inclusive growth.
CO3: Evaluate models of growth, environmental challenges, and sustainability concerns.

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

Statistics (Option-I) (Semester-II)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO211T	**External Marks :70**
60 Hrs. (4 Hrs./Week)	**Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)	**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 make students familiar with statistical methods to understand the behaviour of data and its further analysis.

Unit I

Univariate Analysis and Probability: Central tendency, dispersion, coefficient of variation, skewness, and kurtosis, Probability: rules, theories, Bayes' theorem, Random variables, probability distributions and their moments, Theoretical distributions: Binomial, Poisson, Normal, Exponential – characteristics and applications

Unit II

Sampling and Statistical Inference: Probability and non-probability sampling methods, Sampling distribution and its properties, Chebyshev's inequality, Law of Large Numbers, Central Limit Theorem, Estimation: point and interval, good estimator characteristics, Hypothesis testing: formulation, errors, and statistical tests – z-test, t-test, F-test, ANOVA, chisquare, Wilcoxon Signed-Rank, Kruskal-Wallis.

Unit III

Correlation and Regression: Correlation: multiple and partial (three variables), Linear regression model, Multiple linear regression: coefficients interpretation, Coefficient of determination: R^2 and adjusted R^2

Unit-IV

Index Numbers and Time Series: Index numbers: concept, price relatives, quantity and value relatives, Laspeyres, Paasche, and Fisher formulas, Family budget method, splicing, limitations, Ideal index test, Time series: trend measurement – quadratic, exponential, modified exponential, Seasonal indices using simple average, moving average, and trend ratio

Suggested Readings:
1. Anderson, Sweeney and Williams, *Statistics for Business and Economics*, Cengage Learning
2. Levin, R.I. and Rubin, D.S., *Statistics for Management*, Prentice Hall, Delhi
3. Hooda, R.P., *Statistics for Business and Economics*, Macmillan, New Delhi
4. Heinz, Kohler, *Statistics for Business & Economics*, Harper Collins, NY
5. Miller, I. and Miller, J. (1999), *Mathematical Statistics*, 6th ed., Prentice Hall
6. Agresti, A. and Finlay, B. (2013), *Statistical Methods for the Social Sciences*, 4th ed., Pearson
7. Triola, M. (2014), *Essentials of Statistics*, 5th ed., Pearson

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Apply statistical measures and probability distributions for data analysis.
CO2: Conduct sampling, estimation, and hypothesis testing for statistical inference.
CO3: Perform regression, correlation, and index number analysis including trend evaluation.

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
Mathematics for Economic Analysis (Option-II) (Semester-II)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO212T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 familiarize students with the basic mathematical tools and techniques used in economic analysis.

Unit I

Concepts of sets: subset and bounded set, set operations, convex set, Identification of convex sets in budget line, Statements, production possibility frontier, Indifference and isoquant curves, Cartesian product, relations and functions, Polynomial, exponential, logarithmic and trigonometric functions, Linear and quadratic equations, Limit and continuity of functions (single variable)

Unit II

Concept of derivative and differentiation rules, Monotonicity, concavity, convexity of functions, Necessary and sufficient conditions for maxima and minima, Total vs. marginal magnitudes, elasticities, Rules of integration: definite and indefinite Applications in economics: cost curves, consumer surplus, Relation between marginal and total magnitudes

Unit III

Vector and matrix definitions: addition, multiplication, transpose, inverse, Minors and cofactors, determinant, rank of a matrix, Cramer's rule, Homogeneous and non-homogeneous systems of equations, Signs of quadratic forms with and without constraints, Positive definite, negative definite, semi-definite matrices

Unit IV

Functions of several variables: production, utility, cost functions, Partial and total derivatives, implicit functions, higher-order derivatives, Homogeneous functions and Euler's theorem, Demand and supply functions, Optimization: stationary values, constrained optimization (Lagrange method), Difference equations: first and second order with constant coefficients and terms

Suggested Readings:
1. Chiang, Alpha (2023), *Fundamental Methods of Mathematical Economics*, McGraw Hill.
2. Allen, R.G.D. (2014), *Mathematical Economics*, Brunton Press.
3. Henderson, J.M., and Quandt, R.E. (1980), *Microeconomic Theory: Mathematical Approach*, McGraw Hill.
4. Takayama, A. (2000), *Mathematical Economics*, 2nd Edition, Cambridge University Press.
5. Roberts, B., and D.L. Schultze (1973), *Modern Mathematics and Economic Analysis*, W.W. Norton and

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Understand foundational mathematical concepts relevant to economic theory.
CO2: Apply calculus and matrix algebra in solving economic problems.
CO3: Analyze multivariable functions and optimization problems in economic models.

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
Practices of Microeconomics (Semester-II)
Discipline Specific Course (Practicum)

Course Code: P25ECO204P   **External Marks :35**
60 Hrs. (4 Hrs./Week)   **Internal Marks :15**
Credit : 02 (Practicum)   **Total Marks: 50**
Note: The Practical exam will be taken by External Examiner.

Course Objective: To apply microeconomic theories to analyze real-world market behaviors, pricing strategies, consumer welfare, and policy outcomes through case-based and data-driven approaches.

Unit I

Applied Consumer and Firm Behavior: Budget constraint and real-world demand estimation, Price elasticity and its role in taxation, subsidy, and price setting, Production cost analysis using firm-level data, Strategic pricing: case studies from FMCG, telecom, and digital markets, Practical project: Elasticity estimation using household survey or NSSO data, Group activity: Cost-structure analysis of a local industry

Unit II

Markets, Welfare, and Policy Applications: Market failures and real-world externalities: pollution, traffic, health. Public goods and policy challenges: sanitation, education access, Welfare analysis using real policy examples: LPG subsidy, Ujjwala scheme, PDS reforms, Competition policy and antitrust: Case study analysis (e.g., Amazon/Flipkart, telecom mergers) , Practical project: Simulating a policy intervention using Excel or R. Field-based microeconomic survey or online consumer behavior experiment.
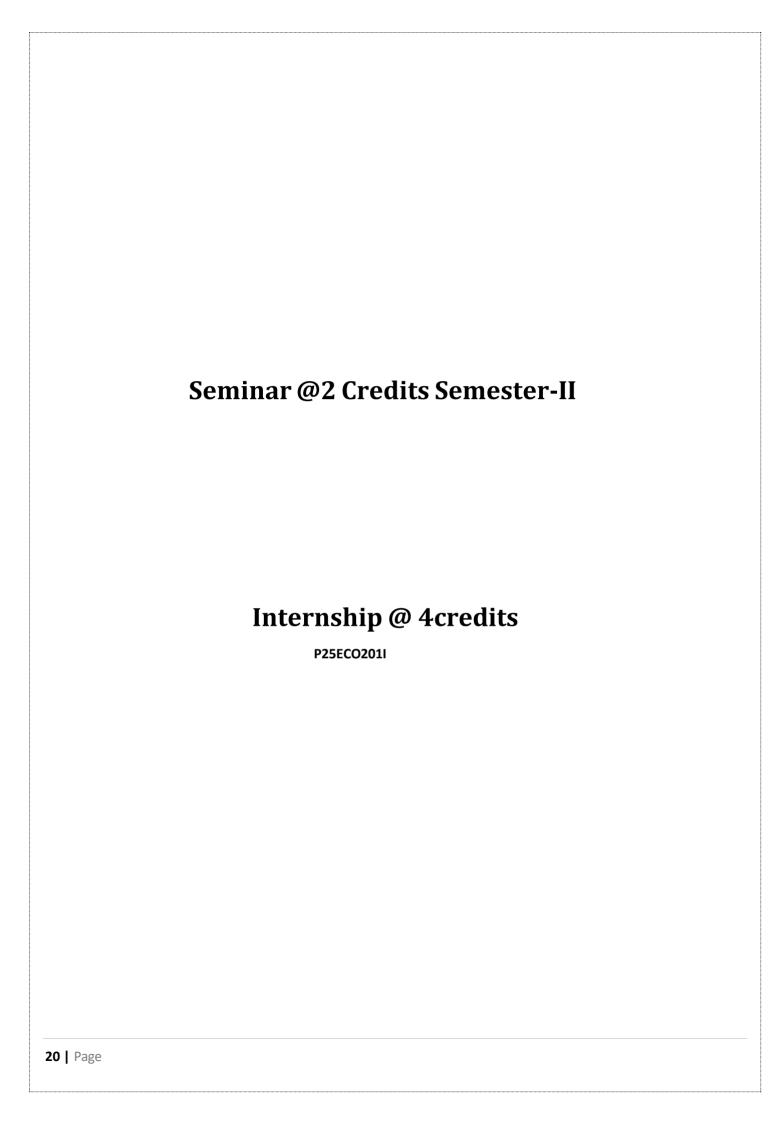
Suggested Readings & Resources:

1. Varian, Hal R. – Intermediate Microeconomics: A Modern Approach (for conceptual foundation)
2. Besanko, David & Braeutigam, Ronald – Microeconomics (Application-focused examples)
3. Case studies from CCI (Competition Commission of India) Reports
4. Select issues of Economic and Political Weekly and NITI Aayog policy briefs
5. World Bank's Microdata Portal / CMIE data (for projects)
6. Government microdata sources: NSSO, ASI, NFHS (for student assignments)
7. Software Tutorials: Basic use of Excel, R, or STATA for microeconomic applications

Course Outcomes (COs): At the end of the course, the students would be able to:
CO1: Use microeconomic frameworks to analyze practical issues like market failure, pricing, and competition.
CO2: Interpret and apply empirical data to assess consumer behavior, firm strategy, and policy effectiveness.
CO3: Develop policy briefs and presentations based on case studies of Indian and global microeconomic issues.

Mapping of Cos with Pos

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

Seminar @2 Credits Semester-II

Internship @ 4credits

P25ECO201I

Semester-III

Course Code: P25ECO301T   External Marks :70
60 Hrs. (4 Hrs./Week)   Internal Marks :30
Credit : 4 (3Theory+1Tutorial)   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 acquaint students with the performance of different sectors of the Indian economy and the policy framework governing them to understand the past, present, and future of the Indian economy.

Unit II

Growth and Structural Changes in the Indian Economy: State of the Indian economy during the pre-reform period (1950–1990): nature, causes, and changes in sectoral income distribution and occupational structure, Indian economy in 1990–91: features and appraisal of economic reform programme, Second-generation reforms, State of the Indian economy during the post-reform period.

Unit II

Labour Force and Employment: Labour force growth and occupational structure since economic reforms, Poverty and unemployment: nature, extent, and estimates, Policy initiatives since reforms, Inter-state disparities in the pattern of development in the post-reform period.

Unit III

Agriculture: Pattern of growth of Indian agriculture since 1950, Deceleration in the 1990s: extent and causes, Regional imbalances in Indian agriculture, Food security: problems and policy options.

Unit IV

Industry: Trends in growth and structure of Indian industry since 1950, Industrial policy initiatives during the post-reform period, Impact of new economic policy on Indian industry.

Suggested Readings:
1. Uma Kapila (Ed.) (2023). *Indian Economy: Performance and Policies*. Academic Foundation.
2. Jean Dre`ze & Amartya Sen (2023). *India: Development and Participation* (Updated Edition). Oxford University Press.
3. Rakesh Mohan (Ed.) (2021). *India Transformed: 25 Years of Economic Reforms*. Penguin India.
4. Pulapre Balakrishnan (2019). *Economic Growth and its Distribution in India*. Orient BlackSwan.
5. C. Rangarajan & S. Mahendra Dev (2022). *India's Economy: From Nehru to Modi – A Brief History*. Viking.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand structural changes in the Indian economy across time periods.
2. Analyze sectoral policies and their implications post economic reforms.
3. Evaluate regional and inter-state disparities in development patterns.

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

Public Economics-I (Semester-III)
Discipline Specific Course (DSC)

Course Code: P25ECO302T	**External Marks :70**
60 Hrs. (4 Hrs./Week)	**Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)	**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 enrich students' understanding of the concepts and theories of public economics, particularly the role of the government in resource allocation and expenditure.

Unit I
Introduction to Public Economics: Meaning of Public Economics, Difference between Public Finance and Public Economics, Fiscal functions of the government.

Public Goods and Resource Allocation: Allocation of resources, Provision of public goods, Voluntary exchange models, Impossibility of decentralized provision of public goods (Samuelson & Musgrave), Demand-revealing schemes – Tiebout model, theory of club goods, Stabilization policy – Keynesian case, Uncertainty and expectations, Inter-temporal market failure, Liquidity preference, social goals, Poverty alleviation, Infrastructure facilities and regional imbalances

Unit II
Government Functions and Market Failure, Role of government: Allocation, Distribution, Stabilisation, Public, Private, and Merit Goods, Market failure: Imperfections, Decreasing costs, Externalities, Wagner's Law of Increasing State Activity, Wiseman-Peacock hypothesis

Unit III
Pure theory of public expenditure: Structure and growth of public expenditure, Criteria for public investment, Social cost benefit analysis, Project evaluation and discount rate, Estimation of costs, Programme budgeting and zero-base budgeting, Reforms in expenditure budgeting

Unit IV
Taxation and Incidence: Theory of incidence, Allocative and equity aspects of individual taxes, Benefit and ability-to-pay approaches, Optimal taxation theory, Tax burden and deadweight loss, Trade-off between equity and efficiency, Double taxation issues.

Suggested Readings:
1.   Rosen, H.S. & Gayer, T. (2022). *Public Finance* (12th Edition), McGraw-Hill Education.
2.   Musgrave, R.A. & Musgrave, P.B. (2017). *Public Finance in Theory and Practice*, McGraw-Hill Education.
3.   Atkinson, A.B. & Stiglitz, J.E. (2015). *Lectures on Public Economics*, Princeton University Press.
4.   Hillman, A.L. (2009). *Public Finance and Public Policy*, Cambridge University Press.
5.   Lekhi, R.K. & Singh, Joginder (2022). *Public Finance*, Kalyani Publishers.
6.   Government of India – Ministry of Finance. *Economic Survey* (Annual, latest edition).
7.   Reports from NITI Aayog and RBI – For current public finance trends, fiscal policy evaluations, and budgeting techniques.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand the provision, demand, and theory behind public goods and government interventions.
2. Analyze public expenditure, budgeting techniques, and cost-benefit frameworks.
3. Evaluate incidence and equity effects of different taxation systems and optimal tax policies.

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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

Course Code: P25ECO303T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 augment students' knowledge of the practices and theories of international trade between nations.

Unit I

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

Demand and supply, offer curves and terms of trade: Equilibrium relative commodity price with trade – a partial equilibrium analysis, general equilibrium analysis, offer curves, terms of trade.

Unit III

Factor endowments and Heckscher-Ohlin Theory: factor intensity; factor abundance, factor price equalization, and income distribution, Stopler 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, Uruguay round and outstanding trade problems.

Suggested Readings:
1. Krugman, P.R. & Obstfeld, M. (2022). *International Economics: Theory and Policy* (12th Edition), Pearson.
2. Feenstra, R.C. & Taylor, A.M. (2021). *International Trade* (5th Edition), Worth Publishers.
3. Salvatore, D. (2019). *International Economics* (12th Edition), Wiley.
4. Van Marrewijk, C. (2021). *International Economics: Theory, Application, and Policy*, Oxford University Press.
5. Bhagwati, J. (2018). *Selected Readings on International Trade*, Cambridge University Press.
6. WTO and UNCTAD Reports – Latest updates on trade negotiations, tariffs, and global economic trends.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand classical and modern theories of international trade and the gains from trade.
2. Analyze the effects of demand-supply interactions and terms of trade under different equilibrium conditions.
3. Evaluate trade policies, tariffs, non-tariff barriers, and the political economy of protectionism.

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 of Agriculture-I (Option-I) (Semester-III)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO311T   External Marks :70
60 Hrs. (4 Hrs./Week)   Internal Marks :30
Credit : 4 (3Theory+1Tutorial)   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 to analyze and critically assess issues related to agricultural transformation, production, and supply with emphasis on Indian agriculture.

Unit I

Introduction: nature and scope of economics of agriculture; specificities of farm organisation and agricultural production and markets; inter-sector linkages of agriculture (backward and forward linkages and feedback effects; role of agriculture in economic development: contribution of agriculture to economic development; historical perspective [experience of England, United States, Australia, Latin America, Russia, Japan, and India]; declining role of agriculture and dilemmas of development.

Unit II

Agricultural production: uniqueness of agricultural production; various types of factor-product, factor-factor, and productproduct relations; Cobb-Douglas and CES production functions. Role of farm size and structure in equilibrium, productivity, and return to scale. Sources and barriers: barriers to agricultural development.

Unit III

Agricultural transformation: Schultz theory of transformation of traditional agriculture; Mellor's model of agricultural development; Hayami-Ruttan induced innovation model of agricultural development. Agricultural transformation: Indian experience.

Unit IV

Risk and uncertainty in agriculture: nature and types of risks and uncertainties in agriculture, public policies and farm level measures to reduce risk and uncertainties. Demand for and supply of farm products: characteristics of demand for farm products, quantity and quality components of demand for food; forecasting of demand for food products. Characteristics of supply of farm products, supply response of farm products; role of price and non-price factors in inducing aggregate supply, empirical supply response functions and evidence.

Suggested Readings:

1. Gardener, B.L. & Rausser, G.C. (Eds.) (2023). *Handbook of Agricultural Economics*, Vol. 1–4, Elsevier.
2. Pingali, P. & Evenson, R.E. (2021). *Handbook of Agricultural Economics: Agricultural Development: Farmers, Farm Production and Farm Markets*, Elsevier.
3. Eicher, C.K. & Staatz, J.M. (2019). *International Agricultural Development*, 3rd Edition, Johns Hopkins University Press.
4. Ghatak, S. & Ingersent, K.A. (2020). *Agriculture and Economic Development*, Routledge.
5. Southworth, H. & Johnston, B.F. (2018). *Agricultural Development and Economic Growth*, Cornell University Press.
6. Tsakok, I. (2017). *Success in Agricultural Transformation: What It Means and What Makes It Happen*, Cambridge University Press.
7. Hazell, P. & Rahman, A. (2014). *New Directions for Smallholder Agriculture*, Oxford University Press.

Course Outcomes (COs): At the end of the course, the students would be able to:

1. Understand the role of agriculture in economic development and inter-sectoral linkages.
2. Analyze factors influencing agricultural production, productivity, and farm size structure.
3. Evaluate models of agricultural transformation and address risk and uncertainty in agriculture.

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 Industry-I (Option-II) (Semester-III)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO312T	**External Marks :70**
60 Hrs. (4 Hrs./Week)	**Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)	**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 develop an analytical understanding of firm behaviour and market structure in industrial settings, particularly within the Indian context.

Unit I

Modern Corporation Enterprise: Size and ownership structure of industrial enterprises; dominance and characteristics of corporate firms; issues of ownership and control separation; alternative management models beyond profit maximization including theories by Baumol, Williamson, Marris, Cyert, and March.

Unit II

Monopoly Power and Market Concentration: Study of monopolistic and oligopolistic market structures; measures and determinants of sellers' concentration; exploration of economies of scale, entry barriers, mergers, and market growth dynamics.

Unit III

Market Conduct Under Oligopoly: Insights into firm behavior under oligopoly: rivalry and collusion, dominant firm strategies, price limits, contestable markets, and non-price competition with a focus on advertising strategies.

Unit IV

Market Performance and Efficiency: Analysis of market performance from the perspectives of allocative and productive efficiency; impact of market structure on profitability; challenges of sub-optimal capacity; comparison between allocative and productive efficiency.

Suggested Readings:

1. Carlton, D. W. & Perloff, J. M. (2015). *Modern Industrial Organization* (4th Ed.). Pearson.
2. Pepall, L., Richards, D., & Norman, G. (2014). *Industrial Organization: Contemporary Theory and Practice* (5th Ed.). Wiley.
3. Shy, O. (1996). *Industrial Organization: Theory and Applications*. MIT Press.
4. Cabral, L. (2017). *Introduction to Industrial Organization* (2nd Ed.). MIT Press.
5. Tirole, J. (1988). *The Theory of Industrial Organization*. MIT Press.
6. Shepherd, W. G. & Shepherd, J. M. (2003). *The Economics of Industrial Organization* (5th Ed.). Waveland Press.
7. Martin, S. (2010). *Industrial Organization in Context*. Oxford University Press.
8. Bhagwati, J. & Desai, P. (1970). *India: Planning for Industrialization*. Oxford University Press.
9. Mukherjee, D. (1995). *Indian Industry: Development and Stagnation*. Oxford University Press.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand the structure and ownership patterns of modern industrial enterprises.
2. Analyze the implications of monopoly and oligopoly in market performance.
3. Evaluate industrial efficiency and the impact of firm behavior on market outcomes.

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

Basic Econometrics (Option-III) (Semester-III)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO313T	**External Marks : 70**
60 Hrs. (4 Hrs./Week)	**Internal Marks : 30**
Credit : 4 (3Theory+1Tutorial)	**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 foundational econometric concepts and statistical tools for analyzing economic relationships and conducting empirical research.

Unit I

Regression Analysis: Linear regression models (two-variable and multi-variable), BLUE properties, general and confidence approach to hypothesis testing, Partial effects and elasticity, goodness of fit, Model evaluation and matrix approach to linear regression.

Unit II

Extensions of Linear Regression Models: Consequences and detection of multicollinearity, heteroskedasticity, and autocorrelation, Remedial measures

Unit III

Dummy Variables: Regression on qualitative and quantitative variables, Dummy variable trap, structural stability of regression models, Chow test, piecewise linear regression model.

Unit IV

Simultaneous Equation Models: Simultaneity bias, structural vs reduced form, Identification (rank vs order condition), under and over identification, Estimation methods: indirect least squares, two-stage least squares.

Suggested Readings:
1. Wooldridge, J. M. (2020). *Introductory Econometrics: A Modern Approach* (7th ed.). Cengage.
2. Gujarati, D. N. & Porter, D. C. (2021). *Basic Econometrics* (5th ed.). McGraw-Hill.
3. Stock, J. H. & Watson, M. W. (2019). *Introduction to Econometrics* (4th ed.). Pearson.
4. Greene, W. H. (2018). *Econometric Analysis* (8th ed.). Pearson.
5. Brooks, C. (2019). *Introductory Econometrics for Finance* (4th ed.). Cambridge University Press.
6. Johnston, J. & DiNardo, J. (1997). *Econometric Methods* (4th ed.). McGraw-Hill.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Able to formulate and estimate basic linear regression models.
2. Diagnose and address issues like multicollinearity, heteroskedasticity, and autocorrelation.
3. Understand and apply models involving dummy variables and simultaneous equations.

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

Practices of Macroeconomics (Semester-III)
Discipline Specific Course (DSC)- Practicum

Course Code: P25ECO304P	**External Marks :35**
60 Hrs. (4 Hrs./Week)	**Internal Marks :15**
Credit : 02 (Practicum)	**Total Marks: 50**

Note: The practical exam will be taken by external examiner.
Course Objectives: To equip students with hands-on experience in analysing and interpreting macroeconomic indicators and applying macroeconomic models to real-world situations.

Unit-I

National Income Accounting using National Statistical Office data (NSO), Inflation Measurement and CPI/WPI Trends in India (RBI data), Unemployment and Labour Force Participation Rate, Practical Exercises with GDP Components and Expenditure Method, Interpreting Economic Survey and Budget, Macroeconomic Framework Statements

Unit-II

Analysis of Monetary Policy Reports and Repo Rate Trends (RBI Bulletins), Fiscal Deficit, Revenue Deficit and Public Debt Sustainability: India Case Study, Balance of Payments and Exchange Rate Trends in India

Suggested Readings List

1. **Ministry of Finance, Govt. of India** – *Economic Survey (latest edition)*
2. **RBI Reports** – *Monetary Policy Report*, *Annual Reports*, and *Handbook of Statistics on Indian Economy*
3. **National Statistical Office (NSO)** – *National Accounts Statistics*, *PLFS*, MOSPI *publications*

Course Outcomes (COs): At the end of the course, the students would be able to:
1. To develop practical understanding of key macroeconomic indicators using real-time data.
2. To apply macroeconomic tools in analysing contemporary economic issues.
3. To enhance skills in interpreting government reports, economic surveys, and macroeconomic models.

Mapping of Cos with Pos

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
Demography Economics (Option-I) (Semester-III)
OEC

Course Code: P25OEC303T(i)   **External Marks :35**
30 Hrs. (2 Hrs./Week)   **Internal Marks :15**
Credit : 02   **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 Objectives: To examine population theories, demographic trends, and policies with emphasis on their economic implications, particularly in the Indian context.

Unit-I
Theories of population; Malthus, Marxian, Liebenstein, Becker. Demographic transition theory and optimum population theory. Population and economic development. Population as "limits to growth and as ultimate source".

Unit-II
Population structure and characteristics: impact of population growth on age and gender structure. Aging of population. Concept of fertility transition. Measurement of fertility and fertility differentials in India. Mortality: components and measurement. Mortality differentials in India: rural-urban, age and gender.

Suggested Readings:

1. Becker, G. (1960): An Economic Analysisof Fertility in Demographic Change and Economic Change Princeton. in Developed Countries (edited by National Bureau of Economic Research), Princeton University Press,
2. Bouge, D. J. (1971): Principles of Demography, John Wiley, New York. Countries:
3. Coale, A. and E. Hoover (1958): Population Growth and Economic Development in Low-income A Case Study of India'sProspects, Princeton University Press, Princeton.

Course Outcomes (COs): At the end of the course, the students would be able to:

1. Understand and evaluate classical and modern theories of population and their link to economic development.
2. Analyse demographic indicators such as fertility, mortality, age structure, and migration with special reference to India.
3. Assess the effectiveness of population estimation methods and policy measures implemented in post-independence India.

Mapping of Cos with Pos

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

S = Strong | M = Medium | W = Weak

Economics of Human Resource Development (Option-II) (Semester-III)
OEC

Course Code: P25OEC303T(ii)   **External Marks :35**
30 Hrs. (2 Hrs./Week)   **Internal Marks :15**
Credit : 02   **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 Objectives: To explore the role, development, and management of human resources in the context of economic theory and policy with national and global perspectives.

Unit-I

Human resource development (HRD):human resource development in national perspective. Relevance of human resource development in India. Human resource development in organizational perspective. Traditional and modern approaches to human resource development. Human resource development in global perspective. Emerging human resource management concepts in new millennium; human resource information system.

Unit-II

Human capital: concept and measurement of human capital. Investing in human capital: Becker's model. Concept of 'on the job training' and re-training. Endogenous growth: role of education, research and knowledge: Arrow, Romar and Lucas models. Managing human resources: techniques of labour demand forecasting, establishing pay plans, various incentive schemes. Human resources development and challenges.

Suggested Readings:

1. Campbell, R. McConnell and Brue Stanley, L. A. and D. A.Macpherson (2010): Contemporary Labour Economics, 8th Ed. McGraw Hill BookCompany, New York.
2. Mankin, David (2009) Human Resource Development, New Delhi, Oxford University 33 Scanned with CamScanner 3. Press. Kempton, John (1995) Human Resource Management and Development: CurrentIssues and Themes, MacMillan, St. Martin's Press, London
3. 3.Richard, B. Peterson (2005): Systematic Management of Human Resources, Lam Tracy Addison Wesley Publishing Company, London.
4. Schultz, Theodore W. (1981): Investing in People: The Economics of Population Quality, Hindustan PublishingCorporatien (India), Delhi.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand key concepts, theories, and approaches to human resource and capital development.
2. Analyze human capital investment decisions and their implications for growth, employment, and wages.
3. Evaluate challenges related to migration, discrimination, and labour market dynamics.

Mapping of Cos with Pos

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

S = Strong | M = Medium | W = Weak

Economics
Economics of Social Sector (Option-III) (Semester-III)
OEC

Course Code: P25OEC303T(iii)   **External Marks :35**
30 Hrs. (2 Hrs./Week)   **Internal Marks :15**
Credit : 02   **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 analyze the role, challenges, and policies of the social sector in fostering inclusive and sustainable economic development.

Unit I

Importance of social sector in economic development, Market failure, externalities, and rationale for government intervention, Concepts of equity, efficiency, and social justice in public provisioning, Human development: capabilities approach (Amartya Sen). HDI, MPI, GDI, GEM – International comparisons and Indian performance. Education as investment in human capital, Cost-benefit analysis and returns to education.

Unit II

Health as a public good and human capital, Determinants of health: income, education, gender, environment, Health care financing: public, private, and insurance-based models, public health systems in India: challenges and reforms (Ayushman Bharat, NHM), Measuring health outcomes: IMR, MMR, life expectancy, DALYs, etc. Inequities in access to health care – rural/urban, gender, caste, region. Gender and economic participation: unpaid work, labor force disparities.

Suggested Readings:

1. Jean Dre`ze & Amartya Sen – *India: Development and Participation*
2. T. Paul Schultz – *Investments in Human Capital*
3. Ronald G. Ehrenberg & Robert S. Smith – *Modern Labor Economics*
4. Klugman, Jeni (Ed.) – *UNDP Human Development Reports*
5. World Bank – *World Development Report (Human Capital/Health/Education Issues)*
6. Ministry of Health & Family Welfare – *National Health Policy Documents*
7. Ministry of Education – *Education Statistics and NEP Reports*
8. Planning Commission/NITI Aayog – *Evaluation Studies on MGNREGA, PDS, NFSA*
9. Economic and Political Weekly – Selected articles on education, health, and welfare
10. Case studies from J-PAL and 3ie on impact evaluations in India

Course Outcomes (COs): At the end of the course, the students would be able to:

1. Understand the economic rationale for government intervention in the social sector and evaluate key social indicators.
2. Analyze issues of access, equity, and efficiency in education, health, and gender-related policies in India
3. Evaluate the design, financing, and impact of social protection programs and policy innovations using economic tools.

CO-PO Mapping Table

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

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

Course Code: P25OEC303T(iv)   **External Marks :35**
30 Hrs. (2 Hrs./Week)   **Internal Marks :15**
Credit : 02   **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 examine the role of money, interest rates, monetary institutions, and policies in shaping macroeconomic outcomes, with special reference to India.

Unit-I

Money: functions, types, the theoretical for debate and empirical attempts to define money. Classical quantity theory of money, Keynesian theory, Friedman's theory, Supply of money: components, money creation by the banking system. High powered money and money multiplier. Measures of money supply in India.

Unit-II

Central banking: main functions, policy tools, recent monetary policy of RBI, autonomy-of RBI. Commercial banking: Functions, major developments in commercial banking in India since nationalization. Banking sector reforms.

Suggested Readings:
1. Bofinger Peter (2001): Monetary Policy: Goals, Institutions, Strategy and instruments, Oxford University Press
2. Dennis Geoggrey, E.J. (1981): Monetary Economics, Longman
3. Dinlio, A. Eugene (1987): Theory and Problems of Money and Banking, Internationalities (Schaum's Outline Series)
4. Fabozzi, F. J. and Franc Modigliani (Fourth Edition)(2009): Capital Markets Institutions and Instruments, Prentice Hall, New Jersey
5. Howells, Peter and Bain Keith(2002): The Economics of Money, Banking and Finance, Prentice Hall,Pearson Education-Ltd.
6. Khanna, Perminder (2005): Advanced Study in Money and Banking Theory and Policy Relevance in the Indian Economy, Atlantic Publishers, NewDelhi.
7. Kulkarni, G. (1999): Modern Monetary Theory, Macmillan, New Delhi.
8. Mankiw, N.G. (Fifth Edition) (2008): Macro-economies, Macmillan Worth Publishers, New York.

Course Outcomes (COs): At the end of the course, the students would be able to:

1. Understand the theoretical and empirical foundations of money demand, money supply, and interest rate determination.
2. Analyze the functioning of central and commercial banking, monetary policy, and the Indian monetary system.
3. Evaluate the role of non-banking financial institutions and international monetary systems in modern economies.

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

1.

Semester-IV

Economics
Research Methodology (Semester-IV)
Discipline Specific Course (DSC)

Course Code: P25ECO401T   External Marks :70
60 Hrs. (4 Hrs./Week)   Internal Marks :30
Credit : 4 (3Theory+1Tutorial)   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 enable students to design, conduct, and evaluate economic research using scientific methods and relevant tools**.**

Unit I
Meaning, objectives, and types of research: Basic, applied, and action research, Research in economics: Role, scope, and limitations, Scientific method: Induction, deduction, and hypothesis formulation, Research ethics and plagiarismReview of literature: Importance, sources, and referencing (APA, MLA, etc.)

Unit II
Research design: Exploratory, descriptive, analytical, and experimental designs, Components of a good research design, Variables: Types and measurement scales, Sampling methods: Probability and non-probability sampling, Sample size determination and errors in sampling

Unit III
Types of data: Primary vs. secondary; quantitative vs. qualitative, Methods of data collection: Survey, interview, questionnaire, focus groups, Sources of secondary data: NSSO, RBI, NFHS, Census, CMIE, World Bank, Data coding, classification, tabulation, and diagrammatic presentation,Use of Excel/SPSS/R for data entry and management

Unit IV
Descriptive statistics: Mean, median, mode, standard deviation, Inferential statistics: Hypothesis testing, t-test, chi-square, ANOVA (introductory level), Correlation and regression (basic level), Interpretation of results and drawing conclusions, Structure of a research report: Introduction, methodology, results, conclusion, and references, Preparing research proposals and dissertations

Suggested Readings:

1. Kothari, C.R. & Garg, Gaurav – *Research Methodology: Methods and Techniques*
2. Krishnaswami, O.R. & Ranganatham, M. – *Methodology of Research in Social Sciences*
3. Panneerselvam, R. – *Research Methodology*
4. Goon, Gupta & Dasgupta – *Fundamentals of Statistics* (for statistical background)
5. Gujarati, Damodar N. – *Basic Econometrics* (for econometric application)
6. Nachmias & Nachmias – *Research Methods in the Social Sciences*
7. Selected journal articles from *Economic and Political Weekly*, *Indian Economic Journal*, and *Journal of Development Economics*

Course Outcomes (COs): At the end of the course, the students would be able to:
   CO1: Understand the philosophical and theoretical foundations of research in economics.
   CO2:Develop the ability to formulate research problems, hypotheses, and conduct literature reviews
   CO3:Gain hands-on experience in data collection, analysis, and writing research reports using appropriate tools.

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

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Economics
Public Economics-II (Semester-IV)
Discipline Specific Course (DSC)

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Course Code: P25ECO402T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 understand the role of public finance in a modern economy, with special focus on debt, fiscal policy, stabilization, and fiscal federalism.

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Unit I

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Classical view of public debt; Compensatory aspect of debt policy; Burden of public debt; Sources of public debt; Debt through created money, Public borrowings and price level; Crowding out of private investment and activity; Principles of debt management and repayment.

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Unit II

</div>

Objectives of fiscal policy - full employment, anti-inflation, economic growth, redistribution of income and wealth; Interdependence of fiscal and monetary policies; Budgetary deficit and its implications.

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Unit III

</div>

Fiscal policy for stabilization - Automatic vs discretionary stabilization; Alternative measures of resource mobilization and their impact on growth, distribution and prices; Balanced budget multiplier.

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Unit IV

</div>

Principles of multi-unit finance; Fiscal federalism in India; Vertical and. horizontal imbalances; Assignment of function and sources of revenue; Constitutional provisions; Finance Commission; Devolution of resources and grants; Theory of grants; Resource transfer from Union to States - Criteria for transfer of resources; Centre-State financial relations in India; Problems of states resources and indebtedness; Fransfer of resources from Union and States to local bodies.

Suggested Readings:

1. Musgrave, R.A. and Musgrage, P.B., 'Piublic Finance in Theory and Practice', McGraw Hill
2. Lekhi, R.K. and Singh, Joginder (2015), 'Public Finance'. Kalyani Publishers.
3. Hillman A. L., (2003), "Public Finance and Public Policy', Cambridge University Press
4. Oxford Chelliah, University R.J.,(1996), Press. Towards Sustainable Growth: Essays in Fiscal and Financial Sector Reforms in India, 6.
5. Joseph Govinda, E. Rao, Stiglitz, M. and Economics T. K. Sen, (1996), "Fiseal Federalism in India: Theory and Practice, Macmillan, India. of the Public Sector' 3rd edition, Wiley

Course Outcomes (COs): At the end of the course, the students would be able to:

1. Students will comprehend the nature and impact of public debt and principles of its management.
2. Learners will analyze the objectives and implications of fiscal policies in a macroeconomic framework.
3. Students will evaluate India's fiscal federal structure and mechanisms of intergovernmental fiscal transfers.

CO-PO Mapping Table

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

S = Strong | M = Medium | W = Weak

Course Code: P25ECO403T   **External Marks :70**
60 Hrs. (4 Hrs./Week)   **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial)   **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 familiarize students with international trade theories, exchange rate systems, and the balance of payments.

Unit I

Economic Integration and Trade Development: Customs unions, free trade areas, trade creation and diversion, Theory of second best, dynamic benefits,International trade and development: export instability, import substitution, export orientation

Unit II

Balance of Payments and Exchange Markets: Current and capital accounts, Foreign exchange markets: spot, forward rates, exchange rate risks, hedging, Efficiency, interest arbitrage, exchange rate determination, Purchasing Power Parity, monetary approach

Unit III

Exchange Rate Adjustments and Open Economy Macroeconomics: Fixed vs flexible exchange rates, Balance of payments adjustments, Income adjustment in closed and open economy, Absorption approach, IS-LM-BP model, open economy policies

Unit IV

International Monetary System and Institutions: Evolution of the international monetary system: past, present, and future, Gold standard, Bretton Woods system, Role of IMF and World Bank.

Suggested Readings:
1. Bhagwati, J. (2020). *International Trade: Selected Readings*, Cambridge University Press.
2. Krugman, P. & Obstfeld, M. (2023). *International Economics: Theory and Policy*, Pearson.
3. Salvatore, D. (2022). *International Economics*, 13th Edition, Wiley.
4. Van Marrewijk, C. (2020). *International Economics: Theory, Application, and Policy*, Oxford University Press.
5. King, P.G. (2019). *International Economics and International Economic Policy*, McGraw Hill.
6. Kindleberger, C.P. (2021 Reprint). *International Economics*, R.D. Irwin.
7. Sodersten, B.O. & Reed, G. (2018). *International Economics*, Palgrave.
8. Bhagwati, J., Panagariya, A., & Srinivasan, T.N. (2022). *Lectures on International Trade*, MIT Press.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand economic integration and its impact on trade and development.
2. Analyze components and determinants of balance of payments and exchange rate systems.
3. Evaluate the evolution and role of international monetary institutions in the global economy.

CO-PO Mapping Table

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 of Agriculture-II (Option-I) (Semester-IV)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO411T   External Marks :70
60 Hrs. (4 Hrs./Week)   Internal Marks :30
Credit : 4 (3Theory+1Tutorial)   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 question s shall carry equal marks.

Course Objective: To equip students to critically examine key issues in agricultural finance, markets, food security, and trade, along with recent developments in Indian agriculture.

Unit I

Agricultural Finance: Financial characteristics of agriculture, Imperfect information: agency relationship, adverse selection, moral hazard, Enforcement problems in credit markets, Segmented rural credit markets, resolving information and incentive problems, Managing borrowers' credit risks, Agribusiness and trade financing, Government intervention in rural credit markets, Structure and functioning of rural credit markets in India.

Unit II

Agricultural Markets: Agricultural markets: types, problems of agricultural commodity markets, Marketing margins, marketing margin determinants, evaluation of marketing efficiency, Structure of agricultural marketing: horizontal and vertical market relationships, Institutional and organizational forms (cooperatives, marketing orders, boards, trading enterprises), Instability in agricultural markets, price and market stabilization, Role of commodity futures and options.

Unit III

Food Security and International Trade: Concept, threat, and indicators of food security, Mechanisms and food assistance programs (domestic and international), Features of international trade in agricultural commodities, Domestic agricultural and trade policies of developed countries and their global impacts, Agriculture in GATT and WTO negotiations

Unit IV

Recent Developments in Indian Agriculture: Indian agricultural development strategy since independence, Emerging opportunities and challenges: expectations, performance, constraints, and potentials, Indian agriculture in the post-reform period, Latest National Agricultural Policy and strategy in the most recent Five-Year Plan.

Suggested Readings:
1. Besley, Timothy (1994). "How Do Market Failures Justify Interventions in Rural Credit Markets?" *The World Bank Research Observer*, Vol. 9, No.1
2. Bruce L. Gardner & Gordon C. Rausser (Eds.) (2002). *Handbook of Agricultural Economics Vol. 1A & 1B*, Elsevier Science B.V.
3. Bruce L. Gardner & Gordon C. Rausser (Eds.) (2002). *Handbook of Agricultural Economics Vol. 2A & 2B*, Elsevier Science B.V.
4. Ghatak Subrata & Ken Ingersent (1984). *Agriculture and Economic Development*, Harvester Press Ltd., London
5. Government of India (Latest). *Five Year Plan*, Planning Commission, New Delhi
6. Government of India (Latest). *National Agricultural Policy*, Ministry of Agriculture, New Delhi
7. Hoff Karla & Joseph E. Stiglitz (1990). "Introduction: Imperfect Information and Rural Credit Markets—Puzzles and Policy Perspective," *The World Bank Economic Review*, Vol. 4, No.3
8. World Bank (2006). *Rejuvenating Indian Agriculture*, Washington: World Bank

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Understand the structure and challenges of agricultural finance and rural credit markets in India.
2. Analyze the organization and efficiency of agricultural commodity markets.
3. Evaluate national and international strategies for food security and trade in agricultural commodities.

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 Industry-II (Option-II) (Semester-IV)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO412T External Marks :70
60 Hrs. (4 Hrs./Week) **Internal Marks :30**
Credit : 4 (3Theory+1Tutorial) **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 question s shall carry equal marks.

Course Objective: To develop a comprehensive understanding of the structure, dynamics, and policy issues in industrial development with a focus on the Indian context.

Unit I

Nature of industrial data for organized industry, Annual survey of industries – scope and coverage, Uses and critique of ASI data, Major classification of organized industry – by economic activities, type of organization, type of ownership, size of employment, size of output, and net value added and by states.

Unit II

Public policy for industrial development in India since independence – a critique, Pattern of industrial growth and changes in industrial structure in India since 1951, National manufacturing policy.

Unit III

Analysis of business groups in India, Ownership pattern of Indian corporate sector, MRTP and nature of concentration in Indian industry, Liberalization and privatization in Indian industry, Mergers and takeovers, Competition policy and consumer protection in India.

Unit IV

India's FDI inflows – nature and extent, FDI and acquisition of technology in India, Trends in Indian direct investment abroad, Impact of economic reforms on industrial sector in India.

Suggested Readings:

1. Ahluwalia, I.J. (2020). *Industrial Growth in India: Stagnation Since the Mid-Sixties*. OUP India (Reprint Edition).
2. Ministry of Commerce & Industry Reports (2022–24). *FDI Fact Sheets and Annual Industrial Reports.*
3. CMIE (2023). *Indian Industry Outlook*. Centre for Monitoring Indian Economy.
4. OECD (2023). *FDI in Figures*. OECD Publishing.

Course Outcomes (COs): At the end of the course, the students would be able to:

1. Understand and critically analyze industrial data and classification in India.
2. Examine the role of public policy and structural changes in Indian industrial development.
3. Evaluate the patterns of business ownership, competition, and FDI inflows in the industrial sector.

CO-PO Mapping Table

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

S = Strong | M = Medium | W = Weak

Economics
Advanced Econometrics (Option-III) (Semester-IV)
Discipline Specific Course (DSC)-Elective

Course Code: P25ECO413T   External Marks :70
60 Hrs. (4 Hrs./Week)   Internal Marks :30
Credit : 4 (3Theory+1Tutorial)   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 question s shall carry equal marks.

Course Objective: To equip students with advanced econometric techniques for empirical research and analysis of economic relationships.

Unit I

Distributed Lag Models: Formation of expectations, Naive expectations vs. adaptive expectations, Partial adjustment models, distributed lag models, Koyck's model, Almon lag, polynomial distributed lag models, Rational expectations models

Unit II
Limited Dependent Variable Models: Introduction to binary variables, Limitations of LPM, Logistic curve, Probit and Logit models

Unit III
Panel Data Models: Introduction to panel data, Pooled model, within and between estimators, Fixed effects, random effects, Hausman test, One-way and two-way models, Random coefficients and dynamic panel data models.

Unit IV
Stationary Time Series: Autocorrelation and partial autocorrelation, Autoregressive and moving average models, Conditions for stationarity and invertibility, Box-Jenkins approach, Simple exponential smoothing, Parameter selection, Seasonal models with trend and seasonal decomposition.

Suggested Readings:
1.   Tock, J.H., & Watson, M.W. (2020). *Introduction to Econometrics* (4th ed.), Pearson
2.   Baltagi, B.H. (2021). *Econometric Analysis of Panel Data* (6th ed.), Springer
3.   Verbeek, M. (2017). *A Guide to Modern Econometrics* (5th ed.), Wiley
4.   Tsay, R.S. (2010). *Analysis of Financial Time Series* (3rd ed.), Wiley

Course Outcomes (COs): At the end of the course, the students would be able to:
1.   Understand and apply models with distributed lags and expectations formation.
2.   Analyze and estimate limited dependent variable and panel data models.
3.   Evaluate and interpret stationarity, time series components, and forecasting models.

CO-PO Mapping Table

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

S = Strong | M = Medium | W = Weak

Economics
Practices of Agriculture Economics (Option-I) (Semester-IV)
Discipline Specific Course (DSC)- Practicum

Course Code: P25ECO404P   **External Marks :35**
60 Hrs. (4 Hrs./Week)   **Internal Marks :15**
Credit : 02 (Practicum)   **Total Marks: 50**
Note: The practical exam will be taken by external examiner.
Course Objective: To develop students' ability to apply economic tools and data analysis to understand and address real-world agricultural issues and rural policy challenges.

Unit I

Farm-Level Data Analysis and Production Economics: Farm budgeting and cost-return analysis of major crops, Use of production functions in agriculture (Cobb-Douglas, linear), Estimation of farm profitability and break-even analysis ,Practical exercise: Data collection from local farmers (input-output matrix),Crop diversification index and risk analysis at farm level, Introduction to Excel/SPSS/R for agri-data entry and descriptive statistics, Mini-project: Farm economics of a selected crop (group/individual)

Unit II

Policy, Market, and Institutional Practices: Analysis of Minimum Support Prices (MSP) and procurement trends, Agricultural marketing and role of APMCs, e-NAM, FPOs, Impact assessment of rural/agriculture schemes: PM-KISAN, PMFBY, MGNREGA (rural labor link), Visit/report: Local mandi/FPO/Cooperative society, Interpreting secondary data: Agricultural Census, NABARD reports, NSSO Situation Assessment Survey, Case Study Presentation: Success/failure of a rural/agri intervention

Suggested Readings:

1. R. Chand – *Agricultural Policies and Development*

2. S.S. Acharya & N.L. Agarwal – *Agricultural Marketing in India*

3. Government of India – *Agricultural Census Reports, NABARD Rural Surveys*

4. NSSO – *Situation Assessment Survey of Agricultural Households*

5. Ministry of Agriculture – *Annual Reports, PM-KISAN Dashboard, e-NAM Portal*

6. Data portals: MOSPI, DAC&FW, FASAL, CMIE (if available)

7. Articles from *Economic and Political Weekly* on rural/agriculture policy

Course Outcomes (COs): At the end of the course, the students would be able to:

1. Analyze agricultural production, cost structures, and farm income using field data and case studies.
2. Interpret key agricultural datasets and evaluate government schemes related to rural and farm development.
3. Prepare policy briefs and conduct mini field surveys on agricultural topics.

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
Practices of Industrial Economics (Option-II) (Semester-IV)
Discipline Specific Course (DSC)- Practicum

Course Code: P25ECO405P	**External Marks :35**
60 Hrs. (4 Hrs./Week)	**Internal Marks :15**
Credit : 02 (Practicum)	**Total Marks: 50**

Note: The practical exam will be taken by external examiner.

Course Objective: To provide hands-on experience in analyzing industrial structures, firm behavior, and government policies using real-world data and case studies.

Unit I

Firm-Level Analysis and Market Structure: Cost structure and economies of scale in industries**,** Market concentration measures: CR, HHI – application using Indian industry data**,** Pricing strategies and market power in oligopoly (case-based)**,** Productivity and efficiency analysis (DEA basics or single-factor productivity)**,** Use of Annual Survey of Industries (ASI) and CMIE Prowess (if available)**,** Project: Market structure and performance analysis of a selected Indian industry (e.g., cement, telecom, steel)**,** Excel/R-based practical: Plotting cost curves, concentration indices, firm-level trends

Unit II

Industrial Policy and Sectoral Case Studies: Impact of Industrial Policies (1991 reforms, Make in India, PLI Scheme) – practical evaluation**,** MSME sector analysis: field or secondary data interpretation**,** Case studies: Public sector restructuring, privatization outcomes, startup ecosystem**,** Environmental regulation and industrial compliance: case of polluting industries**,** Visit/report: Industrial cluster, manufacturing unit, or MSME enterprise (if feasible)**,** Group assignment: Policy brief on sector-specific challenges (e.g., EV sector, textile industry)

Suggested Readings & Resources:

1. R. R. Barthwal – *Industrial Economics: An Introductory Textbook*
2. Uma Kapila (Ed.) – *Indian Economy: Performance and Policies* (relevant chapters)
3. Government of India – *Annual Survey of Industries (ASI), Economic Survey* (industry chapters)
4. RBI – *Report on Currency and Finance, Industrial Outlook Surveys*
5. Ministry of MSME – *Annual Report*
6. EPW articles and case studies on industrial sectors
7. CMIE, DIPP, and PLI scheme portals for applied data (if accessible)

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Apply tools of industrial organization to evaluate firm performance, market concentration, and pricing strategies.
2. Interpret industrial data and policy documents to understand sector-specific challenges and reforms.
3. Prepare analytical reports and case studies on Indian industries using actual data and field insights.

CO-PO Mapping Table

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

S = Strong | M = Medium | W = Weak

Economics
Filed Survey and Report Writing (Option-I) (Semester-IV)
Skill Enhancement Course (SEC)

Course Code: P25SEC403P(i)   External Marks :35
60 Hrs. (4 Hrs./Week)   Internal Marks :15
Credit : 02   Total Marks: 50

Note: The practical Exam will be taken by outside examiner

Course Objective: To develop practical skills in designing, conducting field surveys, and preparing structured analytical reports on socio-economic issues.

Unit-I

Designing and Conducting Field Surveys: Basics of survey research: purpose, scope, and relevance in economics, Types of surveys: household, enterprise, labour market, rural/urban, Questionnaire design: types of questions, Likert scales, sequencing, piloting, Sampling techniques: random, stratified, purposive, and snowball sampling, Fieldwork planning: team organization, ethics, consent, and data entry protocols

Practical Component: Design and test a structured questionnaire; develop a sampling frame and field schedule.

Unit-II

Data Analysis and Report Writing: Data coding, tabulation, and basic analysis (descriptive statistics and simple cross-tabulations), Structuring the report: executive summary, introduction, methodology, findings, conclusions, Use of tables, graphs, and charts in reports, Common errors in report writing; referencing and citation formats, Preparing policy briefs or presentation slides from survey reports.

Practical Component: Analyze collected data and write a short survey report (individual or group-based).

Suggested Readings:

1. Groves, R. M. et al. (2009). *Survey Methodology*. Wiley.
2. Blair, J., & Blair, E. A. (2015). *Applied Survey Sampling*. Sage.
3. Fowler, F. J. (2014). *Survey Research Methods*. Sage.
4. Goode, W. J., & Hatt, P. K. (2006). *Methods in Social Research*. McGraw-Hill.
5. Young, P. V. (2004). *Scientific Social Surveys and Research*. Prentice Hall.
6. NSSO & NFHS technical manuals (for reference to field methods and survey forms).

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

1. Design and implement structured questionnaires for primary data collection.
2. Apply appropriate sampling and data collection techniques in the field.
3. Analyse field data and prepare concise, evidence-based reports.

Mapping of CO with PO

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

S = Strong, M = Medium, W = Weak

Practical of Research Methodology (Option-II) (Semester-IV)
Skill Enhancement Course (SEC) (Practicum)

Course Code: P25SEC403P(ii)   **External Marks :35**
60 Hrs. (4 Hrs./Week)   **Internal Marks :15**
Credit: 02   **Total Marks: 50**
 Note: The practical Exam will be taken by External Examiner
 Course Objective: To provide practical exposure to the tools and techniques of research design, data handling, and report
 writing in economics.

Unit I

Data Cleaning, Coding, and Tabulation using Excel, Descriptive and Inferential Statistics with practical exercises, Graphical Presentation: Histograms, Pie Charts, and Cross-tabulations, Writing Literature Reviews and Referencing (APA/MLA styles), Structure and Format of a Research Report.

Unit II

Identifying and Formulating Research Problems: Defining Objectives and Hypothesis Building, Designing Schedules and Questionnaires, Sampling Techniques: Random, Stratified, and Snowball, Sources of Secondary Data: NSSO, Census, RBI, World Bank etc.

Suggested Readings:
1. Kothari, C. R., & Garg, G. (Latest Ed.). *Research Methodology: Methods and Techniques*. New Age International.
2. Kumar, R. (Latest Ed.). *Research Methodology: A Step-by-Step Guide for Beginners*. SAGE Publications.
3. Krishna Swami, O. R., & Ranganatham, M. *Methodology of Research in Social Sciences*.
4. OECD, World Bank, NSSO, and MOSPI websites – for practical data sources.

Course Outcomes (COs): At the end of the course, the students would be able to:
1. Develop the ability to frame research problems and formulate hypotheses.
2. Gain proficiency in designing data collection tools and handling real datasets.
3. Acquire skills for writing structured research reports with evidence-based analysis.

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

Option B in IV Semester

SEM-IV (Option B)	Disciplinary Specific + Disciplinary Elective + Dissertation/Project Work @12 Credits (Students of IV Semester M.Sc. Economics can also opt Research Project in lieu of 03 Papers @12 credits)+SEC@2 Credits	SEC @ 2 Credits (U25SEC401P)(i) Field Survey and Report Writing Or Practical in Research Methodology