

FACULTY OF ECONOMICS & BUSINESS

SYLLABUS

For

**Master of Science (Economics)
Semester (I –II)**

(Under Credit Based Continuous Evaluation Grading System)

Session: 2024-2025



**The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)**

Program Specific Outcome – Master of Science (Economics)

M.Sc. Economics is two year post graduate course with five subjects in each semester. The basic objective of M.Sc. Economics is to develop strong theoretical base along with practical skills of students associated with economic theories and real world internal as well as international economic problems. This course will help to develop academicians, researchers, analysis, bankers and anchors

Upon successful completion of this course, students will be able to:

PSO1: have in depth understanding of the basic concepts and theories of various streams of Economics.

PSO2: learn basic and advance data analysis techniques, their theoretical base and basics of research write-ups.

PSO3: learn and understand basic problems and issues of Indian and Punjab Economy.

PSO4: learn latest developments in different streams of Economics.

Programme outcome:

The advanced knowledge gained with the optimum combination of economic theory, quantitative techniques, computer & financial courses open various advanced career options for the students

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
Scheme and Curriculum of Examination of Two-Year Degree Program
Master of Science (Economics) (Session 2024-2025)
Credit Based Continuous Evaluation Grading System (CBCEGS)

Semester-I									
Course Code	Course Title	Course Type	Hours /Week	Credits	Marks				Examination time (in Hours)
					Total	Th	P	CA	
MECL-1171	Microeconomic Theory-1	C	4-1-0	4-1-0	100	70	-	30	3
MECL-1172	Macroeconomic Theory-1	C	4-1-0	4-1-0	100	70	-	30	3
MECL-1173	Statistical Techniques	C	4-1-0	4-1-0	100	70	-	30	3
MECL-1174	Public Economics	C	4-1-0	4-1-0	100	70	-	30	3
MECL-1175 (OPT-__)	Optional to be selected from Table 1	E	4-1-0	4-1-0	100	70	-	30	3
Total Credits		25							

Semester-II									
Course Code	Course Title	Course Type	Hours/ Week	Credits	Marks				Examination time (in Hours)
					Total	Th	P	CA	
MECL-2171	Mathematical Techniques	C	4-1-0	4-1-0	100	70	-	30	3
MECL-2172	Research Methodology	C	4-1-0	4-1-0	100	70	-	30	3
MECL-2173	Econometrics Techniques	C	4-1-0	4-1-0	100	70	-	30	3
MECL-2174	Field work and Report Writing	C	2-0-0	2-0-0	50	35	-	15	3
MECL-2175 (OPT-__)	Optional to be selected from Table 1	E	4-1-0	4-1-0	100	70	-	30	3
MECL-2176 (OPT-__)	Optional to be selected from Table 1	E	4-1-0	4-1-0	100	70	-	30	3
Total Credits		27							

Table 1						
Course Code	Course Title	Credits	CA	P	Th	Total Marks
OPT-I	Financial Institutions and Markets	4-1-0	30	-	70	100
OPT-II	Rural Economics	4-1-0	30	-	70	100
OPT-III	Economics of Environment	4-1-0	30	-	70	100

Master of Science (Economics) Semester – I
Session 2024-2025
Course Code: MECL-1171
Microeconomic Theory-I

Course outcomes:

After passing this course students will be able to:

- CO1:** understand basic economic problems related to choice and scarcity and elasticity of demand and supply.
- CO2:** analyze and demonstrate knowledge of the basic theories and functions in Production.
- CO3:** have an understanding of cost functions and revenue analysis under different market conditions.
- CO4:** study equilibrium under oligopoly and bilateral monopoly; parameters and models of growth performance a firm.

Master of Science (Economics) Semester – I
Session 2024-2025
Course Code: MECL-1171
Microeconomic Theory–I

Time: 3 Hours

L-T-P (Credits):4-1-0
Max. Marks: 100
Theory: 70
CA: 30

Instructions for the Paper Setters:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Nature of economic theory. Theory of demand and supply. Elasticities of demand–theoretical and empirical aspects and their relationship, Utility approach, Indifference curve and revealed preference approach, Revision of demand theory by Hicks. Consumer’s choice involving risk: describing risk, preference towards risk, the demand for risky assets; Consumer’s behavior under asymmetric information; implications of asymmetric information

UNIT-II

Production function–Isoquants, producer’s equilibrium, returns to factor and returns to scale, factor substitution, Euler’s theorem. Cobb–douglès, CES and Translog production functions. Technological progress and production functions.

UNIT-III

Traditional and modern theories of costs–a comparison. Derivation of cost functions from production functions. Revenue analysis, price and output determination under perfect competition, monopoly, monopolistic competition.

UNIT-IV

Oligopoly–collusive and non–collusive models of oligopoly, Bilateral monopoly; workable competition –structure, conduct and performance norms.

Alternative theories of the firm –Baumol’s sales maximization hypothesis, Marris model, Williamson’s model, limit price model, full cost and behavioral models of the firm.

A Case study on elasticity/laws of utility.

Suggested Readings:

1. Henderson & Quandt: Microeconomic Theory, A Mathematical Approach, McGraw-Hill, Newyork, 1978.
2. Koutsoyiannis A.: Modern Microeconomics, Macmillan Press, London, 1979.
3. Heath field & Wibe: An Introduction to Cost and Production Functions, Macmillan Press, London,1979.
4. Layard & Walters: Microeconomics Theory, Mc Graw-Hill, New York, 1978.
5. Naylor & Vernon: Microeconomics and Decisions Models of the Firm, W. Norton, NewYork,1996.
6. Ferguson, C. E.: Microeconomics Theory, Prentice Hall, 1978.
7. Dacosta, G.C.: Value and Distribution, Himalaya Publication, 1992.

Master of Science (Economics) Semester – I
Session 2024-2025
Course Code: MECL-1172
Macroeconomic Theory-I

Course outcomes:

After passing this course students will be able to:

CO1: understand the basics concepts of national income and its measurement.

CO2: understand the basics models of income determination and concept of multiplier

CO3: understand the introductory theories of consumption

CO4: understand the basics of money supply and theories of demand for money

Master of Science (Economics) Semester – I
Session 2024-2025
Course Code: MECL-1172
Macroeconomic Theory–I

Time: 3 Hours

L-T-P (Credits):4-1-0
Max. Marks: 100
Theory: 70
CA: 30

Instructions for the Paper Setters:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

National income: Concept–Production vs. non–productive activities, final vs. intermediate activities, Measurement and difficulties. Domestic and national product and their components. National income at factor cost and at market prices. Real and nominal GNP, GNP and welfare. Social accounting and its significance.

UNIT-II

The classical and Keynesian models of income determination, Overall equilibrium in the basic static model (goods, labour and money markets), Adjustment towards equilibrium. Wage-Price Flexibility: Classical Vs Keynesians Views. Balance budget multiplier.

UNIT-IV

Consumption: Keynesian consumption function. The consumption puzzle; Absolute income hypothesis, Relative income Hypothesis, Permanent Income Hypothesis, Life Cycle Hypothesis.

UNIT-III

Money: Concept of money; High powered money and money multiplier; control of money supply. Classical and Keynesian approach to demand for money; Post–Keynesian approaches to demand for money – Patinkin and the Real Balances Effect, Approaches of Baumol and Tobin; Friedman and modern quantity theory.

A Case study on Consumption function/demand for money.

Suggested Readings:

1. Beckerman, W. An Introduction to National Income Analysis, London, E.L.B.S.1976.
2. Studenski, Paul, A., The Income of Nation part2, Theory and Methodology, New York, University Press,1958.
3. U.N. The System of National Accounts, Series F no.2, 1968.
4. Branson, W.H. Macroeconomic Theory and Policy, New York, Harper & Row,1972.
5. Ackley G. Macroeconomics Theory, New York, Macmillan,1969.
6. Dornbusch, E and S. Fischer Macroeconomics Auckland, McGraw Hill International,1981
7. Levacic, R Macroeconomics: The State and Dynamic Analysis of a Monetary Economy, London, Macmillan,1976.
8. Glahe, F.R. Macroeconomics: Theory and Policy, Harcourt Brace Jovanovich, New York,1973.
9. Crouch, R.L. Macroeconomics, New York, Harcourt Brace Jovanovich, New York,1972.
10. Evans, M.K. Macroeconomics Activity, Harper & Row Publishers, New York,1969

Master of Science (Economics) Semester – II
Session 2024-2025
Course Code: MECL-1173
Statistical Techniques

Course outcomes:

After passing this course students will be able to:

- CO1:** understand the co-variability among variables by using statistical techniques simple, partial and multiple correlation and prediction of dependent variable by using simple regression.
- CO2:** learn the techniques for forecasting and prediction by using multiple regression and non-linear growth curves
- CO3:** understand the concepts of probability in detail and theoretical distributions and also moment generating function
- CO4:** understand the methods of drawing a sample and procedure for hypothesis testing and applications.

Master of Science (Economics) Semester – I
Session 2024-2025
Course Code: MECL-1173
Statistical Techniques

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Correlation and Regression: Meaning, assumptions and limitations of simple correlation and regression– analysis; Pearson’s product moment and spearman’s rank Correlation coefficients, and their properties; partial and multiple correlation. Simple regression–basic idea about least–squares principle, lines of regression and properties of regression co –efficient.

UNIT-II

Methods of estimating Multiple linear regression equation. Method of estimation of second degree parabolic, exponential and modified exponential curves; Method of computing average annual rate of growth.

UNIT-III

Elements of probability: Deterministic and non –deterministic experiments, various types of events. Classical and empirical definitions, laws of addition and multiplication of probability, conditional probability and the concept of independence of events, elementary concept of a random variable, probability mass and density functions. Expectations, moments and moments generating function of a random variable.

UNIT-IV

Properties and applications of binomial, poisson and normal distributions.

Sampling: Concepts uses in sampling, difference between random and non–random sampling, simpler and om sampling, stratified random sampling and p.p.s.sampling. Concept of a statistic and its sampling distribution.

A Case study on applications of correlation and regression using statistical software

Suggested Readings:

1. Chou Ya–Lun: Statistical Analysis.
2. Croxton, Cowden and Klein: Applied General Statistics.
3. Gupta S.C. and Kapur V.K.: Fundamentals of Applied Statistics, Sultan Chand & Sons (1993).
4. Miller, Jane: Statistics for Advanced Level, Cambridge University Press (1996).
5. Spiegel, M.R.: Theory and Problems of Statistics.
6. Hogg, R.V. and Craig A.T.: Introduction to Mathematical Statistics (3rdEd.), Macmillan Publishing Co., New Delhi.
7. Sukhatme, P.V. and Sukhatme B.V.: Sampling Theory of Surveys with Applications, Iowa State University Press, Ames, Iowa (1970)

Master of Science (Economics) Semester – I
Session 2024-2025
Course Code: MECL-1174
Public Economics

Course outcomes:

After passing this course students will be able to:

CO1: understand the introduction to and rationale of public economics.

CO2: understand the various concepts and system of provision of public goods

CO3: understand the effects of government expenditure and theories of public economics.

CO4: understand Indian system of public finance and transfer of financial resources.

Master of Science (Economics) Semester – I
Session 2024-2025
Course Code: MECL-1174
Public Economics

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Introduction to public Economics: Nature and scope, Social Choice, Voting Rules, Arrow's Impossibility Theorem Rationale for state intervention: Market failures and externalities. Public Goods: Pure and Local, Merit goods, club goods, The Tiebout hypothesis.

UNIT-II

Public revenue : sources, taxation, tax elasticity and buoyancy, taxable capacity and tax effort; Theory of incidence; equity in taxation; principles of taxation; direct and indirect taxes; effect of taxation on production and distribution; major taxes in India; tax reforms in India.

UNIT-III

Evaluation of government expenditure: Cost-benefit analysis, elements, principles and theoretical foundations. Theories of Public Sector: Wagner's Law, Baumol's Law, Ratchet effect.

UNIT-IV

Fiscal federalism – theory and problems. Criteria for resource transfer from Union to States, Centre-State financial relations in India, recommendations of the latest Finance Commission. Fiscal policy – objectives, interdependence of monetary and fiscal policies.

A Case study on the impact of GST on Indian economy/structure of public expenditure in India.

Suggested Readings:

1. Atkinson A.B. and J.E. Stiglitz, Lectures on Public Economics, New York: McGraw- Hill, 1980
2. Cullis J. and P. Jones, Public Finance and Public Choice, OUP, 1998
3. Hindriks J. and G.D. Myles, Intermediate Public Economics, MIT Press, 2006
4. Myles G., Public Economics, Cambridge University Press, 1995
5. Oates W., Fiscal Federalism, New York: Harcourt, Brace Jovanovich, 1972
6. Purohit M., Value Added Tax, Gayatri Publications, 2001
7. Tresch R., Public Finance: A Normative Theory, Academic Press, 1995
8. Mueller D., Public Choice III, Cambridge University Press, 2003 (Modules 1,2,3,4)
9. Drazen A., Political Economy in Macroeconomics, Princeton University Press, 2000 (Modules 1,3)
10. Cullis J. And P. Jones, Public Finance and Public Choice, Oxford University Press, 1998 (Module 4)

Master of Science (Economics) Semester – II
Session 2024-2025
Course Code: MECL-2171
Mathematics for Economists

Course outcomes:

- CO1:** Recognize the concept of functions and rules of differentiation and apply this to find out revenue, cost, demand, supply function, elasticity and their types.
- CO2:** To learn the concept of differential equations and the concepts of integration and its applications to consumer's surplus and producer's surplus.
- CO3:** To learn the matrix algebra and solve the system of equations using matrices. Students will also be able to understand the concept of quadratic forms, Eigen roots and Eigen vectors.
- CO4:** to learn linear programming problem, its formulation and solution through graphical and simplex methods.

Master of Science (Economics) Semester – II
Session 2024-2025
Course Code: MECL-2171
Mathematics for Economists

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Differentiation: Differentiation. Partial derivatives, Euler's theorem and total differentials. Maxima and minima with and without constraints. Economic applications of differentiation.

UNIT-II

Differential and Difference Equations: Differential and difference equations of first and second order. Integration: Simple integration, Integration by parts, partial fractions, Definite integral, Economic application of integration.

UNIT-III

Linear Algebra: Matrix: Types, properties of determinants, inverse of matrix, Solution by Cramer's rule and matrix inverse method.

Characteristic roots and vectors, quadratic forms: Application of matrix in input–output analysis.

UNIT-IV

Linear Programming: Formulation of L.P.P.: simplex and graphical methods, two–phase simplex method and dual simplex method, Concept of duality.

Suggested Readings:

1. Yamane, Taro: Mathematics for Economists, Printice Hall, Latest Edition
2. Chiang, A: Fundamental Methods of Mathematical Economics, McGraw Hill Ltd.1974
3. Chang Yan Chiou: Introduction to Input–output Economics.
4. Taha, H.A.: Operations Research: An Introduction, Pearsons Publications Latest Edition.
5. Monga, G.S.: Mathematics for Management and Economics. S. Chand and Co.2017.
6. Sancheti, D.C. & V.K. Kapoor: Business Mathematics, S. Chand & Sons.2018.
7. Balwant Kandoi: Mathematics for Business & Economics, Volume I & II Himalya Publications

Master of Science (Economics) Semester – II
Session 2024-2025
Course Code: MECL-2172
Research Methodology

Course outcomes:

After passing this course students will be able to understand:

- CO1:** the basics research and formulation of research problems
- CO2:** the basics of writing a review of literature, referencing and plagiarism
- CO3:** the identification of variables and testing of hypothesis
- CO4:** the ethics in social science research and basics of research writings

Master of Science (Economics) Semester – II

Session 2024-2025

Course Code: MECL-2172

Research Methodology

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Introduction to Research: Meaning, purpose, significance of research, Research methods versus methodology, Classification of Research based on its purpose, Research process.

Formulating a research problem: Selecting the problem, necessity of defining a problem, steps in the formulation of a research problem and objectives.

UNIT-II

Literature review and critical thinking: The scope and importance of a literature review, types of literature review, procedure for reviewing the literature.

Documentation and referencing, Plagiarism and how to avoid it?

UNIT-III

Identification of variables: Types of variables from the point of view of causation, study design and unit of measurement. Types of measurement scale: nominal, ordinal, interval and ratio scale.

Constructing hypothesis: Definition, characteristics, and types of a hypothesis. Data Preparation, screening and transformation.

UNIT-IV

Ethical issues in social science research: Principles of ethically acceptable research, Codes of ethics.

Research writing: Characteristics of a good research paper. Planning and preparing a final research report.

A Case study on designing of questionnaire using different scales of measurement/review of literature on any economic problem/policy/issue.

Suggested Readings:

1. C.R. Kothari; Research Methodology: Methods and Techniques, Wiley Eastern Limited, 1985.
2. Kumar, R. Research Methodology: A step-by-step guide for beginners, 4th edition, Pearson, 2014.
3. Paul D. Leedy and J E Ormrod. Practical Research Planning and design, 11th edition, Pearson, 2018.
4. Creswell, J. W. Research design: Qualitative, quantitative and mixed methods approach. 5th Ed. Thousand Oaks, CA: Sage, 2018.
5. Majhi, P. R. and Khatua, P. K. Research Methodology. 2nd Edition, Himalaya Publication House, 2018.

Master of Science (Economics) Semester – II
Session 2024-2025
Course Code: MECL-2173
Econometric Techniques

Course outcomes:

After passing this course students will be able to understand:

CO I: various problems in the process of estimation of regression.

CO II: uses and basic models related to dummy variables.

CO III: various time series properties and their testing procedures.

CO IV: simultaneous equation models and their estimation.

Master of Science (Economics) Semester – II

Session 2024-2025

Course Code: MECL-2173

Econometric Techniques

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

Unit-I

Meaning and Scope of Econometrics, Multiple Regression Model: Estimation. Problems of regression analysis: Nature, test, consequences and remedial steps of problems of heteroscedasticity, multi collinearity and auto-correlation, Problem of specification bias.

Unit-II

Dummy variables and their uses; Regression with dummy dependent variables; The LPM, Logit, Pro bit.

Unit-III

Time Series Analysis: Stationary time series and their properties; Random Walk model, Testing for unit roots (Dickey-Fuller test and Augmented Dickey-Fuller test), co-integration–spurious regression, Causality analysis (Granger and Sim’s test).

Unit-IV

Simultaneous equations models: The simultaneous equation bias and inconsistency of OLS estimators; The identification problem; Rules of identification–order and rank conditions; Methods of estimating simultaneous equations system; Recursive methods; Indirect Least Squares (ILS), Panel Regression Model: Random and Fixed Effects.

Case Study on time series properties using statistical software.

Suggested Readings

1. Johnston, J.: Econometric Methods, McGraw Hill, New York, 1972.
2. Koutsoyiannis A.: Theory of Econometrics, Palgrave Macmillan, 1978.
3. Gujarati, D.: Basic Econometrics, McGraw Hill Education, 1978.
4. Chow G. C.: Econometrics, McGraw Hill International, 1977.
5. Madala, G.S: Introduction to Econometrics, Wiley-India, 2009.
6. Pollock Beg: The Algebra of Econometrics, Wiley Series in Probability and Statistics, 1979.
7. Greene, W.H.: Econometrics Analysis, Prentice Hall, New York, 2018.

Master of Science (Economics) Semester – II
Session 2024-2025
Course Code: MECL-2174
Field Work and Report Writing

Credits: L-T-P:2-0-0
Total Marks: 50

Master of Science (Economics)
Session 2024-2025

OPT-I (Financial Institutions and Markets)

Course outcomes:

After passing this course students will be able to:

CO1: understand the functioning of leading developing financial institutions in India.

CO2: understand the working of non-banking financial intermediaries and mutual funds.

CO3: understand the mechanism as well as working of Insurance sector in India.

CO4: understand of the working of money and capital markets their structures and role of SEBI.

Master of Science (Economics)
Session 2024-2025

OPT-I (Financial Institutions and Markets)

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Development financial institutions: Evolution of development banks, changing role, IFCI, IDBI, ICICI, NABARD, SIDBI, State Industrial Development Corporations, State Financial Corporations, Performance of All Indian Financial Institutions.

UNIT-II

Non-banking financial intermediaries: Definition and types of Regulation of NBFIs. Mutual Funds: Growth of mutual funds in India, Types of mutual funds schemes, Risks in Mutual funds SEBI guide lines relating to mutual funds. Financial Sector reforms (recent developments).

UNIT-III

Commercial Banks: Systems, Theories of banking, Structure of Commercial Banks in India, Major Reforms in Banks. **Central Banking:** Functions with special reference to developing countries, RBI: Functions and Instruments, Role and functions of Insurance Regulatory and Development Authority (IRDA). SEBI: Role, Powers and Scope.

UNIT-IV

Role and structure of money and capital markets: Call money market, commercial bill market, Treasury Bills Market, Government Securities Market, Primary and Secondary Market for Securities. A Case study on working of any financial institution.

Suggested Readings

1. Bhole, L.M. (2004), Financial Institutions and Markets: Structure, Growth and Innovation, Tata McGraw Hill, New Delhi.
2. Palande, P.S. et al (2003), Insurance in India: Changing Policies and Emerging opportunities, Sage Publications, New Delhi.
3. Pendharkar, V.G. (2003), Unit Trust of India: Retrospect and Prospect, UBS Publishers' Distributors Ltd., New Delhi.
4. Pathak, B.V. (2008), The Indian Financial System Markets, Institutions and Services, Dorling Kindersley (India) Pvt. Ltd., New Delhi.
5. Gupta, S.B. (2006), Monetary Economics Institutions, Theory and Policy, S. Chand & Co. Ltd., New Delhi.
6. Reserve Bank of India, Handbook of Statistics on Indian Economy, Various Issues.
7. Cherunilam Francis (2012), Business Environment, Himalaya Publishing House Pvt. Ltd.

Master of Science (Economics)
Session 2024-2025
OPT-II (Rural Economics)

Course outcomes:

After passing this course students will be able to:

CO1: learn the role of reforms in land utilization, agriculture and industry in rural development.

CO2: understand the rural unemployment and the role of capital formation in rural development. In additions, students will also learn the agricultural development took place in terms of agriculture production.

CO3: learn the agricultural price policy and different marketing systems of agricultural produce.

CO4: Comprehend the various schemes for rural industrialization and the role of social and economic overhead for rural development.

**Master of Science (Economics)
Session 2024-2025**

OPT-II (Rural Economics)

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Concept: Nature and Scope, Agriculture industry interaction: theories and empirical evidences.

Land: Utilisation, Land reform, supply and pricing of inputs.

UNIT-II

Rural Labour and employment: Disguised unemployment, Extent, causes and estimates of rural poverty, Interstate labour migration: factors and implications.

Capital formation in rural sector: Savings and assets formation, credit–institutional and non–institutional special role of NABARD and RRBS.

Production: Agricultural growth in India; Production function, Farm budgeting, Technical changes: Green revolution.

UNIT-III

Rural marketing: Traditional marketing, regulated markets, co –operative marketing and contract farming.

Agricultural prices: Price behaviour; cobweb cycle; public distribution system; terms of trade, agriculture price policy.

UNIT-IV

Rural Industrialisation: Concept and scope, Government policy, KVIC, Mini–industrial estates. Industrial cooperatives. TRYSEM.

Economic and social infrastructure: Transport & Communications, power, education, drinking water, health, Sanitation and rural housing, social forestry and environment. Strategies of rural development in plans. Poverty alleviation programmes.

A case study of Rural labour/employment generation programmes in a Village.

Suggested Readings:

1. Aziz, Sartaj: Rural Development Learning from China.
2. Hirschman, A, O.: The Strategy of Economic Development.
3. Singh, Radha Raman: Studies in Regional Planning and Rural Development.
4. Shah, S.M., Whitby, M.C. D.L.J.: Rural Development, Planning and Reforms.
5. Robins, A.N. and Tensery, K.G. Wills.: Rural Resources Development.
6. Nangundappa, D.M.: Area Planning and Rural Development.
7. Arora, R.C: Integrated Rural Development.
8. Raghava Rao, D.V.: Panchayats and Rural Development.
9. D.S. Tyagi: Public Distribution in India.
10. Sukhpal Singh: Contract Farming and the State: Experience of Thail and India, Kalpaz Publications, 2006.

Master of Science (Economics)
Session 2024-2025
OPT-III (Economics of Environment)

Course outcomes:

After passing this course students will be able to:

CO1: understand environmental policies & regulations and externalities.

CO2: understand the Environmental and development trade-off in context of sustainability development and social accounting.

CO3: understand measurement of benefits and costs of environmental protection, ecological balance in the context of water, land air and spices and energy policy.

CO4: understand global economic issues, sustainable development, trade, WTO regime, strategies and forums in the context of environment protection.

Master of Science (Economics)
Session 2024-2025
OPT-III (Economics of Environment)

Time: 3 Hours

L-T-P (Credits):4-1-0

Max. Marks: 100

Theory: 70

CA: 30

Note: Instructions for the Paper–Setter:

Two questions, each carrying 16 marks, from each of the Units I-IV (i.e. a total of eight questions) are to be set. Candidates are required to attempt five questions, selecting at least one from each unit. The fifth question may be attempted from any unit.

UNIT-I

Environment: Basic concepts, Environment and economics, Distinction between Environmental economics and Ecological Economics. Externalities, common property resources, public goods. Environmental externalities –Piguvian taxes and subsidies, marketable pollution permits, Coase theorem, monitoring and enforcement of environmental regulation.

UNIT-II

Environmental and development trade–off, concept of sustainable development, sustainability– neo–classical and ecological views. Integrated environmental and economic accounting and measurement of environmentally corrected GDP.

UNIT-III

Measurement of benefits and costs of environmental protection and benefit –cost analysis. Environmental regulation and legislation–air, water, land, chemical sand pesticides, endangered species protection, incentive based regulation, promoting clean technology. Energy policy and environment.

UNIT-IV

Global issues–poverty, population and environment, global agreements on environment, political economy of sustainable development, trade and policy environment under WTO regime. Rio Convention, Bali Action Plan, Green Climate Fund.
Mechanism for environment regulation in India; environmental laws and their implementation; Recent policy instruments for controlling pollution environmental standards; social forestry – rationale and benefits.

A Case study on environmental issues due to industrialization/Agricultural Farming

Suggested Readings

1. Baumol, YAN and W.R. Ostes (1998). The Theory of Environmental Policy, Cambridge University Press.
2. Bromely, D.W. (ed) (1995). Handbook of Environmental Economics, Blackwell, London.
3. Hanley, N. and C.J. Roberts (ed.) (2002). Issues in Environmental Economics, Blackwell, Oxford, Macmillan.
4. Kolstad, C.D. (1999) Environmental Economics, Oxford, New Delhi.
5. Sankar, U. (ed.) (2001) Environmental Economics an Indian Perspective, Oxford, New Delhi.
6. Sengupta, R.P. (2001) Ecology and Economics: An approach to Sustainable Development, Oxford, New Delhi.
7. Chadha, G.K. (ed.) (2001) WTO and Indian Economy, Deep & Deep, New Delhi.
8. Goodstein, E.S. (2002) Economics and the Environment, John Wiley, New York.
9. Kadekodi, G.K. (2004) Environmental Economic