Annexure D

FACULTY OF ECONOMICS & BUSINESS

SYLLABUS

For

Master of Arts (Economics)
Semester (I –II)

(Under Credit Based Continuous Evaluation Grading System)

Session: 2023-24

The Heritage Institution
Kanya Maha Vidyalaya, Jalandhar
(Autonomous)

Program Specific Outcome – Master of Arts (Economics)

M.A. Economics is two year post graduate course with five subjects in each semester. The basic objective of M.A. 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 and their theoretical base.

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

PSO4: learn latest developments in different streams of Economics.

Kanya Maha Vidyalaya, Jalandhar (Autonomous)
SCHEME OF STUDIES AND EXAMINATIONOF TWO YEAR DEGREE PROGRAM

Master of Arts (Economics) (Session 2023-2024)

Credit Based Continuous Evaluation Grading System (CBCEGS)

Semester-I									
Course Code	**Course Title**	**Course Type**	**Hours Per Week**	**Credits**	**Marks**				**Examination time (in Hours)**
					Total	**Th**	**P**	**CA**	
MECL-1171	Microeconomics-I	C	4	4-0-0	100	80	-	20	3
MECL-1172	Macroeconomics-I	C	4	4-0-0	100	80	-	20	3
MECL-1453	Quantitative Methods for Economists-I	C	4	4-0-0	100	80	-	20	3
MECL-1174 (OPT-__)	Option to be selected from Table No. 1 below	E	4	4-0-0	100	80	-	20	3
MECL-1175 (OPT-__) / MECM-1125 (OPT- XI)	Option to be selected from Table No. 1 below	E	4	4-0-0	100 100	80 50	- 30	20 20	3 3+3
Students can opt any one of the following Interdisciplinary compulsory courses		IDE		4-0-0 2-0-2 4-0-0 2-0-2	100 100 100 100	80 80 80 50	- - - 30	20 20 20 20	3 3 3 3+3
TOTAL CREDITS		**20**			**500**				
IDEC-1101 IDEM-1362 IDEH-1313 IDEI-1124 IDEW-1275		Effective Communication Skills Basics of Music (Vocal) Human Rights and Constitutional Duties Basics of Computer Applications Indian Heritage: Contribution to the World							

Sr. No.	**(Table No. 1) Paper Title**
OPT-I	Public Finance
OPT-II	Economics of Labour
OPT-III	Theory of Statistics
OPT-IV	Money, Banking and Finance
OPT-V	Industrial Economics
OPT-VI	History of Economic Thought
OPT-VII	Economics of Socialism
OPT-VIII	Econometrics
OPT-IX	Economics of Agriculture
OPT-X	Economics of Public Enterprises
OPT-XI	Computer Applications for Economists (Th.:50+ Pr.: 30+ Int. Ass.:20) = 100 Marks
OPT-XII	Operations Research
OPT-XIII	Economics of Environment and Demography
OPT-XIV	Economics of Infrastructure
OPT-XV	Dissertation* (*in lieu of one optional paper in MA Semester III and IV each). Marks=200 [Credits =8]

OPT-XVI	Field Work and Report Writing [Credits =2]

Note: 1. C- Compulsory Course; E –Elective; IDE- Inter Disciplinary optional Course;

2. Credit points of Interdisciplinary compulsory course will not be included in the SGPA/CGPA of Semester/ Programme.

3. Every Masters student may choose one ID Course in Semester I and One in Semester II.

Kanya Maha Vidyalaya, Jalandhar (Autonomous)

SCHEME OF STUDIES AND EXAMINATIONOF TWO YEAR DEGREE PROGRAM

Master of Arts (Economics) (Session 2023-2024)

Credit Based Continuous Evaluation Grading System (CBCEGS)

Semester-II									
Course Code	**Course Title**	**Course Type**	**Hours Per Week L-T-P**	**Credits L-T-P**	**Marks**				**Examination time (in Hours)**
					Total	**Th**	**P**	**CA**	
MECL-2171	Microeconomics-II	C	4	4-0-0	100	80	-	20	3
MECL-2172	Macroeconomics-II	C	4	4-0-0	100	80	-	20	3
MECL-2453	Quantitative Methods for Economists-II	C	4	4-0-0	100	80	-	20	3
MECL-2174 (OPT-__)	Option to be selected from Table No. 1 below	E	4	4-0-0	100	80	-	20	3
MECL-2175 (OPT-__) / MECM-2125 (OPT- XI)	Option to be selected from Table No. 1 below	E	4	4-0-0	100 100	80 50	- 30	20 20	3 3+3
MECL-2176 (OPT-__)	Option to be selected from Table No. 1 below	E	4	4-0-0	100	80	-	20	3
MECL-2177 (OPT-XVI)	Field Work and Report Writing	C	4	0-0-2	50	40	-	10	3
Total Credits				**26**	**650**				

Sr. No.	**(Table No. 1) Paper Title**
OPT-I	Public Finance
OPT-II	Economics of Labour
OPT-III	Theory of Statistics
OPT-IV	Money, Banking and Finance
OPT-V	Industrial Economics
OPT-VI	History of Economic Thought
OPT-VII	Economics of Socialism
OPT-VIII	Econometrics
OPT-IX	Economics of Agriculture
OPT-X	Economics of Public Enterprises
OPT-XI	Computer Applications for Economists (Th.:50+ Pr.: 30+ Int. Ass.:20) = 100 Marks
OPT-XII	Operations Research
OPT-XIII	Economics of Environment and Demography
OPT-XIV	Economics of Infrastructure
OPT-XV	Dissertation* (*in lieu of one optional paper in MA Semester III and IV each). Marks=200 [Credits =8]
OPT-XVI	Field Work and Report Writing [Credits =2]

Note: 1. C- Compulsory Course; E –Elective

MASTER OF ARTS (Economics) Semester – I
Session 2023-24
Course Code: MECL-1171
Microeconomics-I

Course Outcomes:

After passing this course students will be able to:

CO1: have an in-depth understanding of consumer behaviour, cost curves and production behaviour.

CO2: explain what is meant by economic efficiency and the mechanism by which competitive markets lead to an efficient allocation of resources.

MASTER OF ARTS (Economics) Semester – I
Session 2023-24
Course Code: MECL-1171
Microeconomics–I

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Basic Economic Problem - Choice and Scarcity. Deductive and Inductive methods of Analysis.
Role of assumptions in theory formulation. Positive and Normative Economics. Economic Models.
Elasticities (Prices, Cross, Income) of demand – theoretical aspects and empirical estimation. Elasticity of supply.

UNIT – II

Theories of demand – Utility, Indifference curve (Price, Income and Substitution effects; Hicks and Slutsky Substitution effect, Compensated Demand Curve) and their Applications, Revealed Preference Theory.

UNIT – III

Consumer's choice involving risk: describing risk, preference towards risk, the demand for risky assets. Consumer's behaviour under Asymmetric information, Implications of Asymmetric information- Market Signaling, Moral hazard, Managerial incentives in an integrated firm; Asymmetric information in labour markets–efficiency wage theory. Recent development in demand analysis (linear Expenditure System).

UNIT – IV

Production function: Short period and long period; Law of variable proportions and returns to scale; Isoquants – Least cost combination of inputs; Returns to scale; Technical progress and production function; Cobb–Douglas; CES; Translog production function and their properties. Economies of scale. Multiproduct firm. Elasticity of substitution. Euler's theorem. Traditional and Modern theories of cost - Derivation of cost functions from production function(C–D and CES).

Suggested Readings:

1. Ahuja,H.L.(2018), '*Advanced Economics Theory: Micro Economics analysis'*,S. Chand Publishing.
2. Dwivedi, D.N. (2018), '*Microeconomics: Theory and Applications',* Pearson Education, New Delhi.
3. Koutsoyiannis, A.(2015), '*Modern Microeconomics',* Macmillan Press, London.
4. Sen, A.(2007), '*Microeconomics: Theory and Applications'*, Oxford University Press, New Delhi.

Note: The latest edition of the books is recommended..

MASTER OF ARTS (Economics) Semester – I
Session 2023-24
Course Code: MECL-1172
Macroeconomics-I

Course Outcomes:

After passing this course students will be able to:

CO1: understand the basics of national income accounting and theoretical details of classical and Keynes model of income & employment determination.

CO2: understand the introductory theories of consumption and investment and factor affecting consumption and investment decisions.

CO3: understand factors affecting supply and demand for money.

MASTER OF ARTS (Economics) Semester – I
Session 2023-24
Course Code: MECL-1172
Macroeconomics–I

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

National Income and Accounts: Concept of national income, national Income and welfare, Social Accounts and its uses. Classical and Keynesian Models of income determination, wage price flexibility: classical & Keynesian View.

UNIT – II

Consumption Function: Keynes psychological law of consumption, short–run and long–run consumption function, Empirical evidence on consumption function, income–consumption relationship: absolute income, relative income, life cycle and permanent income hypotheses.

UNIT – III

Investment Function: Keynesian Theory, the accelerator Theory, Neo Classical Theory (Jorgenson's Model), Tobin Q Theory.

UNIT– IV

Money: Concept of money, Empirical definition of money, High powered money and money multiplier, Credit Creation by Banks, 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.

Suggested Readings:

1. Beckeman, W.(1976) *An Introduction to National Income Analysis*, London, 1976, E.L.B.S.
2. Branson, W.H. (1969) *Macroeconomics Theory and Policy*, New York, Harper & Row.
3. Ackley G. (1969) *Macroeconomics Theory*, New York, Macmillan.
4. Junankar, P.N.(1972) *Investment: Theories and Evidence*, London, Macmillan.
5. Shapiro, E. (2001) *Macroeconomic Analysis*, Galgotia Publications, New Delhi.

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics) Semester – I
Session 2023-24
Course Code: MECL-1453
Quantitative Methods for Economists–I

Course Outcomes:

CO 1: Recognize the concept of functions and rules of differentiation and apply this to find out revenue, cost, demand, supply function, elasticity and their types.

CO 2: Understand the rule of partial differentiation and interpretation of partial derivatives.

CO3: Manage to solve the problem related to maxima and minima in single and multivariable functions for application in market equilibrium.

CO4: Learn concepts of integration and its applications to consumer's surplus and producer's surplus.

CO5: Determine the solution of simultaneous equation through crammer's rule and understand the concept of quadratic forms, Eigen roots and Eigen vectors.

CO6: Recognize linear programming problem and its formulation and solution through graphical and simplex methods.

CO7: Well understanding the concept of duality, concept of a game, saddle point solution and its simple applications in economics.

MASTER OF ARTS (Economics) Semester – I
Session 2023-24
Course Code: MECL-1453
Quantitative Methods for Economists–I

Time: 3 Hours **L-T-P (Credits):4-1-0**
Max. Marks: 100
Theory: 80
CA: 20

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 of function and its types ; Rules of differentiation; Application to revenue, cost, demand, supply functions; Elasticities and their types; production function; Rules of partial differential and interpretation of partial derivatives; homogeneous functions and Euler's theorem.

UNIT– II

Problem of maxima and minima in single and multivariable (upto3) functions; Unconstrained and constrained optimization in simple economic problems; Simple applications in market equilibrium; Concept of integration; Simple rules of integration; Application to consumer's surplus and producer's surplus.

UNIT– III

Determinants and their basic properties; Solution of simultaneous equations through Cramer's rule, Concept of matrix–their types, simple operations on matrices, matrix inversion and rank of a matrix; Concept of quadratic form, Eigen roots and Eigen vectors; Introduction to input–output analysis.

UNIT– IV

Linear Programming –Formulation and solution through graphical and simplex method. Statement of basic theorems of linear programming; Formulation of the dual of primal and its interpretation; Shadow prices and their uses; Concept of duality; Concept of a game; Strategies – simple and mixed; Value of a game; Saddle point solution; Simple applications.

Suggested Readings:

1. Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press and ELBS, London.
2. Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
3. Yamane, Taro (1975), Mathematics for Economists Prentice Hall of India, New Delhi.
4. Vygodsky, G.S. (1971), Mathematical Handbook (Higher Mathematics), Mir Publishers, Moscow.
5. Kothari, C.R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.
6. Mustafi, C.K. (1992), Operations Research: Methods and Practice, Wiley Eastern, New Delhi.

Note: The latest edition of the books is recommended..

MASTER OF ARTS (Economics)
Session 2023-24
OPT-I (Public Finance)

Course outcome:

After passing this course students will be able to:

CO1: analyze the functioning of modern public finance to predict and verify the effects of government intervention on behaviour of individuals, households and firms.

CO2: understand the fiscal policy principles to demonstrate a good understanding of the fiscal framework for taxing and spending and to analyze the instruments and objectives of budgetary policy.

CO3: analyze critically tax reforms and policy choices in developed and developing countries.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-I: Public Finance

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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 Public Finance, Role of Public Finance in developing countries. Distinction between public, private and merit goods.
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; effects of taxation on production and distribution; major taxes in India; recent tax reforms in India.

Unit– II

Public expenditure: structure and growth of public expenditure, reasons for growth in public expenditure; Wagner's law, Peacock and Wiseman's hypothesis; Effects of public expenditure on production and distribution; Role of public expenditure in developing countries.

Unit– III

Public budgets: kinds of budget, programme budgeting and zero-base budgeting; different concepts of budget deficits, latest budget of Union Government in India.
Public debt: classification, significance and burden of public debt, principles of debt management, external debt servicing, Public debt in India.

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.

Suggested Readings:

1. Musgrave, R.A. (1989), "The Theory of Public Finance", McGraw Hill, Kogakusha, Tokyo.
2. Tyagi, B.P. (2004), "Public Finance", Jai Prakash Nath & Company, Meerut.
3. Srivastava, D.K. (2000), "Fiscal Federalism in India", Har-Anand Publications Ltd.,New Delhi.
4. Government of India (1992), Reports of the Tax Reforms Committee – Interim and Final (Chariman: Raja J. Chelliah).

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-II (Economics of Labour)

Course outcome:

After passing this course students will be able to:

CO1: understand labour market issues and theories.

CO2: analyze trends and pattern in the labour market and understand wage and social security scheme structure.

CO3: analyze a variety of public policy issues revolving around labour in India.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-II: Economics of Labour

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Nature, scope and subject matter of labour economics; Labour Market: Concept, characteristics, Nature and characteristics and growth of labour markets in India. Theories of Labour markets: Classical, Neo-classical, Dualistic Labour Markets.

Unit– II

Employment and Unemployment – Concept, types and measurements; nature of unemployment in India, Employment policy in five year plans, Casualization of employment in India, Employment in organized and unorganized sector, MGNREGA Scheme .

Wages: classical and neo-classical and bargaining theories of Wages. Concept of Wages – minimum wage, living wage and fair wages in India, Wages and productivity.

Unit– III

Trade Unions; Objectives and functions, Trade unions in India. Industrial Relations in India. Industrial Disputes – Causes and extent, Dispute settlement, Machinery in India in the framework of Industrial Disputes Act.

Unit– IV

Social Security – social assistance, social insurance and social security policy in India. Labour Welfare: State policies with respect to labour welfare in India, Labour Pension Scheme, Labour market reforms in India, exit policy and measures to make labour market flexible; Second National Commission on labour; Globalization and labour markets.

Suggested Readings:

1. Datar, B.N.(1968): Labour Economics, Allied Publisher, Bombay.
2. Dunlop J.T. (ed) : Theory of Wages Determination, Palgrave Macmillan.
3. Report of the National Commission on Labour in India, 1969.
4. I.L.O. : Approaches to Social Security, various Issues.
5. Pant, S.C.(1965): Indian Labour Problems, Chaitanya Publishing House.
6. Papola, T.S., P.P. Ghosh and A.N. Sharma (Eds.)(1992) , Labour, Employment and Industrial Relation in India, B.R. Publishing Corporation, New Delhi.
7. Tyagi, B.P.(2017) Labour Economics and Social Welfare, Jai Prakash Nath and Co., Meerut.

Note: The latest edition of the books is recommended..

MASTER OF ARTS (Economics)
Session 2023-24
OPT-III (Theory of Statistics)

Course outcome:

After passing this course students will be able to:

CO1: understand the various probability distributions, importance of its underlying assumptions and its applications

CO2: learn the procedure of hypothesis testing and identify appropriate parametric and non-parametric tests for analyzing data.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-III: Theory of Statistics

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Axiomatic definition of probability, Chebychev's inequality, meaning of theoretical probability distributions; derivation of main properties of binomial, poisson, normal, gamma and beta distributions.

Unit – II

Meaning of sampling distribution of a statistic; desirable properties of point estimators; internal estimation; derivation of main properties of χ^2, t and F distributions; maximum likelihood estimation (properties without derivation) and applications.

Unit – III

Basic concepts of hypotheses testing; tests of significance based upon Z, χ^2, t and F distributions.

Unit – IV

Non-parametric tests (without derivations; stress on numerical examples): Ordinary sign test, Wilcoxon's signed rank test, test of randomness, Wald-Wolforutz run test, Mann-Whitney test, Kruskel-Wallis test, Kendall's concordance test.

Suggested Readings:

1. Goon, A.M., Gupta, M.K. and Das Gupta, B. (1977), *An Outline of Statistical Theory,* Vols. I & II, The World Press Ltd., Calcutta.
2. Gupta and Kapoor(2014) , *Fundamentals of Mathematical Statistics* , Sultan Chand & Sons , New Delhi
3. Kapur, J.N. and Saxena, H.C. (1997), *Mathematical Statistics,* S. Chand & Co., New Delhi.

Note: The latest edition of the books is recommended..

MASTER OF ARTS (Economics)
Session 2023-24
OPT-IV (Money, Banking and Finance)

Course Outcomes:

After passing this course students will be able to:

CO1: demonstrate an understanding of nature of money and the role of banks in modern monetary economies and financial Intermediation.

CO2: understand the main policy challenges central banks face in choosing appropriate goals, instruments and targets in the conduct of monetary policy.

CO3: understand the main determinants of interest rates in money market and bond market.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-IV: Money, Banking and Finance

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Money : Definition, functions, kinds of money, Inside and Outside money, Neutrality of money-Don Patinkin's, Meltzer's and Gurley and Shaw's analysis. Supply of money in India: concepts, significance and determinants, mechanics of money supply in India. Demand for Money: The traditional quantity theory; Fisher's equation of exchange; Cambridge cash balance approach. Keynesian, Friedman's and Neo-Keynesian theories of demand for money, empirical evidence.

Unit– II

Financial System: Commercial Banks: Systems, Theories of banking, Portfolio behaviour, Innovative banking, Credit creation, Role in economic development. Non-Bank Financial Intermediaries (NBFI's), Credit creation by NBFI's and monetary policy, Development banking and its lending activities with special reference to India.

Unit– III

Banking in India; Structure of Commercial Banks; Regional Rural Banks (R.R.B.'s); Cooperative Banks, Nationalization of banks in India, Banking Sector reforms.

Central Banking: Functions with special reference to developing countries, Monetary policy: Objectives, Targets and Indicators. Transmission Mechanism, Lags in Monetary policy; Reserve Bank of India, limitations of RBI.

Unit– IV

Rate of Interest: Determination; Theories of the term structure of interest rates, Nature and Structure of interest rates in India; Money and Capital markets: Structure, Treasury Bills Market, Call money market and Stock markets in India(Introductory), Mutual Funds (concept), Dichotomy in Indian money market; Interest rate policy in India: Recent developments; Financial sector reforms (recent developments).

Suggested Readings:

1. Thorn, Richard S., (1976), Introduction to Money and Banking, New York, Harper & Row.
2. Luckett, D.G., (1976), Money and Banking, McGraw Hill, New York.
3. Bhole, L.M., (1998), Financial Institutions and Markets Structure, Growth and Innovations, 2nd ed.
4. Paul, R.R., (2018), Monetary Economics, Kalyani Publishers, New Delhi.
5. Reserve Bank of India (1985), Report of the Committee to review the working of the Monetary System.
6. (Narasimha Committee Report).

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-V (Industrial Economics)

Course Outcomes:

After passing this course students will be able to:

CO1: understand the some advance concepts and theories of industrial structure, conduct and performance

CO2: understand the Industrial policy in India – evolution and paradigm shift, recent trends in Indian Industrial growth.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-V: Industrial Economics

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Framework and Problems of Industrial Economics: Concept and organization of a firm **–** ownership, control and objectives of the firm;
Market Structure: Product differentiation; Entry conditions; Economies of Scale; Market structure and innovation; Theories of industrial location – Weber and Sargent Florence; Factors affecting location.

Unit– II

Market Conduct: Product Pricing **-** Theories and evidence; Investment expenditure – Methods of evaluating investment expenditure; Mergers and Acquisitions; diversification.
Market Performance: Growth of the firm – Theory and evidence; Constraints on firm's growth; Productivity, efficiency and capacity utilization – Concept and measurement including evidence from Indian Economy.

Unit– III

Indian Industrial Growth and Pattern: Industrial Policy in India – evolution and paradigm shift; Recent trends in Indian industrial growth; MNCs, transfer of technology and issues related with TRIMS; Privatization: Forms and global and Indian evidence; Regional industrial growth and concentration in India; economic concentration and remedial measures; Issues in Industrial proliferation and environmental preservation.

Unit– IV

Project Appraisal: Cost benefit analysis – Net Present Value (NPV) and internal rate of return (IRR) criteria – balancing private and social returns.
Industrial Labour: Structure of industrial labour; Globalization and labour; Exit Policy and safety nets.

Suggested Readings:

1. Bains, J.S (1996) Industrial Organization, Cheltenham, U.K: "*An Elgar critical Writing Reader"*.
2. Barthwal R.R.,(2010),"*Industrial Economics: An Introductory Text"*, Wiley Eastern, New Delhi.
3. Chadha, V. and G.S. Bhalla (1999),"*Industrial Development in India: The Post-Reform Scene*", Kalyanai Publishers, New Delhi
4. Dutt and Sundram (2016), *Indian economy*, S.Chand Publications, New Delhi.
5. Dhar, P.K. (2016), *Indian Economy: Its Growth and Dimensions,* Kalyani Publications.

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-VI (History of Economic Thought)

Course Outcomes:

After passing this course students will be able to:

CO1: understand key models and concepts of the history of economic thought.

CO2: have a historical consciousness of economic ideas.

CO3: understand the development of economic thought in the context of the evolving global economy and from a historical perspective.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-VI: History of Economic Thought

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Mercantilism: Its origin and content - economic ideas of Petty, Cantillon, Locke and Hume.
Physiocracy: Natural order, primacy of agriculture, social classes and circulation of wealth.

Unit – II

The Classical System: Adam Smith- Division of Labour, theory of value and distribution, economic growth and international trade; David Ricardo- Theory of value and distribution, foreign trade, economic development and theory of rent; T.R. Malthus- Theory of Population, theory of gluts; J.S. Mill- Leissez faire and protection; J.B. Say- Law of Markets; Karl Marx: dynamics of social change, theory of value and surplus value, theory of capitalist competition.

Unit – III

The Marginalists and Neo-Classicism: Precursors to marginalism- Gossen, Jevons, Menger and Walras; The Austrian School- Wiser and Bohm-Bawerk: Theory of capital and distribution; K. Wicksell and the Swedish School; Wicksteed on laws of distribution; The American Contribution: Clark, Walker and Schumpeter on the theory of growth and business cycles; Marshallian Economics: Price determination and elasticites, consumer surplus, costs and economies, rent and profit.

Unit – IV

Keynes and Post Keynesian developments: Marginal efficiency of capital and investment, theory of wages and interest, underemployment equilibrium and the role of fiscal policy, theory of multiplier and business cycles; Post Keynesian developments in consumption function, quantity theory of money, inflation, business cycles and economic growth.

Suggested Readings:

1. Hanley, L.H. : History of Economic Thought, 1949.
2. Blaug, M. : Economic Theory in Retrospect, 1968.
3. Schumpeter, J.A. : History of Economic Analysis, 1954.
4. Spiegel, H.W. : The Growth of Economic Thought, 1971.
5. Roll, E. : A History of Economic Thought, 1956.
6. Friedman, M. : A Theory of Consumption Function, 1957.
7. Hicks, J.R. : A Contribution to the Theory of Business Cycles, 1960.
8. Domar, E. : Essays in the Theory of Economic Growth, 1957.
9. Gide, C. and C. Rist : A History of Economic Doctrines, 1948.

Note: The latest edition of the books is recommended..

MASTER OF ARTS (Economics)
Session 2023-24
OPT-VII (Economics of Socialism)

Course Outcomes:

After passing this course students will be able to:

CO1: understand different types of economic system understand the process of socialism, its crisis and problem of socialistic economy in the context of Marxian theory of surplus.
CO2: learn different forms of planning, resource allocation in Planning and relevance of balanced approach and unbalanced approaches of planning.
CO3: understand the system pricing, consumption, management decision in industry and Agriculture and international economic relations in socialistic pattern

MASTER OF ARTS (Economics)
Session 2023-24
OPT-VII: Economics of Socialism

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Economic system; meaning and features; Distinguishing features of different economic systems pre-capitalist, capitalism, socialism and mixed economy.

Unit – II

Marxian Theory of surplus value, crisis, breakdown and socialism, Pre-requisites, Problems and processes of socialist transformation, Economic problems of socialist economies.

Unit – III

Organizational forms of planning, indicators of planning, development priorities and resource allocations. Balance approach; inter-sectoral and inter-regional balances.

Unit – IV

Pricing, consumption, management of industry and agriculture, International economic relations between socialist and developing economies; breakdown of socialist system.

Suggested Readings:

1. Lavinge, M., Socialist Economies of Soviet Union and Europe.
2. Lange, O., Political Economy, Vols. I and II (relevant portions).
3. Leontive, L., A Short Course of Political Economy.
4. Willzynski, J., Economics Theory of Socialism.
5. Lange, O. & Taylor, F.M., Economics Theory of Socialism (1964, First Edition).
6. Nova, A., Soviet Economy (Third Edition).
7. Nova, A., Socialist Economies (1975), Nutti, D.M. (ed.).
8. Dobb, M., On Economics Theory of Socialism, 1965.
9. Halzman, F. (ed.), Readings in Soviet Economy.

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-VIII (Econometrics)

Course Outcomes:

After passing this course students will be able to:

CO1: understand the nature and methodology of econometrics.

CO2: understand the OLS procedure of estimation of model and problems associated with it.

CO3: understand the basics time series and panel data

MASTER OF ARTS (Economics)
Session 2023-24
OPT-VIII: Econometrics

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Nature, meaning and scope of econometrics. Simple and general linear regression model – Assumptions, estimation (through OLS approach) and properties of estimators, Gauss-Markov's theorem (Two variable and k-variable), Concepts and derivation of R^2 and adjusted R^2. Estimation of regression using SPSS and Interpretation of Output.

Unit – II

Concept of analysis of variance approach and its applications in regression analysis. Nature, test, consequences and remedial steps of the problems of Heteroscedasticity and Multicollineraity.

Unit – III

Nature, test, consequences and remedial steps of the problem of auto-correlation. Concepts of stationarity, random walk model, unit roots-Dicky-Fuller test and Augmented Dicky-Fuller test, Cointegration, Causality analysis (Granger and Sim's test).

Unit – IV

Introduction to panel data models: Fixed effect and random effect models. Dummy variables techniques: Alternative applications – Testing structural stability of regression models, comparing two regression equations, interaction effect, seasonal analysis.

Suggested Readings:

1. Gujarati, D.N (2002), *Basic Econometrics, McGraw* Hill, New Delhi.
2. Koutsoyiannis, A (2001), *Theory of Econometrics,* The Macmillan Press Ltd., London.

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-IX: Economics of Agriculture

Course Outcomes:

After passing this course students will be able to:

CO1: understand the various theories of agriculture economics.

CO2: analyze trends in production & productivity and recognize the challenges in green revolution and post green revolution era

CO3: learn the price and marketing policies of agriculture and its implications

MASTER OF ARTS (Economics)
Session 2023-24
OPT-IX: Economics of Agriculture

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Basic Agricultural Economics – Production functions in agriculture: Input-input and product-product relationship; Inter-sectoral linkages of agriculture (Backward and forward linkages). Models of agricultural development – Lewis, Fei-Ranis, Jorgenson's, Mellor, Schultz and Boserp's model.

Unit II

Basic Inputs – Irrigation, HYV seeds, mechanization, distribution mechanism of inputs, New agricultural strategy and its impact on employment and income distribution.
Food security and international trade, concept, threat, indicators and mechanism to food security. Food assistance programme (Domestic and International).

Unit III

Institutional Structure – Nature of emerging agrarian structure – co-operative farming and its evaluation with reference to productivity, employment and income distribution, Environment and soil erosion, sustainable development.
Organic farming– meaning, techniques of organic farming and its scope in India.

Unit IV

Marketing and Prices – Nature of supply and demand for agricultural products; income and price elasticity of demand and supply, Agriculture marketing in India, Rationale for state intervention, Agricultural price policy (recent), Terms of trade between agriculture and industry.
Main features of International trade in Agri-products. WTO – subsidies and Indian agriculture.

Suggested Readings:
1. Barkey .A. and Barkey.P.(2016), *Principles of Agriculture Economics*, Taylor and Francis
2. Bhalla, G.S. and Tyagi, D.S. (1989), *Patterns in Indian Agricultural Development*, RSID
3. Dantwala, M.L. (1992*), Indian Agriculture Development Since Independence: A collection of Essays*, South Asian Books
4. Dasgupta, B. (1980), *The New Agricultural Technology in India*, Mcmillan.
5. Economic and Political Weekly, *Regular Features on Review of Agriculture.*
Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-X (Economics of Public Enterprises)

Course Outcomes:

After passing this course students will be able to:

CO1: understand the role of public sector in economic development, objectives scope and growth of public sector in India.

CO2: understand the management of public enterprises and personnel management in public enterprises.

CO3: explain the costs and benefit analysis –Net Present Value and Internal rate of return criteria.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-X: Economics of Public Enterprises

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Role of Public Sector in economic development. Objectives, scope and growth of public sector in India. Cost-benefit analysis, shadow prices, social rate of discount, practical approaches in project selection.

Unit– II

Organizational Pattern of public enterprises. Management of Public enterprises: Personal Management in Public Enterprises, Financial management in Public enterprises.

Unit– III

Evaluation of performance of public enterprises, Measurement of efficiency in public enterprises, Pricing Policy of Public Enterprises. Public sector reforms and privatization strategies.

Unit– IV

Accountability of Public Enterprises, Relationship with the government, Auditing of Public Enterprises. Role of Bureau of Public Enterprises, Special Committees in Public Enterprises.
Case study of public sector steel industry in India-growth performance, pricing and management.

Suggested Readings:

1. Jagdishprakash (2010), "*Administration of Public Enterprises in India*", Himalaya Publishing House .
2. Khera, S.S. (1964), "*Management and Control in Public Enterprises"*.
3. NarainLaxmi (1981), "*Principles and Practice of Public Enterprises Management",* Ajanta Publications, New Delhi.
4. Sinha, J.B.S. (1974), "*Some Problems of Public Sector Organisation".*

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
Course Code: MECM- 2125 (OPT - XI)
Computer Applications for Economists

COURSE OUTCOME

After passing this course the student will be able to:

CO1: Comprehend the organization of Computer System, functioning of various units and storage.

CO2: Demonstrate the use of Mobile as computing device and apply new technology in day to day activities.

CO3: Apply features of word processing and spreadsheet software for data manipulation, data entry, worksheet formatting, functions and formulae.

CO4: Comprehend and apply SPSS for economics related calculations.

MASTER OF ARTS (Economics)
Session 2023-24
Course Code: MECM- 2125 (OPT - XI)
Computer Applications for Economists

Time: 3+3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 50
Practical: 30
CA: 20

Note: Instructions for the Paper–Setter:
Two questions, each carrying 10 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

Fundamentals of Computer: Introduction to computer, Applications of computer, Input and Output devices, Memory – Primary and Secondary.

Latest trends and Technologies in IT: Digital Camera, Smart finger: Distance measuring tool, Nipper, Stylus, Tiny cube speaker, Airpods, Mobile as a computing device, Payment gateway, Payment methods: Net-banking, m-Banking, UPI, Debit/Credit Card, Mobile Wallets.

UNIT II

Word Processing: Introduction to word processing & its features, parts of window of word processing (Title bar, menu bar, status bar, and ruler), understanding the ribbon, use of office button and quick access toolbar, creation of new documents, opening document, insert a document into another document. Page setup, margins, gutters, font properties, alignment, page breaks, header &footer, deleting, moving, replace, editing text in document, saving a document, spell checker, printing a document. Creating a table, entering and editing text in tables, changing format of table, height and width of row/column editing, adding and deleting rows/columns. Adding picture, page colors and watermarks, borders, shading, drawing objects.

UNIT –III

Spreadsheet: Introduction to worksheet/spreadsheet, features, creating a new workbook, different functions on different data in excel, creation of chart, creation of worksheet, adding, deleting, moving the text in worksheet, linking, sorting the data, querying the data, filtering the data (auto and advance filters), open an already existing workbook, saving workbook, printing a worksheet, closing the workbook & exiting.

UNIT -IV

SPSS: Introduction, Data editor Window, Syntax, Output basics, If command, Filter command, Entering and modifying data, Creating a chart, using interactive chart function, difference between excel and SPSS.

References/Textbooks:

1. Satish Jain, M. Geetha, Kratika, (2017), *BPB's Office 2010 Course Complete Book*, BPB Publications.
2. Rachhpal Singh, Gurvinder Singh, (2011), *Windows based computer courses*, Kalyani Publishers.
3. Anshuman Sharma (2016), *A book of Fundamentals of Information Technology*, Lakhanpal Publishers, 5thed..
4. E. Balagurusamy,(2002), *Programming in ANSI C*, Tata McGraw-Hill, 5th ed.
5. Yashwant Kanetkar, (2020), *Let us C*, BPB Publications, 17th ed.
6. Anshuman Sharma, (2016), *Learn programming in C*, Lakhanpal Publishers, 7th ed.
7. LokeshJasrai, (2020), *Data Analysis using SPSS*, SAGE Publications Pvt. Ltd., 1st Edition

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-XII: Operations Research

Course Outcomes:

After passing this course students will be able to:

CO1: gain proficiency with tools from optimization techniques like advanced linear programming, transportation, queuing models and assignment problems.

CO2: understand and propose the best strategy among various strategies of game theory under uncertainty.

CO3: understand the basic replacement models to maximize firms profit or minimize losses.

CO4: use CPM and PERT techniques, to plan, schedule, and control project activities.

MASTER OF ARTS (Economics)
Session 2023-24
OPT- XII: Operations Research

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Definition, significance, scope and limitations of operations research, Linear Programming: Assumptions, formulation and solution by graphic method, simplex and two phase simplex method.

Unit – II

Transportation Problems, Assignment Problems. Game Theory: Competitive games, Pure strategy, by Dominance, Mixed strategy (2x2, mx2 and 2xm), Two persons zero sum games, 'n' persons zero sum games, Solution of Game problems with Linear Programming.

Unit – III

Queuing Models: Characteristics Single channel Queuing models:
Model I (M/M/I) : (FCFS/¥/¥)
Model II (M/M/I) : (SIRO/ ¥/¥)
Model III (M/M/I) : (FCFS/N/¥) – (Finite Queue Length Model)
Model IV (M/M/I) : (FCFS/n/N) - (Limited Source Model)
Inventory Model with Deterministic Demand and Probabilistic Demand.

Unit – IV

Replacement models of items that deteriorate (money value constant and changes), For items that fail suddenly (Individual replacement policy and Group replacement policy) Project Scheduling by PERT and CPM

Suggested Readings:

1. Wagner, H.M. (1973), Principles of Operations Research with Applications to Managerial Decisions.
2. Levin, R.I. and Kirk Patrick, C.A., (1978), Quantitative Approaches to Management.
3. Hartley, R.V., (1976), Operations Research : A Managerial Emphasis.
4. Hardy, A. Taha, (1976), An Introduction to Operations Research, 2nd ed.

Note: The latest edition of the books is recommended..

MASTER OF ARTS (Economics)
Session 2023-24
OPT-XIII: Economics of Environment and Demography

Course Outcomes:
After passing this course students will be able to:

CO1: understand environment economics in the context of environmental cost, economic development, population and policies to protect environment at global level

CO3: understand issues and causes of population growth and elements of latest policy to address these issues.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-XIII: Economics of Environment and Demography

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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-economy-population linkage, environment as a public good, common property resources. Environmental Economics and Ecological Economics. Environmental benefits – use value and non-use values, methods of measurement, costs of environmental protection, environment and development trade-off, sustainable development, neo-classical and ecological views.

Unit – II

Environmental policies, Pigovian taxes and subsidies, marketable pollution permits, environmental regulations – command and control, incentive based, promoting clean technology, energy policy. Relationship between poverty, population and environment.

Unit – III

Demography and its concepts, population and economic development, theories of population – Malthus, optimum theory, theory of demographic transition. Factors affecting fertility, nuptiality-concept and analysis, mortality-concepts and factors affecting, Concept of Gender Issues.

Unit – IV

Population policy in India – shift in population control to family welfare to women empowerment, population and human development issues, new population policy, tasks before National Population Commission.

Suggested Readings:

1. Bhattacharya, R.N. (ed) (2001), Environmental Economics: An Indian Perspective, Oxford, New Delhi.
2. Sengupta, R.P. (2001), Ecology and Economics: An Approach to Sustainable Development, Oxford, New Delhi.
3. Simon, J.L. (1992), Population and Development in Poor Countries, Princeton University Press.
4. Chaubey, P.K. (2000), Population Policy in India, Kanisha Publications, New Delhi.

Note: The latest edition of the books is recommended..

MASTER OF ARTS (Economics)
Session 2023-24
OPT-XIV: Economics of Infrastructure

Course Outcomes:

After passing this course students will be able to:

CO1: understand the relevance of infrastructure in economic development of country.

CO2: understand key issues and problems with respect to regulation, governance and policies for the infrastructure sector.

CO3: apply key principles, concepts and tools relevant to the economic regulation of infrastructure industries.

CO4: explain how infrastructure solutions affect society, environment, and health.

CO5: apply this knowledge to the analysis of specific energy issues and policies in India.

CO6: understand the concepts of Cost- Benefit analysis and its application in the transport sector.

CO7: analyse different government policies for regulation and reform of the infrastructure sector.

MASTER OF ARTS (Economics)
Session 2023-24
OPT-XIV: Economics of Infrastructure

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Infrastructure and economic development – Infrastructure as a public good; Social and physical infrastructure; Special characteristics of public utilities. The peak-load, Off-peak load problem, Dual principle controversy; Economies of scale of joint supply.

Unit – II

The structure of transport costs and location of economic activities. Demand for transport models of freight and passenger demand. Cost functions in the transport sector. Principles of pricing. Special problems of individual modes of transport; Inter-model condition in the Indian situation. Rate-making in telephone utilities. Principles of decreasing costs in telephone industry.

Unit – III

Primacy of energy in the process of economic development. Factors determining demand for energy; Effect of energy shortages. Energy conservation, Renewable and non-conventional sources of energy, Energy modelling, Energy policy in the Indian context. Bulk supply and pricing of electricity. The relative economics of thermal, hydel and nuclear power plants. National power grid. Financing water utilities. Urban and rural water supply. The exploitation of natural gas. Pricing problem.

Unit – IV

Organization and financing of supply of social services. Private vs. public sector financing; Recent debate about the fixation of prices of social services. Development of social services in the successive Indian plans. Education and economic growth. Approaches to education planning. Social demand. Rate of return and manpower balance approaches. The case for universal and free primary education; Structure of higher education and problems of its financing in India; Human resources and human capital development. The issues in education policy; Health dimensions of development; Determinants of health – poverty, malnutrition, illiteracy and lack of information; Economic dimensions of health care – Demand and supply of health care; Financing of health care and resource constraints; Inequalities in health – class and gender perspectives; Institutional issues in health care delivery.

Suggested Readings:

1. Berman, P. and M.E. Khan (1993), Paying for India's Health Care, Sage Publications, New Delhi.
2. Centre for Monitoring Indian Economy (1996), India : Energy Sector, CMIE, Mumbai.
3. Eckstein, O. (1958), Water Resource Development, Harvard University Press, Cambridge.
4. Fariss, M.T. and R. Sampson (1975), Public Utilities, Houghton Mifflin, Boston.

5. Goyal, S.K. (Ed.) (1985), Public Enterprises, Indian Institute of Public Administration, New Delhi.
6. Jha, R., M.N. Murty and S. Paul (1990), On Fixing Prices for Postal Services in India, National Institute of Public Finance and Policy, New Delhi.
7. Indian Council of Social Sciences Research (ICSSR) (1976), Economics of Infrastructure, Vol. VI, New Delhi.
8. McMohan, W.W. (1999), Education and Development : Measuring the Social Benefits, Oxford University Press, Oxford.
9. National Council of Applied Economic Research (NCAER) (1996), India Infrastructure Report: Policy Implications for Growth and Welfare, NCAER, New Delhi.
10. Norton, H.S. (1971), Modern Transport Economics, C.E. Merrill, London.
11. Panchamukhi, P.R. (1980), Economics of Health : A Trend Report in ICSSR, A Survey of Research in Economics, Vol. VI, Infrastructure, Allied, Delhi.
12. Parikh, J. (Ed.) (1997), Energy Models for 2000 and Beyond, Tata McGraw-Hill, New Delhi.
13. Parikh, K.S. (Ed.) (1999), India Development Report – 1999-2000, Oxford, New Delhi.
14. Phillips, A. and O.E. Williamson (Eds.) (1967), Prices : Issues in Theory, Practice and Public Policy, University of Pennsylvania Press, Philadelphia.
15. Tilak, J.B.G. (1994), Education for Development in Asia, Sage Publications, New Delhi.
16. Turvey, R. and D. Anderson (1977), Electricity Economics, John Hopkins University Press, Baltimore.
17. Woodhall, M. (1992), Cost Benefit Analysis in Educational

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Semester – II
Session: 2023-24
Course Code: MECL-2171
Microeconomics-II

Course Outcomes:

After passing this course students will be able to:

CO1: learn the production decisions of a producer in the context of inputs and different market structures.

CO2: to understand some aspects of managerial decision making.

CO2: to understand **t**he role of markets imperfections and basics of social welfare

MASTER OF ARTS (Economics)
Semester – II
Session 2023-24
Course Code: MECL-2171
Microeconomics-II

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

General Equilibrium conditions of Firm and Industry; Perfect Competition - Features, Short run and long run equilibrium of the firm and industry; price and output determination; supply curve. Monopoly – short run and long run equilibrium; price discrimination; inter-temporal price discrimination and peak-load pricing; monopoly control and regulation. Monopolistic competition – General and Chamberlin approaches to equilibrium, equilibrium of the firm and group with product differentiation and selling costs; excess capacity under monopolist competition; criticism of monopolistic competition.

Unit II

Oligopoly – Non-collusive (Cournot, Bertrand, Edgeworth, Chamberlin, Kinked demand curve and Stackelberg's solution) and collusive (Cartels and Mergers, Price leadership and Basing point price system) models. Price and output determination under monopsony and bilateral monopoly.

Unit III

Baumol's sales revenue maximization model, Williamson's model of managerial discretion, Marris model of managerial enterprise, Full cost pricing rule, limit pricing theory.
Game theory and competitive strategy- dominant strategies and nash equilibrium.
Neo-classical approach – Marginal productivity theory, Modern Theory of distribution.

Unit IV

Pigovian welfare economics: Measurement of social welfare, Pareto optimal conditions; Perfect competition and Pareto optimality. Compensation principle. Social welfare function: Burgeson's criterion. Grand utility possibility frontier and welfare function. Market failure, Externalities and Property rights, Public goods, incomplete information. Theory of Second Best. Arrow's impossibility theorem. Partial and General Equilibrium

Suggested Readings:

1. Ahuja, H.L. (2018), '*Advanced Economics Theory: Micro Economics analysis'*,S. Chand Publishing.
2. Dwivedi, D.N. (2018),*'Microeconomics: Theory and Applications'*, Pearson Education, New Delhi.
3. Koutsoyiannis, A. (2015), '*Modern Microeconomics',* Macmillan Press, London.
4. Sen, A. (2007), '*Microeconomics: Theory and Applications'*, Oxford University Press, New Delhi.

Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Semester – II
Session: 2023-24
Course Code: MECL-2172
Macroeconomics-II

Course Outcomes:

After studying this course, students will:

CO1: be able to understand the Basic framework of IS-LM mechanism and relative effectiveness of monetary and fiscal policies

CO2: be able to understand the basic theories of inflation and its solutions.

CO3: be able to understand features of important growth models.

CO4: be able to understand the basic features of new classical and new Keynesian models.

MASTER OF ARTS (Economics)
Semester – II
Session 2023-24
Course Code: MECL-2172
Macroeconomics-II

Time: 3 Hours **L-T-P (Credits):4-0-0**
Max. Marks: 100
Theory: 80
CA: 20

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

Neo–classical and Keynesian Synthesis: The IS–LM model, Extension of IS–LM model with government sector, labour market and flexible prices. General Equilibrium in Open Economy: Mundell–Fleming approach in fixed and flexible Exchange rate system, Shapes of IS-LM in open economy, Relative effectiveness of monetary and fiscal policies in closed and open economy.

UNIT– II

Theory of Inflation : Classical, Keynesian and Monetarist approaches, Structuralists' theory of inflation; Philips curve analysis: Short run and long run Philips curve, Natural Rate of Unemployment hypothesis, Adaptive expectations and rational expectations; Policies to control inflation.

UNIT– III

Business Cycles: Theories of Schumpeter, Kaldor, Samuelson, Hicks and Goodwin's model; Control of business cycles.

UNIT– IV

New classical Economics: Rational Expectation Hypothesis, Random Walk, Real Business cycle theory.
New Keynesian Economics: Sticky wage prices, Efficiency Wage models, Insider-Outsider Model.

Suggested Readings:
1. Froyen R. T, (2014), *Macroeconomics: Theory and Policies,* Dorling Kindersley, Noida UP, India.
2. Shapiro, E.(1996), *Macroeconomic Analysis*, Galgotia Publications, New Delhi.
Note: The latest edition of the books is recommended.

MASTER OF ARTS (Economics)
Semester – II
Session: 2023-24
Course Code: MECL-2453
Quantitative Methods for Economists-II

Course Outcomes:

After passing this course students will be able to:

CO1: understand the basic concepts and techniques for analyzing data.

CO2: recognize the connection between theory and applications by appropriately fitting, assessing and interpreting the results/ outcomes.

CO3: develop statistical approach and thinking among students to problem solving.

MASTER OF ARTS (Economics)
Semester – II
Session 2023-24
Course Code: MECL-2453
Quantitative Methods for Economists-II

Time: 3 Hours **L-T-P (Credits):4-1-0**
Max. Marks: 100
Theory: 80
CA: 20

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.

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UNIT– I

Meaning, assumptions and limitations of a simple correlation and regression analysis; Pearson's product moment and Spearman's rank correlation coefficients and their properties; Concept of the least–square technique and the lines of regression; Standard error of estimate; Partial and multiple correlation and regression (applications only).

UNIT– II

Analysis of Time Series: Definition, components of time series, measurement of trend by different methods, measurement of seasonal variations.
Methods of estimation of non–linear equations – Parabolic, Exponential, Modified Exponential and Logistic Curves.

UNIT– III

Deterministic and non–deterministic experiments; Various types of events; Classical and empirical definitions of probability; Laws of addition and multiplication; Conditional probability and concept of independence; Bayes' theorem and its applications; Elementary concept of random variable; Probability, mass and density functions; Expectation, Properties (without derivations) of binomial, Poisson and normal distributions.

UNIT– IV

Basic concepts of sampling – random and non–random methods of sampling; Concept of an estimator and its sampling distribution; Concepts of statistical hypotheses – Null and alternative : level of significance; Type–1 and Type–2 errors; Confidence interval; Hypothesis testing in respect of means and proportions.

Software

SPSS (Practicals of Correlation, Regression and Time Series with SPSS)

Suggested Readings:

1. Gupta, S.C. (2018), *Fundamentals of Statistics*, Himalaya Publishing House, Delhi
2. Gupta, S.P. (2017), *Statistical Methods*, Sultan Chand & Sons, Delhi
3. Kapoor, V.K and Gupta, S.C. (2014), *Fundamentals of Mathematical Statistics*, Sultan Chand & Sons, Delhi.

Note: The latest edition of the books is recommended..