

**SYLLABI AND SCHEME OF EXAMINATIONS
FOR
MASTER OF ARTS (ECONOMICS)
Online Program**

(Based on Curriculum and Credit Framework as per NEP-2020)

With effect from the Academic Session 2025-26



**CENTRE FOR DISTANCE AND ONLINE EDUCATION
MAHARSHI DAYANAND UNIVERSITY
ROHTAK (HARYANA)**

Scheme of Examinations

MASTER OF ARTS (ECONOMICS)

Type of Course	Nomenclature of Course	Course Code	Total Credits	Assignment Marks	Term End Examination (Theory) Marks	Total Marks
Semester I (2025-26 Onwards)						
DSC 1	Micro Economics I	25ECO201DS01OL	04	30	70	100
DSC 2	Macro Economics I	25ECO201DS02OL	04	30	70	100
DSC 3	Economics of Growth and Development I	25ECO201DS03OL	04	30	70	100
DSC 4	Mathematics for Economists I	25ECO201DS04OL	04	30	70	100
DSC 5	Statistical Methods I	25ECO201DS05OL	04	30	70	100
SEC1	Techniques of Economic Data Collection and Analysis	25ECO201SE01OL	04	30	70	100
Semester II (2025-26 Onwards)						
DSC 6	Micro Economics II	25ECO202DS01OL	04	30	70	100
DSC 7	Macro Economics II	25ECO202DS02OL	04	30	70	100
DSC 8	Economics of Growth and Development II	25ECO202DS03OL	04	30	70	100
DSC 9	Mathematics for Economists II	25ECO202DS04OL	04	30	70	100
DSC 10	Statistical Methods II	25ECO202DS05OL	04	30	70	100
SEC2	Research Methodology	25ECO202SE01OL	04	30	70	100

Type of Course	Nomenclature of Course	Course Code	Total Credits	Assignment Marks	Term End Examination (Theory) Marks	Total Marks
Semester III (2026-27 Onwards)						
DSC 11	Indian Economy I	26ECO203DS01OL	04	30	70	100
DSC 12	Public Economics	26ECO203DS02OL	04	30	70	100
DSC 13	International Trade and Finance I	26ECO203DS03OL	04	30	70	100
DSC 14	Agricultural Economics I	26ECO203DS04OL	04	30	70	100
DSC 15	Finance Institutions and Markets I	26ECO203DS09OL	04	30	70	100
SEC 3	Economic Research Review	26ECO203SE01OL	04	30	70	100
Semester IV (2026-27 Onwards)						
DSC 16	Indian Economy II	26ECO204DS01OL	04	30	70	100
DSC 17	Indian Public Finance	26ECO204DS02OL	04	30	70	100
DSC18	International Trade and Finance II	26ECO204DS03OL	04	30	70	100
DSC19	Agricultural Economics II	26ECO204DS04OL	04	30	70	100
DSC20	Finance Institutions and Markets II	26ECO204DS09OL	04	30	70	100
SEC4	Computer Applications in Economics	26ECO204SE01OL	04	30	70	100

SEMESTER - I

SYLLABI FOR POST GRADUATE PROGRAM IN ECONOMICS

Semester I

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Micro Economics-I	Course Code	25ECO201DS01OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students understand the basics of Economics.

CLO 2: Students are aware how various economic agents behave optimally.

CLO 3: Knowledge about various economic issues is enhanced.

CLO 4: Ability to understand the market structure is improved.

Unit 1

Nature and scope of Economics and Microeconomics. Positive and normative analysis. Role of assumptions in economic analysis. Circular flow of economic activity. Concepts of: household, firm, factors of production, equilibrium – partial and general, static, comparative static and dynamic analysis, margin and slope.

Law of Demand and Supply. Market demand curve; Concept of consumer surplus. Elasticity of Demand: Types, measurement and uses of Elasticity, Elasticity of Supply

Unit 2

Analysis of consumer behaviour: Theories of Demand-cardinal, ordinal and revealed preference approaches, income-consumption curve, Engel curve, substitute and complimentary goods.

Consequences of Bandwagon, Snob and Veblen effect

Unit 3

Laws of Production: short run and long run. Internal and External economies and diseconomies. Concept of cost, derivation of short and long run cost curves. Optimum input combination Simple case of a multiproduct firm. Technical progress and production function – Hick's classification. Elasticity of substitution. Properties of Cobb-Douglas and CES production function.

Unit 4

Pricing process and equilibrium of firm and industry under perfect competition, monopoly (including discriminating and bilateral monopoly), monopolistic competition. Welfare effects of price control, price support and production quota, asymmetric information: Adverse Selection and Moral Hazard.

References:

- Koutsoyiannis, A: (1979): Modern Microeconomics (2nd ed), Macmillan Press, London.
- Varian, H(2000): Microeconomic Analysis, W.W. Norton, New York.
- Baumol, W.J: (1982): Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Bain, J (1958): Barriers to New Competition, Harvard University Press, Harvard
- Henderson, J.M. and Quandt (1980): Micro Economic Theory: A Mathematical Approach, Mc Graw Hill, New Delhi.
- Ahuja, H.L. (2006): Advanced Economic Theory, Sultan Chand and Co., New Delhi.
- राजेंद्र चौधरी (2024), इकाई आधारित अर्थशास्त्र, Intellectul Foundation (India) Rohtak.

Semester I

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Macro Economics-I	Course Code	25ECO201DS02OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students understand the concept of opportunity costs, trade –off and benefits of economics.

CLO 2: Knowledge about the concept of fiscal and monetary policies is imparted.

CLO 3: Students knowledge about laws of supply and demand is increased.

CLO 4: Basics of circular flow of economic transactions is imparted.

Unit 1

Macro Economics-Meaning, Nature and Scope, national Income, Concept, Identities, measurement and limitation of National Income Accounting; Determination of Output and Employment: Classical theory without saving and investment and with saving and investment; Keynesian Approach-Two Sector Model, Three Sector Model and Four Sector Model with circular flow of economic activities; Investment Multiplier and derivation in Two Sector, Three sector and four sector model.

Unit 2

The Extended Model: (Hicks and Hansen Synthesis) with fixed price level- derivation of IS-LM curve , Equilibrium in product and money market, Fiscal policy: Impact on aggregate demand- government spending , taxation etc. Monetary policy: change in money supply and its impact; The IS-LM Elasticity and Monetary & Fiscal Policies.

Unit 3

The Extended Model: Variable Price Level – Deviation of Aggregate Demand Curve and Determination of equilibrium price and output levels; wage-price flexibility and the Full Employment equilibrium; Monetary – Fiscal policies and the Full-Employment Equilibrium.

Unit 4

Behavioral Foundation: Theories of consumption – The Absolute Income Hypothesis, The Relative Income Hypothesis; The Permanent Income Theory of Consumption; The Life cycle theory of consumption; Theories of Investment – The Present Value of Criterion for investment; The Marginal Efficiency of Capital and Investment; the accelerator theory; financial Theory of investment.

References:

- Ackley, G (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Banson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- Dorn Busch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc. New York.
- Heijdra, B.J. and V.P. Fredericck (2001), Foundation of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publication, New Delhi.

Semester I

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Economics of Growth and Development I	Course Code	25ECO201DS03OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100 Theo 70 Int. 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students are acquainted with the various perspectives of economic growth and its relevance.

CLO 2: Students are familiar with factors affecting economic growth and development.

CLO 3: Knowledge about the various theories of economics development has increased.

Unit 1

Economic Growth and Development: Factors affecting Economic Growth, Historical Perspective of Economic Growth and its relevance; Structural Diversity and common characteristics of developing nations.

Unit 2

Balanced and Unbalanced Growth, Big push theory and Rostow model.

Measurement of Economic Development: PQLI, HDI and SDG's, Capabilities Approach

Development Gap: concepts and measurement, Poverty, Inequality and Development: Measurement and Policy options.

Unit 3

Classical Theories of Economic Growth: Contributions of Adam Smith, Ricardo, Karl Marx and Schumpeter,

Unit 4

Growth Models: Harrod - Domar Model; Solow Model ; Growth Models of Joan Robinson and Kaldor.

References:

- Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University Press, Stanford.
- Barro, R. and X. Sala-i-Martin, Economic Growth, McGraw Hill, New York.
- Behrman, S. and T.N. Srinivasan (1995), Handbook of Development Economics, Vol. 3, Elsevier, Amsterdam.
- Brown, M. (1966), On the Theory and Measurement of Technical Change, Cambridge, University Press, Cambridge, Mass.
- Chakravarti, S. (1982), Alternative Approaches to the Theory of Economic Growth, Oxford University Press, New Delhi.
- Chenery, H. and T.N. Srinivasan (Eds.) (1989), Handbook of Development Economics, Vols. 1 & 2, Elsevier, Amsterdam.
- Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
- Gillis, M., D.H. Perkins, M. Romer and D.R. Snodgrass (1992), Economics of Development, (3rd Edition), W.W. Norton, New York.

Semester I

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Mathematics for Economists -I	Course Code	25ECO201DS04OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students able to understand different types of functions and their applications.

CLO 2: Students are familiar with the maxima and minima of functions.

CLO 3: Knowledge about the use of lagrange multiplier methods is imparted.

CLO 4: Knowledge of solving linear equations is imparted.

Unit 1

Basics: real number system, sets and set operations, relations and functions, inverse functions; solution of linear equations in two variables, solution of quadratic equations, logarithms and exponents; exogenous and endogenous variables. A.P. and G.P.

Unit 2

Fundamentals of Matrices; Determinants. Solution of a system of upto 3 equations by matrix inversion and Cramer's rule. Input-Output analysis – Static open model.

Unit 3

Differentiation – idea of limit (but not its evaluation) meaning and economic interpretations of derivative. Rules of differentiation including logarithmic and exponential functions. Unconstrained optimization – single choice variable, global and local.

Unit 4

Calculus of multivariable functions, higher order derivatives, constrained optimization with upto 2 equality constraints

References:

- Chiang, Alpha C. "Fundamental Methods of Mathematical Economics" (Mc-Graw Hill)
- Dowling, Edward T "Mathematics for Economists" (Schaum's outline Series, Tata Mc-Graw Hill)

Semester I

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Statistical Methods I	Course Code	25ECO201DS05OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100	Theo 70	Int. 30
		Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students have learnt the common statistical techniques.

CLO 2: Students are able to apply fundamental tools for data summary.

CLO 3: Students have gained knowledge to summarise data sets.

CLO 4: Students have developed an understanding of the basic concepts of probability.

Unit 1

Collection and classification of economics data. Diagrammatic and graphic representation of statistical data. Measures of central tendency: A.M., G.M., H.M., Median, quartiles, deciles, percentiles, mode, relationship between A.M., G.M. and H.M., Selection of an average, Limitations of Averages.

Unit 2

Measures of dispersion: range, interquartile range, quartile deviation, mean deviation, standard deviation, standard deviation of the combined series, variance, coefficient of variation, relation between various measures of dispersion, Lorenz curve, skew ness and Kurtosis, moments.

Unit 3

Index numbers: Problems and methods of construction of various types of indices, Laspeyres, Pasche's and Fisher's ideal index numbers, Time reversal, factor reversal and circular tests; chain base indices, base shifting splicing and deflating the index nos., costs of living index numbers and consumer price index numbers. Time series: components of time series and their decomposition, Methods of measuring trend, cyclical, seasonal and irregular variation.

Unit 4

Random experiment, random variable, sample space, events, fundamental principles of counting, classical, relative frequency and axiomatic approaches to probability, basic results on probability, conditional probability, Baye's thereon.

References:

- Gupta S.C. "Fundamentals of Statistics" S. Chand & Sons New Delhi (1993).
- Spiegel, Murry R "Theory and problems of Statistics" (Schaum's outline series, McGraw Hill, 1992).
- Karmal P.H. and Polasek M. "Applied Statistics for Economists (4th edition), Pitman, Australia.

Semester I

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Techniques of Economic Data Collection and Analysis	Course Code	25ECO201SE01OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students are aware of primary and secondary economic data sources

CLO 2: Students are able to understand the use of quantitative techniques of data analysis.

CLO 3: Students are able to use basis data analysis software.

Unit 1

Basic concepts: Population, Sample, Parameter, Statistic, frequency distribution, Cumulative frequency distribution, Primary and Secondary Data, Methods of Data Collection Various Methods of Sampling

Measures of Central Tendency and Dispersion: Mean, Median, Mode, Range, Quartile deviation Mean deviation, Standard deviation; Skewness and Kurtosis.

Unit 2

Sampling Techniques: Stratified clusters, Multistage and Systematic Sampling. Estimation process and properties of a good estimator. Testing of hypothesis. Simple applications of t-test.

Unit 3

Regression and Correlation Analysis: Karl Pearson and Spearman's Rank correlation, method of Ordinary Least Square (OLS), numerical examples of simple liner regression model.

Unit 4

Introduction to MS-Word and MS-Power Point and MS- Excel, Creation of data files and spread sheets, Data Analysis using MS Excel, Descriptive statistics, Comparing means, Bivariate Correlation, One way ANOVA.

References:

- Preeti Dabas (2024), Descriptive and Inferential Statistics Using R, Sultan Chand & Sons, New Delhi
- Gujrati DN.et.al. (2011): Basic Econometrics, Tata McGraw- Hill/Irwin.
- George Darren (2011): SPSS for Windows Step by Step: A simple Guide and Reference, Pearson Education, Prentice Hall.
- Foster J Jeremy (2001), Data Analysis Using SPSS for Windows Versions 8-10: A Beginner's

Guide, Education, Delhi. Sage Publishing Ltd.

- Gupta S.C. —Fundamentals of Statistics, S. Chand & Sons New Delhi (1993)
- Spiegel, Murry R —Theory and problems of Statistics, Schaum's outline series, McGraw Hill, 1992
- Karmal P.H. and Polasek M. —Applied Statistics for Economists (4th edition), Pitman, Australia

SEMESTER - II

Semester II

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Micro Economics-II	Course Code	25ECO202DS01OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students have a basic understanding of reasoning of Economics.

CLO 2: Students are aware how various economic agents behave optimally

CLO 3: Understanding on various economic issues is enhanced.

CLO 4: Ability to under the market structure is improved.

Unit 1

Oligopoly: non collusive models – Cournot, Bertrand, kinked demand model; collusive models – joint profit maximising, market sharing and leadership cartels. Critique of neo-classical theory of firm. Theory of Games – Twp-person, Zero-sum game, Pure and Mixed strategy, Saddle Point Solution, Decision making under uncertainty Attitude towards Risk.

Unit 2

Alternative theories of firm: Baumol's Sales maximization model (simple, static without advertisement model) Morris and Williamson Average/full cost pricing, Bain's limit pricing model, behavioural model of Cyert and March consumer surplus.

Unit 3

Neoclassical theory of factor pricing under competitive conditions, with monopolistic power in product market, monoposonistic power in factor market, bilateral monopoly in factor market, monopoly in factor market. Product exhaustion problem. Neoclassical theory of rent, quasi-rent, interest and profit. Issues in General Equilibrium analysis.

Unit 4

Concept of social welfare, some early criteria, Pareto optimality criterion and efficiency conditions, Bergson's social welfare function, idea of theory of second best and Arrow's impossibility theorem, compensation criterion. Market structure and welfare maximization. Market failure – case of externality and public goods; and ways of correcting it.

References:

- Koutsoyiannis, A: (1979): Modern Microeconomics (2nd ed), Macmillan Press, London.
- Sen, A (1999): Microeconomics: Theory and Applications, Oxford University Press, New Delhi.
- Varian, H(2000): Microeconomic Analysis, W.W. Norton, New York.
- Baumol, W.J: (1982): Economic Theory and Operations Analysis, Prentice Hall of India, New Delhi.
- Bain, J (1958): Barriers to New Competition, Harvard University Press, Harvard
- Henderson, J.M. and Quandt (1980): Micro Economic Theory: A Mathematical Approach, Mc Graw Hill, New Delhi.
- Ahuja, H.L. (2006): Advanced Economic Theory, Sultan Chand and Co., New Delhi.
- राजेंद्र चौधरी (2024), इकाई आधारित अर्थशास्त्र, Intellectul Foundation (India) Rohtak.

Semester II

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Macro Economics-II	Course Code	25ECO202DS02OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students able to understand the concept of Demand and supply of Money.

CLO 2: Knowledge about IS-LM model is imparted.

CLO 3: Knowledge about the role of financial institutions in the economy is enhanced.

CLO 4: Students are able to explain concept of gross domestic product, inflation and unemployment.

Unit 1

Classical Approach to Demand for Money – Quantity Theory Approach; Fisher's equilibrium; Cambridge Quantity theory; Keynes Liquidity preference Approach –Theory of Demand for Money; Friedman, Patinkin Baumol and Tobin.

Function and Determinants of money supply, High-powered money, Money multiplier.

Unit 2

Concept of Inflation Its Types and Effects: Social and Economics effects of Inflation; Theory of Inflation: Demand Pull and Cost Pull Inflation, The Monetarist View on Inflation, Modern Theory of inflation, Policy Measure to Control Inflation.

Unit 3

Inflation and unemployment: The Phillips Curve, The Inflationary Pressure Curve: Phillips Curve, Inflationary Pressure Curve and the Rate of Inflation. The Phillips Curve; Trade off and Non-Trade Off. Adaptive Expectation and Rational Expectation Keynesianism Vs Monetarism.

Unit 4

Trade Cycles – Models of Samuelson, Hicks and Kaldor, Economic Growth: Harrod- Doman Model; Neo-Classical Model (with money & without money). International Adjustment: The Determination of National Income in Open Economy; The International Transmission of Disturbance: Transmission under Fixed Exchange Rate; Balance of Payment (BoP), Transmission under Floating Exchange Rate (Mudel Fleming Model)..

References:

- Ackley, G (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
- Banson, W.A. (1989), Macroeconomic Theory and Policy, (3rd Edition), Harper and Row, New York.
- Dorn Busch, R. and F. Stanley (1997), Macroeconomics, McGraw Hill, Inc. New York.
- Heijdra, B.J. and V.P. Fredericck (2001), Foundation of Modern Macroeconomics, Oxford University Press, New Delhi.
- Jha, R. (1991), Contemporary Macroeconomic Theory and Policy, Wiley Eastern Ltd., New Delhi.
- Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publication, New Delhi.

Semester II

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Economics of Growth and Development II	Course Code	25ECO202DS03OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100 Theo 70 Int. 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students are acquainted with the various perspectives of economic growth and its relevance.

CLO 2: Students are familiar with factors affecting economic growth and development.

CLO 3: Knowledge about the various theories of economics development has increased.

Unit 1

Importance of agriculture and industry in economic development. Role of institutions – government and markets. Human capital formation and economic development.

Unit 2

Trade as an engine of growth, two gap analysis, Prebisch, Singer and Myrdal views, gains from trade and LDCs; Role of foreign Direct investment (FDI) and Multi-national corporations (MNCs) in the developing nations.

Unit 3

Objectives and role of monetary and fiscal policies in economic development; Choice of techniques and appropriate technology; Technical progress – Disembodied & embodied; Investment Criteria; Cost-benefit analysis.

Unit 4

Techniques of planning; features and objectives of economic planning, Endogenous growth; role of education research and knowledge in economic development and growth.

References:

- Behrman, S. and T.N. Srivasan (1995), Handbook of Development Economics, Vol.-3, Elsevier, Amsterdam.
- Chenery, H.B. et. al. (Eds.) (1974), Redistribution with Growth, Oxford University Press, Oxford.
- Higgins, B. (1959), Economic Development, W.W. Norton, New York.
- Chatak, S. (1986), An introduction to Development Economics, Allen and Unwin, London.
- Kindleberger, C.P. (1977), Economic Development, (3rd Edition), McGraw Hill, New York.
- Todaro, M.P. (1996), (6th Edition), Economic Development, Longman, London.
- Thiwal, A.P. (1999), (6th Edition), Financing Economic Development.
- Singh S.P (ed.), From underdevelopment to Development.

Semester II

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Mathematics for Economists -II	Course Code	25ECO202DS04OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: The course able to introduce the concepts of differentiation and integration and application in economics.

CLO 2: Knowledge of matrices and determinants and their applications in economics is imparted.

CLO 3: Knowledge of integration and differentiation is enhanced.

Unit 1

Integration – meaning and economic interpretation. Indefinite and definite integration. Simple techniques including integration by substitution and integration by parts.

Unit 2

Differential equation – basic concepts, solution of first order linear differential equation. Non-linear differential equation – exact and variable separable type only. Linear differential equation of second order with constant coefficient and term.

Unit 3

Difference equation – basic concepts, solution of first and second order linear difference equation with constant term and coefficient.

Unit 4

Linear Programming – Relevance and basic concepts, Graphic, simplex and dual solution. Economic interpretation of dual.

References:

- Chiang, Alpha C. “Fundamental Methods of Mathematical Economics” (Mc-Graw Hill).
- Dowling, Edward T “Mathematics for Economists” (Schaum’s outline Series, Tata Mc-Graw Hill).

Semester II

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Statistical Methods II	Course Code	25ECO202DS05OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100	Theo 70	Int. 30
		Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Basics of the common statistical techniques is imparted.

CLO 2: Knowledge about the fundamental tools for data summary is imparted.

CLO 3: Knowledge to summarise data sets is enhanced.

CLO 4: An understanding of the basic concepts of probability is developed.

Unit 1

Diagrammatic and graphic representation of statistical data. Measures of central tendency: A.M., G.M., H.M., Median, quartiles, deciles, percentiles, mode, relationship between A.M., G.M. and H.M., Selection of an average, Limitations of Averages.

Unit 2

Measures of dispersion: range, interquartile range, quartile deviation, mean deviation, standard deviation, standard deviation of the combined series, variance, coefficient of variation, relation between various measures of dispersion, Lorenz curve, skewness and Kurtosis, moments.

Unit 3

Index numbers: Problems and methods of construction of various types of indices, Laspeyres, Pasche's and Fisher's ideal index numbers, Time reversal, factor reversal and circular tests; chain base indices, base shifting splicing and deflating the index nos., costs of living index numbers and consumer price index numbers. Time series: components of time series and their decomposition, Methods of measuring trend, cyclical, seasonal and irregular variation.

Unit 4

Random experiment, random variable, sample space, events, fundamental principles of counting, classical, relative frequency and axiomatic approaches to probability, basic results on probability, conditional probability, Bayes's theorem.

References:

- Gupta S.C. "Fundamentals of Statistics" S. Chand & Sons New Delhi (1993).
- Spiegel, Murry R "Theory and problems of Statistics" (Schaum's outline series, McGraw Hill, 1992).
- Karmal P.H. and Polasek M. "Applied Statistics for Economists (4th edition), Pitman, Australia.

Semester II

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Research Methodology	Course Code	25ECO202SE01OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students able to understand various kinds of research.

CLO 2: Basic knowledge on qualitative research techniques is enhanced.

CLO 3: Adequate knowledge on measurement and scaling techniques is imparted.

CLO 4: Basic awareness of data analysis and hypothesis testing procedures is imparted.

Unit 1

Introduction to Research in Social Sciences: Objectives, Significance, and Limitations of Research in Social Science, The Interplay Between Theory and Research, Types of Research, Ethical Considerations in Social Science Research.

Unit 2

Review of Literature: Need and purpose for reviewing literature, Sources of literature. Hypothesis: meaning, types, and characteristics of a good hypothesis. Sampling: Census vs. Sampling, Techniques and methods of sampling, sampling, and non-sampling Errors.

Unit 3

Data Collection: Meaning, types, Sources, and methods of collecting data. Paper writing: Introduction, Types of manuscripts, General instructions for authors, Selection of journal, submission of manuscript. Parts of papers.

Unit 4

Data Processing: Editing, coding, classification tabulation and analysis of data. Report Writing: Meaning, purpose, and types of reports; steps, format, and final presentation of research report. Documentation: footnotes, references, and bibliography.

References:

- Clive Seale (2004): Social Research Methods- A Reader, Routledge Student Readers-Indian Print.
- William J. et.al.(2006): Methods in Social Research, Surjeet Publications, Delhi
- Moser CA and Kalton G(1985): Survey Methods in Social Investigation, Darmouth Publishing Co. Ltd. England.
- Cooper D.R. and Pamela S Schindler (2013): Business Research Methods, Tata McGraw-Hill/Irwin.
- Krishnaswamy KN, et.al. (2009): Management Research Methodology: Integration of Principles, Methods and Technique, Pearson Education India, New Delhi
- Krishnaswamy M and M Ranganathan (2014): Methodology of Research in SocialSciences, Himalaya Publishing House, New Delhi.
- Bhandarkar PL and TS Wilkinson (2010): Methodology and Techniques of Social Research, Himalaya, New Delhi.

SEMESTER - III

Semester III

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Indian Economy I	Course Code	26ECO203DS01OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100	Theo 70	Int. 30
		Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Knowledge about the issues in Indian Economy like planning, poverty, unemployment etc is imparted.

CLO 2: Knowledge about the relationship between monetary policy, fiscal policy and economic development is enhanced.

CLO 3: To know about framework of policy making for the development of Indian economy.

CLO 4: To know about the preparation of budgeting and its utilization for Indian economy.

Unit 1

Features of Indian economy; Nature and Characteristics of Indian economy; Planning; objectives and strategies; achievements of five years plans, basic economic indicators-National income, performance of different sectors. Trends in prices. NITI Aayog; constitution, functioning, objectives and outcomes.

Unit 2

Pattern & Structure of Growth, Major Challenges, Policy Responses: Agriculture, Industry ,and Services, institutional structure: Land-reforms in India; Agricultural marketing and warehousing; Issues in food security - policies for sustainable agriculture; Agricultural finance policy; Agricultural price policy.

Unit 3

Malthusian theory of population, optimum theory of population, theory of demographic transition, population as 'Limits to Growth' and as 'Ultimate Source' Concepts of Demography- Vital rates, life tables, composition and uses. Measurement of fertility - Total fertility rate, gross and net reproduction rate - Age pyramids, population projection stable, stationary and quasi-stationary population; Characteristics of Indian population through recent census.

Unit 4

Financial Sector: Monetary policy of RBI; money supply, Money and Capital markets; Growth and problem; Role of commercial banks in India; Banking sector reforms since 1991- Industrial finance in India. National Manufacturing policy,2011

References:

- Bardhan. P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi. .
- Brahmanada, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian

Economy:

- Inter-State Perspectives, Bookwell, Delhi.
- Datta, R. and KP.M. Sundhram (2003), Indian Economy. S. Chand & Company Ltd. New Delhi.
- Government of India, Economic Survey, (AnnuaJ), Ministry of Finance, New Delhi.
- Mishra, S.K and V.K Puii Indian Economy- 151 Development Experience, Himalaya Publishing House, Mumbai, Latest Edition.
- Rudra Ashok, Indian Plan Models.
- Todaro, P. Development Planning: Models and Methods.

Semester III

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Pubic Economics	Course Code	26ECO203DS02OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100	Theo 70	Int. 30
		Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: The students are able to learn the features of the federal structure and financial relationship among them.

CLO 2: The course able to develop the analytical ability of students to distinguish between beneficial and detrimental effects of a government policy and their effect on macroeconomics framework of an economy.

CLO 3: Students are able to understand the fiscal relations between centre and state government and principles of federal finance.

Unit 1

Economic rationale of government, fiscal functions; market failures: imperfections, decreasing costs, externalities and public goods; concepts of private goods, pure public goods, mixed goods and merit goods; theory of public goods; free Rider's problem, contributions of Samuelson and Musgrave. Lindhal equilibrium; public choice and fiscal decision making, voting systems, majority voting.

Unit 2

Budgeting: meaning, objectives and types of budgets, economic and functional classification of budget, zero based budgeting and performance budgeting. Budget of the Union Government in India, budget making process in India.

Unit 3

Theory of Taxation: Various approaches to taxation, neutrality, equity, ability to pay, benefit principle, incidence and shifting of taxation, elasticity, buoyancy, taxable capacity, effects of taxation on work effort, savings, investment, and growth; classification of taxes: direct and indirect taxes, progressive, proportionate, and regressive taxes, Ad-valorem, and specific taxes.

Unit 4

Federal Finance: multi-unit finance principles, Principles of grant design, horizontal and vertical imbalances, financial relations under constitution; Centre-State financial relations in India. Problem of State indebtedness.

References:

- Atkinson, A. B., & Stiglitz, J. E. (1980). Lectures on Public Finance. Tata McGraw Hill.

- Chelliah, R. J. (1996). Towards Sustainable Growth: Essays in Fiscal and Financial Sector Reforms in India. Oxford University Press.
- Government of India, Ministry of Finance. (1988). Sarkaria Commission Report on Centre-State Finance Relations.
- Government of India, Ministry of Finance. (Various years). Economic Survey.
- Jha, R. (1999). Modern Public Economics. Routledge, London.
- Kennedy, M. M. J. (2013). Public Finance. PHI Learning Private Limited.
- Mundel, S. (2000). Public Finance: Policy Issues of India.
- Musgrave, R. A., & Musgrave, P. B. (2017). Public Economics in Theory and Practice. McGraw Hill.
- Srivastava, D. K. (2005). Issues in Indian Public Finance. New Century Publications.
- Sury, M. M. (2005). Finance Commissions of India, 2005. New Century Publications.

Semester III

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	International Trade and Finance I	Course Code	26ECO203DS03OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100	Time of Examinations	3
	Theo 70		
	Int. 30		

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students are able to understand **about** international trade and foreign exchange.

CLO 2: The students are able to understand about terms of trade, international debt and balance of payments positions.

CLO 3: Students are able to understand about the policies regarding exports and institutions etc.

Unit 1

The pure theory of international trade - Theories of absolute advantage, comparative advantage and opportunity cost, Modern theory of international trade, Theorem of factor price equalization; Kravis and Linder theory of trade, Role of dynamic factors in explaining the emergence of trade.

Unit 2

The Rybczynski theorem, Immiserizing growth, Measurement of intra-industry trade and its impact on developing economies. Trade as an engine of economic growth, Measurement of gains from trade and their distribution, Concepts of terms of trade.

Unit 3

The Theory of interventions (Tariffs, Quotas and non-tariff barriers), Economic effects of tariffs and quotas on national income, output, employment, terms of trade, income distribution and Balance of payments under partial and general equilibrium analysis, The political economy of non-tariff barriers and their implications.

Unit 4

Meaning and components of balance of payments; Equilibrium and disequilibrium in the balance of payments; Merits and Demerits of fixed exchange rates and flexible exchange rates; Expenditure-reducing and expenditure-switching policies, a critical review of the Absorption and monetary approaches to the theory of balance payment adjustment.

References:

- Bhagwati, J. (Ed.) (1981), International Trade, Selected Readings, Cambridge University press, Massachusetts.
- Carbouth, M. (1999), International Economics, International Thompson Publishing, New York.
- Chacholiades, M. (1990), International Trade: Theory and Policy, McGraw Hill, Kogakusha, Japan.
- Dana, M.S. (2000), International Economics: Study Guide and Work Book (5th Edition), Rutledge

Publishers, London.

- Dunn, R.M. and J.H. Mutt (2000), International Economics, Rutledge Publishers, London.
- Kenen, P.B. (1994), The international Economy, Cambridge University Press, London.
- Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
- King, P.G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.

Semester III

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Agricultural Economics I	Course Code	26ECO203DS04OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Knowledge about the issues agriculture Economics is enhanced

CLO 2: Students are aware of various approaches of agricultural development

Unit 1

Agricultural Economics and Economic Development: Definition of agricultural Economics, its scope and nature; Regional disparities in Indian agriculture; Difference between agriculture and Industry; Need for a separate study of Agricultural Economics. Agriculture and Economic Development: Role of agriculture in Economic Development; Contribution of industry to the development of agriculture; Interdependence of agriculture and industry.

Unit 2

Approaches to Agriculture Development: Schultz, Mellor, Boserup, Lewis and Ranis-Fie.

Unit 3

Economics of Agriculture Production: The Production Function; Factor-Product Relationship; Factor-Factor Relationship; Product- Product Relationship. Equilibrium of the capitalist form, peasant family farm and share tenant farm.

Unit 4

Analysis for Farm Management: The Production Function Approach; Farm-budgeting Approach. Measures of Farm Efficiency; Supply response in agriculture; Size of the farm and Productivity Debate.

References:

- South-worth, H.M. and B.F. Johnston (ed.) Agricultural Development and Economic Growth (Cornell University Press, London, 1974).
- Heady, E.O. Economics of Agricultural Production and Resources Use (Prentice Hall India Ltd. New Delhi - 1964).
- Schult, T.Z. Transforming Traditional Agriculture (Yale University Press, 1964).
- Metacalf D. The Economics of Agriculture.
- Basu, K. Agrarian Structure and Economic Under Development (Harwood Academic, London 1980).
- Sadhu, AN. and A Singh, Agricultural Problems in India (Himalaya Publishing House, Bombay).
- Mellor, J. W. The Economics of Agricultural Development (Vora and Co. Bombay, 1966).

Semester III

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Finance Institutions and Markets I	Course Code	26ECO203DS09OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Knowledge regarding money market, capital market, stock exchange i.e. Indian Financial System which is the backbone of the country is enhanced.

CLO 2: To familiar students about the relationship between financial development and economic development.

CLO 3 :To impart knowledge to students about controller of financial system, e.g. RBI, SEBI, IRDA and TERI.

Unit 1

Financial System - The Nature, Functions, Structure and Role of Financial System; Financial Institutions- Classification of Financial Institutions; Financial Markets - Classification of Financial Markets, Financial Instruments and Services; Equilibrium in Financial Markets- Determinants of Supply and Demand for Funds; Financial System and Economic Development -Effects of Financial System on Saving and Investment; Theories of the Impact of Financial Development on Savings and Investment; Indian Financial System at Present, Criteria to Evaluate Financial Sector

Unit 2

Concept of Risk- Types of Risk; Concept of Return-Types of Return or Yield, Internal Rate of Return or Yield Rate, Bond Rate or Coupon Rate, Realised and Expected Return, Holding Period Yield/Return, Types of Yield; Risk-Return Trade-Off, Valuation of Securities, Bonds, Preferences Shares and convertible Securities

Unit 3

Interest rate: Theories of the Level and Structure of Interest Rates-Introduction, Theories of the Term-Structure of Interest Rates, The Expectations Theory, Liquidity Premium Theory, Market Segmentation Theory, Preferred Habitat Theory, Determinants of the General Structure of Interest Rates

Unit 4

Commercial Banking-Meaning, Types and Functions, Liquidity & Profitability of

Commercial Bank (Credit Creation, Balance Sheet & Portfolio Management); Co-operative Banks-Introduction, Structure, Features of Co-Operative Banks and Main Weaknesses of Co-operative Banks in India ,Central Banking- Meaning, Function and Credit Control Measures Of Central Bank, , Monetary Policy: Meaning, Aim, Type, Objective and effectiveness of monetary policy.

References:

- Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Edminster, R.O. (1986), Financial Institutions, Market and Management, McGraw Hill, New York.
- Goldsmith, R.W. (1969), Financial Structure and Development, Yale, London.
- Hanson, J.A. and S. Kathuria (Eds.) (1999), India: A Financial Sector for the Twenty-first Century, Oxford University Press, New Delhi.
- Karker, P.T. and S.A. Zenios (2000) (Ed.), Performance of Financial Institutions, Cambridge University Press, Cambridge

Semester III

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Economic Research Review	Course Code	26ECO203SE01OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

The examiner has to set nine questions in all. Two questions of 14 marks from each unit and one compulsory question that is question no. 1, consisting of 7 short answer type questions of two marks covering the entire syllabus. A candidate has to attempt five questions in all by selecting one question from each unit and compulsory question.

Course Learning Outcomes:

CLO 1: Students are familiar of the basic concept of review of literature
 CLO 2: Enhanced knowledge about the various sources of economic literature
 CLO 3: Students have gained the basic skill of literature review

Unit 1

Research: Concept and Need for Social Sciences Research, Objectivity and limitations of social sciences research, Various types and methods of social and economic research.

Unit 2

Literature Review: Concept, objectives of literature review, scope and purpose of literature review, selection of relevant economic literature, exploring research gaps and developing a research problem, limitations of literature review.

Unit 3

Sources of economic literature, books, journals news-papers, searching the literature through web sources, E Resources, open-source resources and E libraries, use of search engines for finding literature

Unit 4

Introduction and exposure to review of economic data resources: Understating the budget documents and related concepts of budget, Economic Survey of Government of India. RBI and CMIE and NSSO database on Indian Economy- main features and key trends on national income, growth, agriculture, industry and trade.

References:

- Krishnaswami, O. R., M. Ranganatham & P.N. Harikumar (2016), New Age International (P) Limited Publishers, New Delhi
- Kothari, C. R., (2012), Research Methodology: Methods and Techniques, Himalaya Publishing House, New Delhi
- Budget Document, Government of India
- Economic Survey, Government of India
- RBI (official website)
- CMIE (Official website)
- MOSPI (official web site)

SEMESTER - IV

Semester IV

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Indian Economy II	Course Code	26ECO204DS01OL
Hours per Week	4	Credits	4
Maximum Marks	Total 100	Theo 70	Int. 30
		Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: To have knowledge about the issues in Indian Economy like planning, poverty, unemployment etc.

CLO 2: To know about relationship between monetary policy, fiscal policy and economic development.

CLO 3: To know about framework of policy making for the development of Indian economy

CLO 4: To know about the preparation of budgeting and its utilization for Indian economy.

Unit 1

Agriculture: Role and features of Indian agriculture; Technological change in agriculture; Trends in agricultural productions and productivity; WTO and Indian agriculture. Poverty in India - Absolute and relative analysis of poverty.

Unit 2

Industry: Growth and pattern of industrialization; New industrial policy and liberalisation - impact on Indian economy; Public Sector enterprises - trends and performance; Small and cottage industries; issues of privatization. Unemployment and Migration in India

Unit 3

External sector: Structure and direction of foreign trade; FEMA Exchange rate policy; Foreign capital. Infrastructure Development: Physical and Social; Public-Private Partnerships. Issues of competitiveness of Indian manufacturing sector, emergence of knowledge intensive industries in India.

Unit 4

Environment as necessity-amenity and public goods; causes of environmental and ecosystem degeneration-policies for controlling pollution-economic and persuasive; their relative effectiveness in LDCs; Relation between population, poverty and environment degradation-micro-planning for environment and eco-preservation-water sheds, joint forest management and self-help groups. Role of State in environmental preservation -f Review of environmental legislation in India

References:

- Sen, R.K. and B. Chatterjee (2001), Indian Economy: Agenda/or 21st Century:

- Dhar, P.K., Indian Economy - Its growing dimensions, Kalyani Publishers, New Delhi (Latest Edition) Mishra, S.K. and V.K. Puri Indian Economy - 1st Development Experience, Himalaya Publishing House, Mumbai, Latest Edition.
- Economic Surveys, Government of India, various issues.

Semester IV

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Indian Public Finance	Course Code	26ECO204DS02OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: The students are able to understand the features of the federal structure and financial relationship among them.

CLO 2: Ability of students to distinguish between beneficial and detrimental effects of a government policy and their effect on macroeconomics framework of an economy is enhanced.

CLO 3: Students are able to critically analyses the fiscal reforms and policy choices of the government in developed and developing countries.

Unit 1

Indian Fiscal Federalism: pre- and post-independence development in fiscal decentralization, assignment of functions and sources of revenue and constitutional provisions, competitive and cooperative federalism. Role of Finance Commissions in tax sharing. State-Local Financial relations in India.

Unit 2

Fiscal Policy: Instruments and transmission mechanisms; fiscal policy for stabilization-automatic vs. discretionary stabilization; various concepts of budgetary deficits; fiscal deficit in India: extend, trend and implication.

Unit 3

Public Expenditure: theories of public Expenditure, Wagner's law of public expenditure, peacock-wiseman hypothesis, Colin Clark hypothesis, growth of public expenditure in India, Trends in revenue and expenditures of the Central and State Governments. Tax evasion and tax avoidance in India.

Unit 4

Public debt: meaning, types, sources and importance of public debt, growth of public debt in India, public debt management, burden of public debt, Fiscal reforms in India.

References:

- Brown, C. V., & Jackson, P. M. (1990). Public Sector Economics. Basil Blackwell, Oxford.
- Chelliah, R. J. (1996). Towards Sustainable Growth: Essays in Fiscal and Financial Sector Reforms in India. Oxford University Press.
- Government of India, Ministry of Finance. (1988). Sarkaria Commission Report on Centre-State Finance Relations.

- Kennedy, M. M. J. (2013). Public Finance. PHI Learning Private Limited.
- Mundel, S. (2000). Public Finance: Policy Issues of India.
- Musgrave, R. A., & Musgrave, P. B. (2017). Public Economics in Theory and Practice. McGraw Hill.
- Srivastava, D. K. (2005). Issues in Indian Public Finance. New Century Publications.
- Sury, M. M. (2005). Finance Commissions of India, 2005. New Century Publications.

Semester IV

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	International Trade and Finance II	Course Code	26ECO204DS03OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Students would know the country's position regarding international trade, payments and foreign exchange.

CLO 2: The students would learn the methods regarding improvement in terms of trade, international debt and balance of payments positions.

CLO 3: Students would know about the policies regarding increase in exports, to deal with international institutions and to maintain relation with other countries. Since globalization and international relations can increase the rate of growth and solve domestic problems like inflation, unemployment and value of currency etc.

Unit 1

Foreign trade multiplier with and without foreign repercussions and determination of national income and output; Policies for achieving internal and external equilibrium simultaneously under alternative exchange rate regimes, Forms of economic cooperation; Static and Dynamic effects of a custom union and free trade areas.

Unit 2

International Monetary System and Trade Policies in India: Multilateralism and WTO, collapse of Bretton Woods system, Conditionality clause of IMF; Emerging International Monetary System with special reference to Post Maastricht developments and developing countries; Reforms of the International Monetary System, Optimum currency Areas - Theory and impact in the developed and developing countries.

Unit 3

Need, adequacy and determinants of international reserves, Recent changes in the direction and composition of trade; Rationale and impact of trade reforms since 1991 on balance of payments, employment and growth.

Unit 4

Problems of India's International debt; Working and regulations of MNCs in India, Recent Export and Import policy of India

References:

- Dana, M.S. (2000), International Economics: Study Guide and Work Book (5th Edition), Rutledge Publishers, London.
- Dunn, R.M. and J.H. Mutt (2000), International Economics, Rutledge Publishers, London.

- Kenen, P.B. (1994), The international Economy, Cambridge University Press, London.
- Kindleberger, C.P. (1973), International Economics, R.D. Irwin, Homewood.
- King, P.G. (1995), International Economics and International Economic Policy: A Reader, McGraw Hill International, Singapore.

Semester IV

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Agricultural Economics II	Course Code	26ECO204DS04OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Course provides knowledge about agricultural background, farm and agro business activities, agri finance and management.

CLO 2: It introduces learner applied part of economics.

CLO 3: Course offer relevant production and various techniques to understand agricultural production.

Unit 1

Land Reforms in India: Agricultural Development and Tenurial conditions: Land Reforms - The Theoretical Issues (Meaning, Important changes caused by Land Reform and Objectives of Land Reforms); Land Reforms; Ceiling on Land Holdings; Implementation of Land Reforms in India. Strategy for Development of Indian Agriculture; The Green Revolution; Factors responsible for Green Revolution; Economics Benefits of Green Revolution; Measures for making Green Revolution all pervasive; Regional disparities created by Green Revolution; Inter-farm disparity in Income; Green Revolution and Employment. Trends in Migration and Labour markets; Minimum Wages Act.

Unit 2

Terms of Trade between Agriculture and Industry: Meaning; Impact of change in terms of trade in favour of and against agriculture; changes in terms of trade between agriculture and industry during the course of economic development; Terms of trade between agriculture and industry in India since Independence; Agricultural Marketing: Need for an efficient system of agricultural marketing; Efficiency of agricultural Marketing system in India; Measures to improve the efficiency of agricultural marketing in India. Cooperative movement in India - organization structure and development of different types of cooperatives in India.

Unit 3

Agricultural Credit: Importance of agricultural credit; Sources (formal and informal), problems and Government policies since Independence. Capital formation in the rural sector - savings, assets and credits. Issues in Agriculture price policy: objectives of Agricultural Price Policy; Main elements of Agricultural Price Policy; Agricultural Price Policy in India: Its evolution; objectives of Price policy in India; Important constitution of Agriculture Price Policy in India; Critical Evaluation of India's Agriculture Price Policy; Need for Revision of Agricultural Price Policy in India.

Unit 4

The New Economic Policy and Indian Agriculture: Macro Economic Stabilization measures; structural Adjustments in the Agricultural Sector. World Trade Organization and Indian Agriculture; Model of Production Debate: Private V/s Public investment in Agriculture; Trends in public and private investment in Indian Agriculture

References:

- Bardhan. P.K. (9th Edition) (1999), The Political Economy of Development in India, Oxford University Press, New Delhi. .
- Brahmanada, P.R. and V.R. Panchmukhi (Eds.) (2001), Development Experience in the Indian Economy: Inter-State Perspectives, Bookwell, Delhi.
- Datta, R. and K.P.M. Sundhram (2003), Indian Economy. S. Chand & Company Ltd. New Delhi.

Semester IV

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Finance Institutions and Markets II	Course Code	26ECO204DS09OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note: Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: Course work provides a path to follow research in general area of economics and business.

CLO 2: Students would gain understanding of primarily about estimation and hypothesis testing. What is different and generally much more interesting and useful is that parameter being estimated and tested are not just means and variances but relationship between variables, which is much of economics and other social sciences.

CLO 3 : Students are able to understand Economics with an applied approach.

Unit 1

Financial Markets:- Money Market - Introduction, Structure Financial Institutions, Financial Instruments, Organization, Features and Drawbacks of Indian Money Market, Strategies for Improvement, **Capital Market-** Introduction, Indian Capital Market, Structure of Capital Market, Components of Capital Market, Lender's Sector, Borrower's Sector, Financial Instruments, Organisation of Capital Market;

Unit 2

Call Money Market-Introduction, Inter-bank Call Market, Call Rates ,Call Money Market in India, Volatility and Reasons for Call Rate Volatility, Measures Taken to Reduce Volatility of Call Money Rate, Repo Market, Treasury Bills Market-Introduction, Nature and Characteristics, Funding of Treasury Bills, Bank Deposits and Monetary Policy; Types of Treasury Bills, Treasury Bill Rate , Treasury Bill market and Rates in India and Limitation of TB Market in India, Commercial Papers and Certificate of Deposits Markets ,Commercial Bills Market, Bill of Exchange, Classification of Bills-Accommodation and Supply Bills ,Discount Market-Bond Market- Introduction, Basic Features of Bonds, Types of Risks Involved in Bonds, Valuation of Bond , Relation between Coupon Rate, Discount Rate, Value of the Bond and Par Value, Relation between Bond Value and Rate of Return , Government Security Market- Importance of Government Securities Market (GSM) , Bill Market in India, Composition and Significance of Bill Market. Development of Bill Market, Advantages of Bill Market, Money Market Reforms in India

Unit 3

Stock Market-Introduction- Classification of Stock Markets and Securities, Ordinary Shares, Preference Shares, Private Equity , Valuation of Ordinary Shares , Valuation of Preferred

Stock ;Primary Market-Initial Public Offerings; Secondary Equity Market , Drawbacks of Indian Stock Markets

Derivatives Market-Introduction, Concepts, Services Provided by Derivatives, Types of Derivatives-Forwards, Futures, Options, Swap ,Valuation or Pricing of Derivatives

Foreign Exchange Market(FEM)- Introduction, Foreign Exchange Market Structure, Retail Market, Wholesale Market, Players in the Foreign Exchange Market in India, Foreign Exchange Market Trading, Risk Management in the FEM, Efficiency of the Foreign Exchange Market,

Foreign Capital Flows-Introduction, Uses and Determinants of Foreign Capital, Multilateral Financial Institutions, International Financial Instruments, Components of Foreign Capital in India

Unit 4

The Reserve Bank of India- Introduction, Organisation and Management and Functions of RBI, Monetary Policy of the RBI, Monetary Policy Operations in India ,**SEBI, IRDA and PFRDA** -Introduction and Functions

References:

- Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd., New Delhi.
- Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.
- Goldsmith, R.W. (1969), Financial Structure and Development, Yale, London.
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- Johnson, H.J. (1993), Financial Institutions and Markets, McGraw Hill, New York.
- Khan M. Y. (1996), --Indian Financial Systems, Tata McGraw Hill, New Delhi.
- Machiraju, M.R. (1999), Indian Financial System, Vikash Publishing House, New Delhi.
- Ohlson, J.A. (1987), The Theory of Financial Markets and Institutions, North Holland, Amsterdam.
- Prasad, -K.N. (2001), Development of India's Financial System, Sarup & Sons, New Delhi.
- Robinson, R.I. and D. Wrightman (1981), Financial Markets, McGraw Hill, London.
- Smith, P.F. (1978), Money and Financial Intermediation: The Theory and Structure of Financial System, Prentice Hall, Englewood-Cilffs, New Jersey.

Semester IV

Name of Program	MA Economics	Program Code	ECO2
Name of the Course	Computer Applications in Economics	Course Code	26ECO204SE01OL
Hours per Week	4	Credits	4
Maximum Marks	Total Theo Int. 100 70 30	Time of Examinations	3

Note:

Note: Examiner will set nine questions and the candidates will be required to attempt five questions in all. Question number one will be compulsory containing short answer type questions from all units. Further, examiner will set two questions from each unit and the candidates will be required to attempt one question from each Unit. All questions will carry equal marks.

Course Learning Outcomes (CLO):

CLO 1: The students have improved understanding of computing economic data

CLO 2: The students are equipped with basic knowledge of computer operation

CLO 3: The students are able to analyze the economic data .

Unit 1

Opening, saving and printing documents files, Editing and formatting of documents, inserting page Numbers and footnotes, Table: Auto Format and Properties, Inserting graphs and diagrams, Introduction to MS Power Point, Preparation of presentations in Power point using design template and Text structure layouts.

Unit 2

Introduction to Microsoft Excel: Creation of worksheets; Data entry, formatting, sorting and validation; Importing and exporting of data files, Uses of mathematical, financial and statistical function and what if analysis, Data Analysis: Correlation, Simple and Multiple Regression, One way ANOVA, Creation of diagrams and graphs.

Unit 3

Basics of search engines, Emails, Internet Security of computer and documents, Antivirus-scanning and updates, introduction to Artificial Intelligence AI, Economics and ethics in AI.

Unit 4

Introduction to R and SPSS: Creation of data files, assigning names and labels to variables, sort cases, import/export of files, Computing variable, Data Analysis: Descriptive statistics, Comparing means, Simple Correlation analysis, ANOVA, Simple Regression Analysis, Preparation of graphs and diagrams.

References:

- Bhattacharjee Dibyojyoti (2010), Practical Statistics: Using Microsoft Excel, Asian Books, Asian Books Private Limited, New Delhi
- George, Darren Mallery Paul (2011) SPSS for Windows step by step: A simple guide and reference 15.0, Pearson Education, New Delhi
- ITL Education Solution Limited (2012), Introduction to information Technology, Pearson, New Delhi (ISBN 978-81-317-6029-1
- Preeti Dabas (2024), Descriptive and Inferential Statistics Using R, Sultan Chand & Sons, New Delhi