

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

DIT UNIVERSITY

Dehradun



Detailed Course Structure & Syllabus

of

M.A. in Economics

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Course Structure

Year: 1st

Semester: I

Course Category	Course Code	Course Title	L	T	P	Credit
UC	ECO601	Advance Theory of Microeconomics	4	1	0	5
UC	ECO602	Mathematical Economics	4	1	0	5
UC	ECO603	Advance Theory of Macroeconomics	4	1	0	5
GE I		General Electives I	4	1	0	5
AEC I	HS601	Communication and Personality Development	3	0	0	3
Total			23			

General Electives I

ECO641	International Economics
ECO642	Economics of Regional and Rural Development

Year: 1st

Semester: II

Course Category	Course Code	Course Title	L	T	P	Credit
UC	ECO604	Economics of Growth & Development	4	1	0	5
UC	ECO605	Applications of Statistics in Economic Theories	4	1	0	5
UC	ECO606	Basic Econometrics I	4	1	0	5
GE II		General Electives II	4	1	0	5
AEC II	ECO645	Computer Application in Economic Analysis	2	0	2	3
AEC II	ECO646	Innovation and Entrepreneurship	3	0	0	3
Total			23			

General Electives II

ECO643	Agricultural Economics
ECO644	Environmental Economics

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Year: 2nd

Semester: III

Course Category	Course Code	Course Title	L	T	P	Credit
UC	ECO701	Indian Economic Policy	4	1	0	5
UC	ECO702	Research Methodology and Applications	4	1	0	5
UC	ECO703	History of Economic Thought	4	1	0	5
UC	ECO704	Financial Institutions and Market	4	1	0	5
DSE I		Discipline Specific Electives I	3	0	0	3
Total						23

Discipline Specific Electives I

ECO741	Industrial Economics
ECO742	Advance Econometrics
ECO743	Labour Economics

Year: 2nd

Semester: IV

Course Category	Course Code	Course Title	L	T	P	Credit
UC	ECO705	Monetary Economics	4	1	0	5
UC	ECO706	Public Economics	4	1	0	5
UC	ECO707	Major Research Project/Thesis	4	1	0	5
DSE II		Discipline Specific Electives II	3	0	0	3
DSE III		Discipline Specific Electives III	3	0	0	3
Total						21

Discipline Specific Electives II

ECO744	Ecological Economics
ECO745	Health Economics
ECO746	Experimental Design and Data Analysis

Discipline Specific Electives III

ECO747	Economics of Social Sector and Gender
ECO748	Multinational Enterprises
ECO749	Population Economics

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Summary of the Credit

Year	Semester	Credit
1	1	23
	2	23
2	3	23
	4	21

Category wise classification of the Credit

Category	Credit
UC	65
GE	9
AEC	6
DSE	10
Total	90

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Detailed Syllabus

Program/Branch: M.A. Economics

Subject Code	ECO601	Subject Title	Advance Theory of Microeconomics						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	1 st	Semester	I

Course Objective:

It is mainly concerned with the objective of equipping the students in a rigorous and comprehensive manner with the various aspects of consumer behaviour and demand analysis, production theory and behaviour of costs, the theory of traditional markets.

Unit 1: Demand Analysis

Utility and indifference curve approaches; Income compensated demand curve; Income and Substitute effects; Slutsky theorem; Revealed preference theory; Consumer surplus. Elasticity (Price, cross, income) of demand and supply. Revision of Demand theory by Hicks; Indirect utility functions; Demand systems – Linear expenditure system; Inter-temporal consumption; Hick's revision of demand theory.

Unit 2: Theory of Production and Costs

Production function - Short term and long-term period; Law of variable proportions; Returns to scale; Economies of scale; Cobb-Douglas Production function; Iso-quants; Least-cost combination; Multi-product firm; CES production functions and their properties; Euler's theorem; Technical; Theories of costs – traditional and modern; Derivation of cost function from production function; Derived demand for factors; Marginal rates of technical substitution.

Unit 3: Price and Output Determination

Marginal analysis as an approach to price and output determination; Perfect competition – Short- and long-term equilibrium of the firm and industry; Monopoly – short run and long run equilibrium; Price discrimination; Monopolistic competition – General and Chamberlin's approaches to equilibrium of the firm and the group with product differentiation and selling costs; Criticism of monopolistic competition.

Unit 4: Oligopoly

Oligopoly – non-collusive models: Collusion and Quasi competitive solution; Cournot, Bertrand, Stackelberg, Edgeworth, Chamberlin, Kinked-demand curve and Stackleberg solution. Collusive models: Cartels and mergers; Price leadership model. Price and output determination under monopsony and bilateral monopoly.

Unit 5: Social Welfare and Game Theory

Welfare economics of monopoly, Welfare function and Pareto Criterion, First and Second Theorem of welfare economics, value judgement; Theory of second best – Arrow's impossibility theorem, Rawl's theory of Justice; Sctovsky's double criterion; General Equilibrium Theory; Equity efficiency trade off. Game Theory: Basic component of game theory, Nash equilibrium, Dominant and dominated strategies, Mixed strategies, Repeated prisoner's dilemma, Sequential-move game and strategic moves; General Equilibrium: General equilibrium and partial equilibrium; Existence of equilibrium pure exchange economy and production.

Course Outcome:

- Students will be able to understand the advance theory of Microeconomics and its use to formulate policy at individual.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Suggested Reading Material

1. Varian H. (2000). Microeconomic Analysis, W.W. Norton, New York.
2. Varian H. Intermediate microeconomics: A Modern Approach (5th Edition).
3. David Besanko Breautigam (4th ed). Micro Economics, John Willey & Sons, INC.
4. Dwivedi D.N. (2011). Micro Economics - Pearson Publication New Delhi.

Subject Code	ECO602	Subject Title	Mathematical Economics						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	1st	Semester	I

Course Objective:

- To increase the basic understating of students to use mathematics in economic theories.
- To provide significant platform for students to apply mathematical tools in current economic issues.
- To provide the several ways to use of mathematical applications in firms and industrial activities.

Unit I: Function and Differentiation

Concept of function and types of functions; Multivariable functions; Interpretation of revenue, cost, demand, supply functions; Cobb-Douglas Production Function, CES production function; Limit, Continuity and derivatives; Rules of differentiation; Elasticity and their types; Rules of Partial differentiation; Rules of differentiation; Application of unconstrained optimization.

Unit II: Applications of Differentiation and Integration

Applications of differentiation and integration in economic problems; Problem of maxima and minima in single and multivariable function; constrained optimization in simple economic problems; Concept and simple rules of integration; Application to consumer's and producer' surplus.

Unit III: Matrix and Determinant

Concept of Matrix and Determinant – their types, simple operations on matrices, matrix inversion and rank of matrix; Solution of simultaneous equations through Cramer's rule and Matrix inverse method; Application of matrix and determinant in economic theories; Linear independence and Linear dependence of vectors; input-output analysis.

Unit IV: Application of Differential Equation

Solution of first order and second order difference equations; Applications in trade cycle models; Growth models and lagged market equilibrium models; Homogeneous case, Standard linear differential equation; Bernoulli's form, Exact equation; Solution of linear differential equation with constant coefficients; Simple Application questions.

Unit V: Linear Programming and Game Theory

Linear programming – Basic concept, Nature of feasible, basic and optimal solution; Solution of linear programming problem through graphical and simplex method. Concept of a Game: Two-person Zero sum game; saddle point, value of a game; strategies- simple and mixed; Dominance rule; Solution of a game by linear programming.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Course Outcome:

- Students would be able to apply mathematics as a key instrument in economic theories.
- Students will be familiar with firms and industrial activities.
- Students would be efficient to develop functional relationship among the variables in various social and economic issues.

Suggested References

1. Bose D.C. (1996): An Introduction to Mathematical Economics. Himalaya Publishing House, Bombay.
2. Sydsaeter. Mathematics of Economics Analysis. Pearson Education Publication, New Delhi, 2002.
3. Malcolm Pemberton and Nicholas Rav (2016). Mathematics for Economists: An Introductory Textbook. Manchester University Press.
4. Madnani BC and Mehta GM (2007). Mathematics for Economists. Sultan Chand & Sons, New Delhi.
5. Burmister and Dobell: Mathematical Theories of Economic Growth.

Subject Code	ECO603	Subject Title	Advance Theory of Macroeconomics						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	1 st	Semester	I

Course Objective:

- To increase the understanding of students towards advance theories of macroeconomic which would be useful to take decision at national level.

Unit I: National Income and Accounts

Circular Flow of Income in two, three and four-sector economy; different forms of national income accounting – social accounting, input-output accounting, flow of funds accounting, Relationship between national income and social welfare.

Unit II: Consumption and Investment Function

Keynes' Psychological law of consumption; Empirical evidence on consumption function; Reconciliation of short run and long run consumption function – absolute income relative, permanent income and life cycle hypotheses; Determinants of consumption function; Cyclic and secular consumption function.

Marginal Efficiency of Investment; Marginal Efficiency of Capital, Accelerator- Simple & Flexible, Profits Theory, Financial Theory (Time Value of Money, Present and Future Value, Net Present Value), Neoclassical Model.

Types of multiplier; Money multiplier; Super multiplier; foreign multiplier.

Unit III: Demand and Supply for Money

Classical and Keynesian approach; Post Keynesian approaches to demand for money-Tobin (Portfolio balance approach), Baumol (Inventory theoretic approaches) and Friedman (Restatement of quantity theory of money); Supply of Money: Measures of money supply; Instruments of Monetary control; Mechanism of Monetary Expansion and contraction (deterministic and behavioural models); Determinants of money supply; Money supply and Rate of Interest.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Unit IV: Neo-classical and Keynesian Synthesis

Classical, Neo – classical and Keynesian views on interest; The Basic IS-LM model, extension of IS-LM model with government sector and variable price level; IS and LM function; Mundell–Fleming model.

Unit V: Money and Banking

Theory of Inflation: Demand pull and cost push inflation; Measurement of inflation; Inflation control; Trade-off between inflation and unemployment – Phillips curve (Short run and long run).

Theory of Business Cycles: Phases of business cycles; Business cycle theory Schumpeter.

Macro-Economic Policy: Monetary and Fiscal Policy- Targets and instruments.

Course Outcome:

- Students will be able to differentiate between social and economic problems at micro at macro level.
- Students will contribute their academic contribution in macro-economic principles.

Suggested References

1. Romer, D.L. (1996), Advanced Macroeconomics, McGraw Hill Company Ltd., New York.
2. Shapiro, E. (1996), Macroeconomic Analysis, Galgotia Publications, New Delhi.
3. Mankiw, N. Gregory (2000), Macroeconomics Macmillan worth Publisher's 4th Edition.
4. Principles of Macroeconomics, J. E. Stiglitz and Carl E. Walsh, W.W. Norton and Company, New York, 2002.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO641	Subject Title	International Economics						
LTP	4-1-0	Credit	5	Subject Category	GE I	Year	1 st	Semester	I

Course Objective:

- To provide the concrete environment of trade regime at international level.
- To increase the understanding of students towards economic theories in international trade.

Unit I: Introduction of International Economics

Concept of International economics; Economic Growth and International Trade: Growth and Trade when growth is unspecified, formal model of economic growth and international trade, increases in factor endowments and international trade, technical progress and international trade, economic growth.

Unit II: Trade in Global Economics

International trade and inter movement of factors; a dynamic analysis of pattern of specialization and factor accumulation; Economic expansion and the terms of trade; The British School Premises hypothesis; Intermediate products and international trade; implications of inter-industry flows and pure intermediate products.

Unit III: Factor Market and International Trade

International Trade and factor market distribution with wage differential with factor immobility and factor price rigidity; The Basis of International Trade, Comparative cost Theory, Heckscher-Ohlin Trade Theory. Leontief Paradox –Factor Price Equalization Theories; The international Monetary Fund: Reforms of the International Monetary system.

Unit IV: Product Market and International Trade

International Trade with product market imperfections, the theory of monopoly in general equilibrium; International Trade with non-traded goods; Theory of optimal tariff. Theory of Effective protection, Theory of Customs Union.

Unit V: Foreign Exchange and Fluctuation in International Market

Volatility in financial market; Currency Fluctuation in International market; Foreign Exchange Market: Demand and supply of Foreign Exchange, Flexible Exchange Rate, Spot and Forward markets for foreign Exchange, Fixed Exchange rate; Foreign Exchange Rate: Purchasing Power Parity Theory, Balance of Payment Theory; Balance Payment and its adjustment; Balance of International Payment; Disequilibrium in International payment; Adjustment mechanism under flexible exchange rates.

Course Outcome:

- Student would be able to understand the trade regime and its implications in domestic economies.
- Students will be familiar with international theories which are conducive for economic development in various social and economic scenarios.

Suggested References

1. Rober A. Mundell: International Economics.
2. Thomas A. Paugel (2015). International Economics, Pub.
3. Dominick, Salvatore (2010). International Economic, Willy Pub.
4. D.M. Mithani (2004). International Economic, Himalaya Pub.
5. Jhingan M.L. (2014). International Economics, Vrinda Pub.
6. Carbug Robert J (2008). International Economics, Carbug pub.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO642	Subject Title	Economics of Regional and Rural Development						
LTP	4-1-0	Credit	5	Subject Category	GE I	1 st	2021-23	Semester	I

Course Objective:

- To provide the importance of regional and rural development in economic development of a nation.
- To provide the various theories to measure the diversity across regions of a country.

Unit I: Importance of Regional and Rural Development

Importance of regional analysis; Need of regional and rural development in India; Source of regional and rural development: agriculture, Dairy, fishery, animal resource development; Problems in Region: Geographical, demographic, planning and model regions.

Unit II: Development in Rural Development

Development strategy for rural development; Role in NGOs in rural development; Self-help groups; Institutions for rural development; rural local bodies; Locational inter-dependence, location and decision criteria.

Unit III: Role of Co-operatives Societies in Regional and Rural Development

Rural co-operatives; rural banking, role of bureaucracy in rural development; Nodal Hierarchy: Central Place Theory, The Central place hierarchy and the ranksize rule gravity model growth poles.

Unit IV: Importance of Developmental Plan

Rural Development Plan: MGNREGS, National Rural Livelihood Mission; National Rural Health Mission; National Food Security Act; Regional aspects of stabilization and growth policy: Post war regional cyclical behavior and policy measures for stabilization, theories to explain regional differences in growth, fiscal programmes.

Unit V: Federalism and Economic Growth

Theory of federalism, division of sources of revenue between the central and state governments with special reference to Indian adjusting mechanism, problems of resources mobilization at the regional level.

Course Outcome:

- Students would be in position to measure the regional development.
- Students would understand the role of regional and rural development in nation's building.

Suggested References

1. Sen Amartya. Development as Freedom, Oxford University Press, New Delhi.
2. W. Isard. Methods of Regional Analysis. MIT Press.
3. Richardson H.W. Regional Economic: Location Theory, Urban Structure and Regional Change.
4. Khanna B.S. Rural Development in South Asia, Deep and Deep Publications, New Delhi.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	HS601	Subject Title	Communication and Personality Development						
LTP	3-0-0	Credit	3	Subject Category	AEC I	Year	1st	Semester	I

Course Objective:

- To increase the communication skills of the students.
- To create personal development of the students.

Unit I: Framework to communication

Defining communication, process of communication, principles of effective communication, importance of business communication and feedback; Factors affecting communication-Physical, Mechanical and Psychological barriers to communication. Effective listening – types and Essentials of effective listening.

Unit II: Channels, Types and Forms of Communication

Channels, Verbal, Non-verbal, Formal, Informal, Internal, External and Communication networks

Unit III: Enhancement of Creative Writing Ability

Vocabulary building (wordlist) and learning idioms, Adaption and selection of words, construction of clear sentences and paragraphs; writing short articles on a topic; designing an advertisement for a product.

Unit IV: Fundamentals of Letter Writing

Basic patterns and format of Business Letters -Application & Notice– Leave applications, Notice -Sales letter – Placing orders, Complaint letters; Bank correspondence- Informing bank about lost cards, Complaint letter, Request a loan.

Unit V: Enhancement skills / Employability Skills

Employment Messages: Writing Resumes, covering letter, Job Application, Resignation Letter -Interview skills: Types of interview, preparing for an interview, Attire for an interview, how to handle stress interview; Activities: Presentations, Extempore and Group discussion, Mock interviews. Review of newspaper article as weekly activity. Wordlist and idioms to be provided by faculty.

Course Outcome:

- Students will be strong to share their ideas among the academicians with greater confidence.
- Students would be able to criticise the current social and economic issues with greater confidence.

Suggested Reading Material

1. K.K.Sinha, Galgotia: Business Communication. Publishing Company.
2. Chhabra.T.N. (2005). Business Communication, Sun India Publication.
3. Parag Diwan: Business Communication, Excel Books.
4. Rajendra Pal (2000). Essentials of Business Communication, Sultan Chand Publication.
5. R.K.Madhurkar: Business Communication, Vikas Publishing House Pvt. Limited.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 604	Subject Title	Economics of Growth & Development						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	II

Course Objective:

- To provide the comprehensive overview of developmental theories in context of developed and developing economies.
- To increase the understanding of students on how economic and social issues can be resolved through existing developmental theories.

Unit I: Traditional Growth Model

Concept of development and underdevelopment; Rostow's Stages of Economics Growth-Take off and India, Theories of Economic Growth-Keynesian and Post Keynesian; Theories of growth: Harrod -Domar Model, Robinson's Model, Mead's Model, Solow Model, Kaldor Model, Endogenous growth models-Arrow, Robert Lucas and Paul Romer.

Unit II: Model and Techniques of Development

Strategies of Development; Lewis model with unlimited labour supply; Leibenstein's theory of critical minimum effort; Rosenstein Roden's Big-Push theory; Balanced and Unbalanced growth model; Technique of Development: Planning and Plan Models; Aggregate Models and Sectoral models, Accounting Prices, capital output ratio.

Unit III: Economic Development and Capital Formation

Capital formation and Economic Development; Nurkse's analysis of vicious circle of poverty, HDI; process and measures of capital formation, disguised unemployment and saving potential.

Unit IV: Problems in Planning and Policies

Planning Problems and Policies of Development Planning, investment criteria, choice of technique: Sen's analysis, Technologies dualism, appropriate technology for developing economy, Schumacher's intermediate Technology International Transfer of technology. Regional Planning-Strategy from Regional Planning, Regional imbalance and the measures to reduce it, regional imbalance during plan periods, policy for balanced regional development.

Unit V: Human Capital Formation

Human Capital Planning, Evolution of the Concept, Sources of human capital formation, Role of human capital in economic development.

Course Outcome:

- Enables the student with different tools of analysis while simultaneously equips the student to appreciate alternative perspectives in development theory and policy.
- It will also increase the understanding of students towards various perspective of development model in developed and developing economies.

Suggested References

1. Jhingan ML. Economics of Development Planning. Publisher: Vrinda Publications P Ltd., India, 2017.
2. SK Mishra and VK Puri. Economics of Development and Planning-Theory & Practices. Publisher: Himalaya Publication, New Delhi, 2006.
3. H L Ahuja. Development Economics. S. Chand & Company Ltd., New Delhi, 2016.
4. Ray D. Development Economics. Oxford Publishing House, 1999.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO605	Subject Title	Applications of Statistics in Economic Theories						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	II

Course Objective:

- The course provides understanding of basic concepts and terminology that are fundamental to statistical analysis and inference.
- To enable the students about the application of statistical tools and to understand the assumptions underlying those statistical tools.

Unit I: Nature and Scope of Statistics

Definition, Importance & Scope of statistics, Revision of Measures of Central tendency; Measures of dispersion and skewness – Range, Quartile deviation, Mean deviation, Standard deviation. Correlation Analysis: Karl Pearson coefficient of correlation, Spearman's rank correlation, and concept of probable Error.

Unit II: Index Numbers and Time Series Investigation

Concept, types, application and problems in construction of Index numbers, the chain index numbers, Base shifting and deflating the index numbers, cost of living index numbers.

Components of Time Series. Measurement of Trend by Graphic Method, Semi-Average & Moving Average method and Least Squares Method.

Unit III: Correlation and Regression Analysis

Correlation coefficient and its importance; Concept, Regression lines, regression coefficients, equations and prediction. Interpolation and extrapolation.

Unit IV: Probability and its Theorems

Concepts & Definition, Calculation of Probability, Theorems Addition Theorem and Multiplication Theorem. Probability Distribution: Normal, Binomial & Poison Distribution.

Unit V: Applications of Various Statistical Tools in Social and Economic Data

ANOVA, Ramsay test, stationarity of data, unit root, parametric and non-parametric test, PCA and factor analysis, composite index.

Course Outcome:

- The students will understand how to use empirical evidence to evaluate the validity of an economic argument, use statistical methodology, interpret statistical results and conduct appropriate statistical analysis of data.
- Students should be able to interpret and apply basic statistical methods and understand empirical papers of an appropriate level.

Suggested References

1. SC Gupta (2016). Fundamental of Statistics. Himalaya Publishing House, New Delhi.
2. SP Gupta (2016). Statistical Methods. Himalaya Publishing House, New Delhi.
3. AL Nagar and AK Das (2016). Basic Statistics. Oxford University Press.
4. RV Hogg, A. Craig, and McKean (2004). Introduction to Mathematical Statistics. Prentice Hall.
5. D.N. Elhance (2007). Fundamentals of Statistics. Kitab Mahal.
6. Davis & Pecor (2014). Business Statistics, Oxford University.
7. N.K. Viswanathan (2011). Business Statistcs, Pearson Pub.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO606	Subject Title	Basic Econometrics I						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	II

Course Objective:

- To provide the knowledge of econometrics in economic theories.
- To cover basic econometrics with focus on regression modelling and the problems encountered in dealing with cross-section and time series data.
- To increase the understanding of PhD students towards advance econometric models in emerging social and economic issues in India.

Unit I: The Econometric Approach

Meaning and objectives of Econometrics; hypothesis; raw materials of econometrics; Time series and Cross section data: the problem of their pooling together. **Elements of Statistical inferences:** Point and interval estimation-estimator and its properties; Method of Maximum Likelihood; Interval Estimation- confidence interval; Test of Hypothesis- Simple and composite hypothesis, two types of errors, Neyman-Pearson Lemma Power Function of a test.

Unit II: Classical Linear Regression Model

Assumption and their economic interpretation, least square estimations of regression parameters, their properties, Gauss-Markov Theory; Theorem: Standard errors of estimates; Estimator of errors, Control limit theorem, Maximum likelihood estimator. Normality of errors, control limit theorem, Maximum Likelihood Estimator; Significance test and confidence intervals of estimates Z-test, t-test and f-ratio test; Prediction point and interval.

Unit III: Extension of the Two Variable Linear Model

Three –variable linear model, the coefficient of multiple correlation, partial correlation coefficient; General Linear model (with K- Explanatory variable), Least-square estimates and their properties; Variance- covariance matrix of estimates, Estimates of error variance, Multiple coefficients of determination- R^2 and multiple correlation co-efficient- R ; Significance test and confidence intervals.

Unit IV: Non-linear Regression Model and Dummy Variables

Non-linear Models-Choice of functional forms, estimation; Extensions of the general model: Dummy variables, Use of dummy variable in seasonal analysis, dummy dependant variable.

Unit V: Limitation of Classical Model

Violations of the assumptions of the classical model; Errors in variables consequence, Methods of estimation-classical method of maximum likelihood, use of instrumental variable; Autocorrelation: Sources, Consequences; Tests for autocorrelation: Remedial measures, Prediction.

Course Outcome:

Students would get idea to create their own empirical models.
Students would be able to identify various issues in time series, panel data and cross-sectional data.
Students would enable to resolve statistical remedies in econometric model.

Suggested References

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

1. Gujarati D.N.: Basic Econometrics (5th Edition). MC Graw Hill New Delhi.
2. Koutsoyiannis A. Theory of Econometrics (2nd Edition). The Macmillan Press Ltd. London.
3. Maddala G.S. Introduction to Econometrics (3rd Edition). McMillan, London.
4. Woolridge J. Introductory Econometrics (5th Edition). South-Western Educational Publishing.
5. N.Hatekar. Principles of Econometrics. Sage Publishing House.
6. Krishna K.L. Economic Application in India. Oxford University Press, Delhi.

Subject Code	ECO643	Subject Title	Agricultural Economics						
LTP	4-1-0	Credit	5	Subject Category	GE II	Year	2 nd	Semester	II

Course Objective:

- To understand the knowledge of nature and scope of agricultural economics.
- To enable the students to have different theories related to agricultural economics

Unit I: Agricultural and Economic Development

Role of Agriculture in economic development; Agricultural Production and Inputs; Production functions; returns to scale; resource allocations under competitive conditions; Resource substitution of factor relationship; Cost and supply curves factor combination and solution techniques under uncertainty system of framing; choice of product; relationship among product and adjustment of production and resource use to uncertainty.

Unit II: Land Distribution, Agricultural credit and marketing

Factors: Principle of land utilization; land and tenancy; land reform; land values and rent; land taxation; labour market; wages and employment and under employment.

Characteristics of agricultural credit; types of credit; sources of credit; agencies of credit; co-operative credit; Agriculture Markets: the market structure, marketing functions, marketing costs, organization of markets, co-operative marketing.

Unit III: Agriculture Price and Policies

Agricultural price; nature of demand for and supply of agricultural product; movements of price; long period and short period cyclical and seasonal variations; stabilization of price. State in relation to agriculture: Problems in agricultural Policy, State intervention in agricultural marketing, Stabilization of price and income protection of farm wages, planning in agriculture, contract farming.

Unit IV: Problems of Indian Agriculture

Indian agriculture problems; land utilizations; land tenure; tenancy agrarian reforms and structural change in India; Agricultural production in India; size of farms, productivity and economic efficiency in agricultural industry; problem of agricultural labour; Agrarian unrest; employments situation and wages.

Unit V: International Trade in Agricultural Products

WTO and International trade in agricultural commodities, commodity agreements, international programme for agricultural development.

Course Outcome:

- The students will have an exposure to different theories which have connection with agricultural

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

development.

- The students will demonstrate an awareness of production, cost and price of agricultural development.
- Students would be able to understand the various problems in agricultural sector.
- Student would be able to solve various problems in agricultural sector.

Suggested References

- Economic Liberalization and Indian Agriculture. Institute for Studies in Industrial Development, Bhalla G. S., 3rd Edition, New Delhi, 1994.
- Indian Agricultural Economics: Myths and Reality, Rudra A, 5th Edition, New Delhi, 2004.

Subject Code	ECO644	Subject Title	Environmental Economics						
LTP	4-1-0	Credit	5	Subject Category	GE II	Year	2 nd	Semester	II

Objectives:

- Environment is a major issue in today's times. This paper helps to understand the nexus between environment and economic development.
- To increase the awareness among the students towards environmental sustainability. Also, how engineering would play a significant role to maintain the quality and quantity of natural resources to maintain the social development.

Unit 1: Introduction of Environmental Economics

Measuring of Environment & Ecology, Significances of Environmental balance, Role of Economic in Environment. Nature of Environmental Economics. The new environmental paradigm in sociology. The relationship between environment and 'social complex'. Environmentalism and Development (issue of socio-economic equities).

Unit 2: Overview of Social Institutions and Environment

Social response to environmental-imperatives (Role of value structure, normative and attitudinal patterns in communities). Social Institutions in the context of environmentalism, e.g., Religion, caste, tribe, local communities and voluntary associations. Environmental movements and their impacts.

Unit 3: Environmental Problems and Challenges

Environmental problems- A market failure Environmental quality A public good. Environmental problems Externalities Positive & Negative. Environmental Challenges- Role of economics, Valuing the environment- concepts and methods. Property rights, externalities and environmental problems, sustainable development.

Unit 4: Environmental Decision Making

Assessing benefits for Environmental Decision making; Cost benefit Analysis in Environmental decision making; Conflicts between Environment Economic Development Population growths; Environmental Law & their implementation; Allocation of resources- depletable and renewable- energy, minerals, water, land; Environmental pollution- air, water; Environmental justice, Sustainability of development.

Expected Outcome:

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

- The outcome of this course would provide the solution to maintain the environmental sustainability in India. The course will include various aspects related to earth's nature, its linkages with human well-being or welfare and appropriate management policies.

Suggested Books

1. T. Tietenberg, and L. Lewis, Environmental and Natural Resource Economics (International Edition) Pearson Education, 2008.
2. J. Conrad, Resource Economics, Cambridge University Press, 1999.
3. Hanley, N., Shogren, J., and B.White, Environmental Economics in Theory and Practice (2nd edition), Palgrave Macmillan: UK, 2007.
4. Pearce, D., Turner, K., and I. Bateman, Environmental Economics: An Elementary Introduction, Pearson Education Ltd.: England, 1994.
5. Birnie, P., Boyle, A., and C. Redgwell, International Law and the Environment (3rd edition), Oxford University Press: Oxford, New York, 2009.
6. Michael R. Redclift and Woodgate G. The International Handbook of Environmental Sociology (3rd Edition). Edward Elgar Publishing Limited, Cheltenham, USA. 2004.
7. M.V. Joshi. Environment Economic.
8. Kuber Singh and Anil Sisodia. Environment Economics.

Subject Code	ECO 645	Subject Title	Computer Application in Economic Analysis						
LTP	2-0-2	Credit	3	Subject Category	AEC II	Year	2 nd	Semester	II

Course Objective:

- To provide the basic idea to operate the computer and its use to do descriptive and empirical exercises.

Unit I: Introduction to Computers

Computer fundamentals; Components of a personal computer system; Input output devices; Types of computers and their applications; Operating system; Application software's; Computer languages; Assemblers, compilers and interpreters.

Plagiarism software. English language processing for grammar and spelling corrections-Grammarly.

UNIT 2: Model Specification

Model Specification: Data classification, role of data in modeling, exploratory data analysis (EDA) vs. formal statistical inference (FIS), different dimensions of data – social, time, spatial etc.

Modeling average: working with real world dataset (usefulness and shortcomings of modeling mean.

UNIT 3: Simple Model

Basic principles and discussion on theoretical background; Regression with graphics – checking the model assumption, exploratory band regression, checking of high leverage & influential points, transformation of data towards linearity, double-log transformation vs. semi-log transformation.

UNIT 4: Macro Level Data Set

Working with different macroeconomic data set, money illusion in the demand function, partial vs. multiple regressions, decomposing the sum of squares across regression, coefficient of determination.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

UNIT 5: Regression on Categorical Variable and Statistical Packages

Regression on categorical variable: Handling different data sets where dependent variable is categorical, preparation, distributional and contingency tables, test of association, Logit and Probit modeling. SPSS, STATA, E-Views.

Course Outcome:

- Students can use computer in their project work.
- Student can do descriptive and empirical exercises.

Text book [TB]:

- Sinha, P.K. (1992), Computer Fundamental, BPB Publications, New Delhi.
- Gupta, S.C. and V.K. Kapoor (1983), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.
- Rajaraman, V. (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.
- Research Methodology: Methods and Techniques, C.R. Kothari, 2nd edition, New Age International, 2009.
- Research Methods: The Concise Knowledge Base, W.T. Trochim, Atomic Dog Publisher, 2004.

Reference books [RB]:

- Basic Econometrics, D.N. Gujarati, the McGraw-Hill Companies, 2005.
- Introduction to Econometrics, G.S. Maddala, 3rd Edition, Wiley, 2001.
- Introductory Econometrics: A Modern Approach, J.M. Wooldridge, South Western, 2009.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 646	Subject Title	Innovation and Entrepreneurship						
LTP	3-0-0	Credit	3	Subject Category	AEC II	Year	2 nd	Semester	II

Course Objective:

- To provide the broad perspective of innovation and its role in economic development to the student.
- To increase the understanding of students on entrepreneurship ecosystem and its drivers.
- To increase the ability of students to develop business model.

Unit 1: Innovation and its determinants

Innovation and its determinants and its types; measurement of innovation, R&D and innovation; Innovation and economic development; economic theories to innovation.

Unit 2: Entrepreneurship

Introduction to Entrepreneurship: Entrepreneurs; entrepreneurial personality and intentions - characteristics, traits and behavioral; entrepreneurial challenges. Entrepreneurial Opportunities: Opportunities, discovery/ creation, Pattern identification and recognition for venture creation: prototype and exemplar model.

Unit 3: Entrepreneurial Process and Decision Making

Entrepreneurial Process and Decision Making: Entrepreneurial ecosystem, Ideation, development and exploitation of opportunities; Negotiation, decision making process and approaches, Effectuation and Causation.

Unit 4: Business Model

Crafting business models and Lean Start-ups: Introduction to business models; Creating value propositions-conventional industry logic, value innovation logic; customer focused innovation; building and analyzing business models; Business model canvas, Introduction to lean startups, Business Pitching.

Unit 5: Entrepreneurship Ecosystem in India

Forms of business organizations in India; organizational structures in India; Evolution of Organization, sources and selection of venture finance options and its managerial implications. Policy Initiatives and focus area of government of India; role of institutions in promoting entrepreneurship in India.

Course Outcome:

After the completion of the course, the students will be able to:

- Comprehend the role of bounded rationality, framing, causation and effectuation in entrepreneurial decision making.
- Demonstrate an ability to design a business model canvas.
- Evaluate the various sources of raising finance for startup ventures.
- Understand the fundamentals of developing and presenting business pitching to potential investors.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Text book [TB]:

Bagchi, Subroto, (2012). MBA At 16: a Teenager's Guide to Business, Penguin Books

Bansal, Rashmi, Stay Hungry Stay Foolish, CIIE, IIM Ahmedabad

Bansal, Rashmi, (2013). Follow Every Rainbow, Westland.

Mitra, Sramana (2008), Entrepreneur Journeys (Volume 1), Booksurge Publishing

Abrams, R. (2006). Six-week Start-up, Prentice-Hall of India.

Verstraete, T. and Laffitte, E.J. (2011). a Business Model of Entrepreneurship, Edward Elgar Publishing.

Reference books [RB]:

Johnson, Steven (2011). Where Good Ideas comes from, Penguin Books Limited.

Gabor, Michael E. (2013), Awakening the Entrepreneur Within, Primento.

Guillebeau, Chris (2012), The \$100 startup: Fire your Boss, Do what you love and work better to live more, Pan Macmillan

Kelley, Tom (2011), The ten faces of innovation, Currency Doubleday

Prasad, Rohit (2013), Start-up sutra: what the angels won't tell you about business and life, Hachette India.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 701	Subject Title	Indian Economic Policy						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	III

Course Objective:

- To provide the concrete idea on ongoing policies in India.
- To provide the impact of ongoing policies on socio-economic development in India.

Unit I: Introduction to Indian Economy

Economic Policy: An Introduction; Trend and Structure of National Income; Demographic Features and Indicators of Development; Poverty and Inequality; Employment and Unemployment.

Unit II: Development Strategies in India

Economic Reforms; Critique of Economic Reforms; Special Programme – SEZ's; Policy related to poverty removal – MGNREGA, NRLM, Jan Dhan Yojna, women empowerment and welfare Yojna.

Unit III: Indian Plans and Sectoral Performance

Objectives; Allocations; strategy; achievement in Indian planning system; Agricultural Growth, Productivity Trends and Crop Patterns; Issues and Concerns in Indian Agriculture; Industrial Sector: growth pattern and new trends, growth of MSMEs in India.

Unit IV: Economics of Infrastructure

Economics of infrastructure: investment in infrastructure and economic development, power, irrigation, roads and transport; Indian Financial System: Money Market and Monetary Policy; Capital Marketing India including Indian stock market.

Unit V: Public Sector and Economic Planning in India

The role of public sector in the economic development, trends in expansion of public enterprises, public sector and regional development; The strategy of planning; Resource relocation different plans.

Course Outcome:

- Students would be able to develop very comprehensive understanding of government policies and critically evaluate them.

Suggested References

1. SK Mishra and VK Puri. Indian Economy. Himalaya Publication, New Delhi, 2016.
2. Gaurav Datt and Ashwani Mahajan. Indian Economy. S. Chand & Company Ltd., New Delhi, 2016.
3. Rudar Datt and KPM Sundharam. Indian Economy. S. Chand & Company Ltd., New Delhi, 2016.
4. H. Hansen. Public Enterprises and Economic Development.
5. A. N. Agrawal: Indian Economy, Vishnu Prakashan.
6. Nitanjan Banik: Indian Economy, Sage publication.
7. V.K.R.V.Rao (2004). Great Indian Economics, Deep & Deep Pub.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 702	Subject Title	Research Methodology and Applications						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	III

Course Objective:

- To help the students to develop thorough understanding of research methods and processes.
- To enable the students to have deep understanding of various techniques to collect and analyze the primary and secondary data.
- To help students to write research proposals, research papers and research documents after thorough survey of literature on relevant issues.

Unit I: Research Methods and Research Problem

An Introduction - Meaning of Research, Objectives of Research, Motivation in Research, Types of Research, Significance of Research, Research and Scientific Method, Research Process; Research Problem - What is a Research Problem?, Selecting the Problem, Necessity of Defining the Problem, Technique Involved in Defining a Problem.

Unit II: Research Design and Data Collection

Meaning of Research Design, Need for Research Design, Features of a Good Design, Important Concepts Relating to Research Design, Different Research Designs; **Data Collection** - Introduction, Selection of Appropriate Method for Data Collection, Experiments and Surveys, Collection of Primary Data and Secondary Data, Case Study Method. Decoding of NSSO data.

Unit III: Sampling and Statistical Inference and Hypothesis testing

Types of Sampling: Random and non-random. Sampling Distribution, Degree of Freedom, Central Limit Theorem, Sample size. Estimation & Testing of Hypothesis - What is a Hypothesis? Basic Concepts of hypothesis Testing, Critical Value and Decision Rule, Mean, Proportion, Variance, Limitations of Tests of Hypothesis.

Unit IV: Chi-square and ANOVA

Difference of more than Two Proportions, Test of Independence of Attributes, Test of Goodness of Fit, Caution in using Chi-Square Tests; **Analysis of Variance** The Anova Technique, The Basic Principle of ANOVA, One Way ANOVA, Two Way ANOVA, Linear Regression Analysis Dependent and Independent Variables, Other Nonparametric Methods - Sign Tests, Wilcoxon Signed Rank Sum Test for Single Population, Mann Whitney U Test, Spearman's Rank Correlation, Some Features of Non-Parametric Tests.

Unit V: Interpretation and Report Writing

Significance of Report Writing, Different Steps in Writing Report, Layout of the Research Report: decimal numbering and number letter, Types of Reports, Table of contents, writing abstracts, writing the main body, literature review, result: presenting the data, result and discussion, conclusion and summary, References styles.

Course Outcome:

- Students can use various statistical methods in their research.
- Students would get the effective and authentic way of research in various areas.
- Acquire a strong research background and knowledge of research methodology.
- Have an exposure to analysis the various types of data.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

- Understand how primary data can be collected at household's level.
- Write a scientific report and scientific research articles.

Suggested References

- W.T. Trochim, Research Methods: The Concise Knowledge Base, Atomic Dog Publisher, 2004. (ISBN: 1592601464)
- C.R. Kothari, Research Methodology: Methods and Techniques (2nd edition), New Age International, 2009.
- R.V. Hogg, A. Craig, and McKean. Introduction to Mathematical Statistics (6th Edition), Prentice Hall, 2004.
- S.S. Singh: Research Methodology in Social Sciences.
- P.C. Tripathi (2010). Research Methodology. Sultan Chand & sons, Education publisher, New Delhi.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 703	Subject Title	History of Economic Thought						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2nd	Semester	III

Course Objective:

To develop the research insight and acquaint them with application of statistical inference.

Unit I: Ancient Economic View

Mercantilism- Leading Ideas, their balance of trade, doctrine the specific flow mercantilism; Physiocracy- The natural order, the net product, Circulation of wealth, Trade and Taxation.

Unit II: Classical Economic Thinkers

The English Classical School- Adam Smith's theory of Value, Distribution and growth, Ricardo's theory of value, Distribution and growth of international trade, Malthus theory of population and gluts, Say's Law of markets; J.S Mill and A. Nassan Senior.

Unit III: Critical appraisal of Classical Economic thoughts

Critics of Classical Economics- Rise of Socialist Ideology, Scientific and Utopian Socialism (Sismondi, St. Simon, Charles Fourier, Louis Blanc, Proudhon) Marx's Scientific Socialism, Lenin's Contribution to the growth of Scientific Socialism; Reaction against Classicism; German Historical School- R. Friedrich List.

Unit IV: View of Various Thoughts of Schools

The Development of Marginal Utility Economics- Jevons, Welts and Mathematical School; The Austrian School- Menger, Wiser, Bohm Bawerk; Neo-Classicism- Marshall: His important contributions; Wickshell and Swedish School.

Unit V: Indian Economic Thoughts

Keynesian Ideas on Employment and Income- Influence of Keynesian Ideas; Indian Economic Thinkers- Economic thinking of Naroji, Gokhle, Gandhiji, BR Ambedkar.

Course Outcome:

- Student will be able to understand the view of economic thinkers on various principles of economics.
- Student would be able to develop their own theories on emerging social and economic issues in India.

Suggested Books

1. Gide and Rist. A History of Economic Doctrines.
2. Erich Roll. A History of Economic Thought.
3. A. Gray. History of Economic Doctrine.
4. Haney. History of Economic Thought.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 704	Subject Title	Financial Institutions and Market						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	III

Course Objective:

- To increase the understanding of students on financial activities in era of globalization.
- To explore the role of finance in economic growth and development.

Unit I: Introduction of Financial Economics

Introduction of financial system, Functions of the Financial System, Structure and Characteristics of Financial system, Prerequisites of a Financial System, Players in the Financial System; Scope of Financial Economics; Goals of Finance; Economics of capital Budgeting-Investment Criteria, Estimation of project Cash Flows, Risk Analysis

Unit II: Valuation of Assets

Evolution of the Financial Markets, Segments of Financial Markets; Economics of Capital Structure and Firm Value-Net Income Approach, Net Operating income Approach, Modigliani and Miller Approach; Analysis of Optimal Capital structure – EBIT & EPS Analysis, ROI & ROE Analysis, Ratio Analysis, Cash Flow Analysis.

Unit III: Model of Financial Economics

Economics of Dividends-Walter Model, Gordon Model, Modigliani and Miller Model; Key Dimensions of Dividend Policy; Economics of Working Capital-Estimation of Working Capital, Financing of Working Capital. Economics of Cash- Cash Budgeting and its Simulation, Optimal Cash balance, Baumol Model, Miller and Orr Model; Economics of Receivables; Discriminate Analysis and Customer Classification; Economics of Inventory – EOQ Mode, Pricing of Raw materials, Monitoring and Control of Inventories.

Unit IV: Money and Capital Market

Money Market: Introduction to Money Market, Characteristics and functions, Development of money market in India, Money Market instruments and factors affecting its growth, Role of RBI in the development of money market, Money market and its linkage with Monetary Policy.

Capital Market: Introduction to Capital Market, Characteristics and functions, Development of Capital market in India, Primary and Secondary Capital markets, Role of SEBI in regulation of the Capital Markets, Reforms in the Capital Markets, Capital Market instruments.

Unit V: Valuation of Money and Foreign Exchange Market

Cost-Volume-Profit Analysis; Operating and Financial Leverage; Theories of Corporate Valuation –Adjusted Book Value Theory, Direct Comparison Theory, Discounted cash flow Theory; Value Creation Approaches – Marakon Approach, Alcar Approach. McKinsey Approach, Economic value Added (EVA) Approach; Economics of Mergers and Acquisitions. Introduction to Foreign Exchange Markets, Structure of Foreign Exchange Markets, Types of transactions and settlement.

Course Outcome:

- Students will be able to understand the concept of money and capital market, their distinction, role, functions and current status in Indian Context.
- Students will also be able to know mutual fund, its evolution, types and advantages.
- Students would be efficient to understand the importance of finance in economic development.
- Students would be able to use economic theories to solve financial problems.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Suggested References

1. Jean Tirole, "The Theory of Corporate Finance", Princeton University Press, 2006.
2. Prasanna Chandra, "Financial Management", Tata McGraw-Hill Publishing Company Limited, New Delhi.
3. Bhole, L.M. (1999), Financial Institutions and Markets, Tata McGraw Hill Company Ltd. New Delhi.
4. Bhole, L.M. (2000), Indian Financial System, Chugh Publications, Allahabad.

Subject Code	ECO 741	Subject Title	Industrial Economics						
LTP	3-0-0	Credit	3	Subject Category	DSE I	Year	2 nd	Semester	III

Course Objective:

- To provide the knowledge regarding pattern of industrial Product and industrialization.

Unit I: Introduction of Industrial Economics

Meaning, Rational, pattern and impact of industrialization. Factors favouring and Hampering Rapid Industrial Development of India. Relationship between industry and economic development, Industry & sectoral linkages. New Industrial Policy in India, from 1991 to till date. Recent trends in Indian Industrial growth.

Unit II: Firms and Organization

Concept and organization of a firm, Business classification of firm on the basis of, its activities, Sector, and Ownership structure. (Public, Private, Joint and Cooperative Sectors). Size and Use Base Classification of Indian Industry and their Trends in past 5 years, Control and objectives of the firm, Sellers's concentration; Product differentiation; Entry condition.

Unit III: Market Structure and Industries

Market and its structure, Extent of market concentration, Industrial combination and its impact on efficiency of the firm and economic power. Theories of Industrial location - Weber and Sargent Florence; Factors affecting location, Industrial Sickness

Unit IV: Size and Growth of Firms

Size and Growth of the firm; Growth and Profitability of the firm, Constraints of the growth, Indian situation; Product Pricing theories and evidence. Concept & Measurement of Productivity. Productivity Trends in Indian Industry. Industrial competition & Monopoly; Concept and measurement of productivity trend in Indian Industry

Unit V: Industrial Development Strategy

Industrial Development Strategy and Growth under Indian Planning: Commodity Exchange and its Regulation, Price and Distribution Control, Concentration of Economic Power; Industrial Policy, Privatisation, Industrial Sickness.

Course Outcome:

- Students would be aware towards the needs of industries in India.
- Students would be able to use various techniques to estimate the cost and benefits aspect the Industries.

Suggested References

1. S.S.M. Desai: Industrial Economics of India.
2. K.V. Sivagya, S.C.Das: Indian Industrial Economy.
3. Bathwal: Industrial Economics,
4. T.N.Chabra and R.K.Puri Industrial Relations.
5. Monappa: Industrial Relation.
6. Memoria: Dynamics of Industrial Relations.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 742	Subject Title	Advance Econometrics						
LTP	3-0-0	Credit	3	Subject Category	DSE I	Year	2nd	Semester	III

Course Objective:

- It will help the students to enhance the understanding of various econometric techniques to enable them to analyze various economic issues.
- To cover basic econometrics with focus on regression modelling and the problems encountered in dealing with cross-section and time series data.

Unit I: Existence of Heteroscedasticity and Transformation in Time Series Data

Heteroscedasticity: Nature and consequences, Heteroscedasticity structures, Tests for Heteroscedasticity, Remedial measures the methods of weighted least square; Transformation: Specification error, RESET test, Box-Cox test; Time Series: ARMA, ARIMA – Diagnostic Test – Casualty Test, Co-integration Test – Correcting Mechanism.

Unit II: Existence of Multicollinearity in Time Series Data

Multicollinearity: Implications consequences, Tests for multicollinearity, Methods of estimation Multicollinearity and prediction, Remedial measures.

Unit III: Distributive Lag Models and Simultaneous Equations

Distributive Lag Models: Lagged exogenous and endogenous methods, consequences of applying OLMS to lagged and generous model; Estimation of distribution log models-KOYCK's approach, Adaptive expectation, Use of instrumental variable, Almon's approach; Simultaneous Equations Methods.

Unit IV: Dependent and Predetermined Variables

Jointly dependent and predetermined variables, structural form reduced form, final form; The identification problem-Rank and order conditioned; Methods of Estimation- Method of Indirect least squares 2SLS, Method of instrumental variable, 3SLS.

Unit V: Panel and Cross-Sectional Data

Panel data regression models and its application; Panel Unit Root Test, Fixed v/s Random Effect, Cross-sectional Dependence or Contemporaneous Correlation, Serial-correlation and Autocorrelation, Heteroskedasticity in panel data; Regression models for cross sectional data; Basic introduction for quantitative and qualitative data, LPM, Profit, Logit and Tobit Model.

Course Outcome:

Students would get conversant with theoretical and empirical modelling.
Students would be able to identify various issues in time series, panel data and cross-sectional data.
Students would enable to resolve statistical remedies in econometric model.

Suggested References

1. Gujarati D. Basic Econometrics.
2. Koutsoyiannis A. Theory of Econometrics (2nd Edition). The Macmillan Press Ltd. London.
3. Maddala G.S. Introduction to Econometrics (3rd Edition). McMillan, London.
4. Woolridge J. Introductory Econometrics (5th Edition). South-Western Educational Publishing.
5. N.Hatekar. Principles of Econometrics. Sage Publishing House.
6. Krishna K.L. Economic Application in India. Oxford University Press, Delhi.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 743	Subject Title	Labour Economics						
LTP	3-0-0	Credit	3	Subject Category	DSE I	Year	2nd	Semester	III

Course Objectives:

To understand issues pertaining to the labour market, wage theories, employment policies trade unions and collective bargaining.

Unit I Nature Characteristics of Labour market

Nature and characteristics of labour Problems, Characteristics of Industrial Labour, and casual labour market in India.

Unit II Theories of Wage Determination

Classical and Modern Theory of Wage Determination. Labour Welfare in India. – Theories of Labour Welfare The policy, Theory. The Religious Theory, Philanthropic theory, The trusteeships theory. The placating theory, The Public Relation theory and the function theory, Rigidity and Flexibility in the labour market.

Unit III Demand and Supply of Labour

Demand for Labour and Supply of Labour Demand for labour in relations to size and pattern of investment, Supply of Labour in relation to growth of Labour Force. Labour Market policies, Mobility of labour, employment service organization in India. Employment and unemployment in developing countries, Employment policy in Five Year Plans and its evaluation. Rural and Agricultural labour in India.

Unit IV Social Security of Labour

Concepts of minimum wage, living wage and fair wage. Social Security in India – Need of Social Security, social insurance and social assistance, workmen Compensation Act. Maternity Benefit act and Employees state Insurance Scheme, Women and Child Labour.

UNIT V: Migration

Approaches to Labour Migration trends & effects of Migration. Factors leads to international migration; Absenteeism to Industrial Labour in India, causes, effects and remedies. Labour turnover - Trends in Labour Turnover in India.

Reading List:

1. Gupta P.K. (2012) Labour Economics, New Delhi Virnda Publication (p) Ltd.
2. Hajela P.D. Labour Restructuring in India: A Critique of the New Economic Policies, Commonwealth Publishers, New Delhi.
3. Lester, R.A. (1964) Economics of Labour (2nd Ed.), Macmillan, New York.
4. Pepola, Ghosh and A.N.Sharma (1993) Labour Employment and Industrial Relations in India B.R. Publishing House, New Delhi.
5. Datt, G. (1996), Bargaining Power Wages and Employment: An Analysis of Agricultural Labour Markets in India, Sage Publications, New Delhi.
6. Bhagoliwal T.N. (2002), Economics of Labour and Industrial Relations: SahityaBhavan Agra.
7. R.R. Singh (1971): Labour Economics, Agra, Sri Ram Mehra
8. V.V. Giri (1972): Labour Problem in India Industry, Asia Publishing House.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 705	Subject Title	Monetary Economics						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	IV

Course Objective:

- This paper develops the understanding of the students to comprehend the banking policies and policy instruments.

Unit I: Overview of Monetary Economics

Overview of development of monetary theory Major issues and scope; Concept of Money and components of money supply, Credit Creation, Money Multiplier, Monetary, Policy, Instruments of Monetary Controls, its role and effectiveness. RBI's approach to monetary market- review of current five monetary policies.

Unit II: Time Value of Money

What is Money? Money and related concepts – Framework of Monetary circulation –Barter versus Money Economy; Theories of Value of Money- Classical theories- Fisher, Cambridge view. Keynesian Theory of Money and Prices, Milton Friedman Modern Quantity Theory of Money, latest advancement in theories of money.

Unit III: Inflation and Its Types

Measurement and types of Inflation, Demand and Supply side Inflation, Effects of Inflation, Methods to Check Inflation, Deflation and Stagflation. Anti-Inflationary Policy, trend of Inflation in the last decade. Inflation and Unemployment, Philips's curve- Long and short run. Adaptive expectation theory.

Unit IV: Banking System

Banking Systems in India. Types of Banks. Commercial Banking Origin & Growth, Functions and role of Commercial Banks in a Developing Economy. New Trends in Commercial Banking. RBI –origin, structure and regulation. Business Cycles Meaning and Nature, Theories of trade Cycle.

Unit V: Demand and Supply of Money

Interest rate determination-Liquidity preference theory; Overview of components of Money Supply. Monetary and fiscal policy in the open economy- The Mundell -Fleming Model, The case of imperfect capital mobility, The case of perfect capital mobility. Theory of the transaction demand for money, Extension of Keynes's Theory of the demand for money, Instability of money demand; Supply of Money – Various theories.

Course Outcome:

- Students would understand the role of monetary system in Indian economy.
- Students would understand the significance of money in Indian financial market.

Suggested References

- M.C. Vaish. Macroeconomic Theory, Vikas Publishing.
- R. Glomn Hubbard. Macroeconomics, Pearsons publications.
- David Miles. Macroeconomics, Willey publication.
- Edward Shapiro. Macroeconomic Analysis, Galgotiya Publication.
- Olivier Blanchard. Macroeconomic, Pearsons Publication
- S.K. Mishra. Modern Macroeconomic.
- M.L. Seth. Macroeconomic.
- M.L. Jhingan. Macroeconomics.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 706	Subject Title	Public Economics						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	IV

Course Objective:

- To bring together the various streams of thought on the subject and also make you understand the institutional aspects.
- To provide necessary tools and conceptual framework to understand fiscal situation around the world.
- To provide basic understanding of the conceptual and theoretical issues in Public Economics.

Unit I: Basic Concept of Public Economics

Economic Rationale of Mixed Economy; Role of Government in a State; Efficiency, markets and Governments; rationale for Government Intervention; Natural Monopolies and Market Failure; Non-Existence of Futures Markets; Asymmetric Information and market Failure; The Problem of Externalities and their Internalisation.

Unit II: Characteristic of Public Goods

Concept, Characteristics and Types of Public Goods; Efficient Provision of Public Goods; Pure Theories of Public Goods –Bowen Model, Lindahl Model, Pigou Model, Samuelson Model; Empirical Theories of public goods – Wagner Hypothesis, Wiseman-Peacock Hypothesis; Preference revelation Mechanisms for Public Goods – Thompson Mechanism, Clarke Mechanism, Lindahl- Wicksell Mechanism; Theory of Club Goods.

Unit III: Principles of Taxation

Efficiency and Equity Principles of Taxation; Incentive Effects of Taxation on Labour Supply, Supply of Savings and Risk Taking; Taxation and Investment; Other Distorting Effects of the Tax System; Tax Incidence – Partial and General equilibrium Analysis; Mieszkowski Analysis of Tax Incidence; Keynesian Short Run Model of Tax Incidence; Dynamic Tax Incidence.

Unit IV: Types of Taxation

Normative Analysis of Taxation – Income v/s Excise Tax; Optimal Tax Mix – Optimal Commodity Tax, Optimal User Fees, Optimal Income Tax; Excess Burden of Tax and its Measurement; Equity; Considerations in the Choice of a Tax System; Corporation tax and its Effects on Corporate Decisions.

Unit V: Indian Taxation Policies

Indian Taxation System; Fiscal Trends in India; Fiscal Reforms in India; Fiscal Imbalance in India; Budgetary Subsidies in India; Value Added Tax in India; GST; Issues in Fiscal Transfers in India.

Course Outcome:

- Students would enable to understand the practical problems involved in implementing the principles of public economics.
- Students will be able to discuss critically the major issues relating to public economics.
- Students will be able to use methods of independent research to prepare a short dissertation on topic in public economics of their choosing.

Suggested References

- Backhaus J.G. and Wagner R.E. (2004). *Handbook of public finance* (Vol. 1). Dordrecht, Netherlands: Kluwer Academic Publishers.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

- Buchanan J. M. (2003). Public choice: Origins and development of a research program. Fairfax, Virginia: Centre for Study of Public Choice, George Mason University.
- Jha R. (2009). Modern public economics - second edition. Routledge.

Subject Code	ECO 707	Subject Title	Major Research Project/Thesis						
LTP	4-1-0	Credit	5	Subject Category	UC	Year	2 nd	Semester	IV

Course Objective:

- To provide the concrete idea to write a scientific research article.

Course Outcome:

- Students can write the scientific research article and research reports.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 744	Subject Title	Ecological Economics						
LTP	3-0-0	Credit	3	Subject Category	DSE II	Year	2 nd	Semester	IV

Course Objective:

- To provide the economic implications of ecological services in an economy.
- To provide the various methods to estimate the economic value of available natural resources.

Unit 1: Basic Overview

Components of Ecological System; Various Ecosystem Services; Measurement of Nature; Methods to Measure the Ecosystem Services; Ecosystem Services in Developed and Developing Economies.

Unit 2: Ecosystem Services and Development

Rural Development and Ecosystem Services, Regional Diversity in Ecosystem Services, Economic Valuation of Various Ecosystem Services; Ecosystem Services of Rivers, Forestry, Soil, Air, Plants.

Unit 3: Management in Ecosystem Services

Management Policies of Ecosystem Services; Sustainability of Ecosystem Services; Inter-linkages between Economic Development and Ecosystem Services; Human Well-being and Ecosystem Services; Sustainability in Ecosystem Services.

Unit 4: Government Policies and Ecosystem Services

Government Policies and Ecosystem Services in India; Different Mathematical and Econometric Models for Ecosystem Services; Simulation Techniques for Ecosystem Services.

Unit 5: Natural Resource

Allocation of resources- depletable and renewable- energy, minerals, water, land; Environmental pollution- air, water; Environmental justice, Sustainability of development.

Course Outcome:

- Students will be able to understand the role of ecosystem services in socio-economic development of an economy.
- Students can use several methods to estimate the economic values of ecosystem services (i.e., water, rivers, forest and others).

Suggested Books

1. Millennium Ecosystem Assessment (MEA) (2005). Ecosystems and Human Well-being: Synthesis. Island Press, Washington, DC.
2. Verma M. and Kumar CVRSV (2006). Natural Resource Accounting of Land and Forestry Sector (Excluding Mining) for the States of Madhya Pradesh and Himachal Pradesh. Indian Institute of Forest Management Bhopal, Bhopal (M.P.)
3. _____ (2013). Human Activity and the Environment: Measuring Ecosystem goods and Services in Canada.
4. Negi G.C.S. and Dhyani PP. (2012). Glimpses of Forestry Research in the Indian Himalayan Region: Special Issue on International Year of Forests-2011. ENVIS Centre on Himalayan Ecology, G.B. Pant Institute of Himalayan Environment & Development, Kosi-Katarmal, Almora- 263643, India.
5. _____ (2004) Valuing Ecosystem Services: Towards Better Environmental Decision-Making. National Research Council of the National Academies Press, Washington, D.C.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 745	Subject Title	Health Economics						
LTP	3-0-0	Credit	3	Subject Category	DSE II	Year	2 nd	Semester	IV

Course Objective:

- To provide the role of human health in the socio-economic development of a country.
- To provide the various scientific methods which can be useful to measure the health status of people at micro to macro level.

Unit 1: Health and its Determinants

Health care as an economic commodity; Determinants of health; Efficiency and equity in health care; Demand and supply of health care.

Unit 2: Basic Health Services

Optimal payments for health services; Health care and financing and insurance; Health policy (national and international); Liability and regulation.

Unit 3: Health Policies in India

Overview of Various Health Policies across Indian States, Current Health Issues in India, Health facilities in Rural and Urban India.

Unit 4: Measurement of Health

Measurement of Health Status at Individual level; Discussion on Various Techniques to Measure the Health Status of peoples, impact assessment analysis to assess the impact of public health facilities.

Unit 5: Health Issues and Social Development in India

Various Health Problems, Solution to improve the health status of common peoples; Impact of Health Problems on Social Development.

Course Outcome:

- Students would be able to understand the role of human health in nation's building.
- Students can use various techniques to measure the health issues in India.
- Students can use various statistical tools to assess the impact of ongoing policies on human health.

Suggested Reading Material

1. Antony and Laxmaiah, (2008). Human development, poverty, health & nutrition situation in India. *Indian J Med Res*, 128(1):198-205. <http://medind.nic.in/iby/t08/i8/ibyt08i8p198.pdf>.
2. Balarajan Y., Selvaraj S. and Subramanian S.V. (2011). Health care and equity in India. *Lancet*, 377(9764):505–515.
3. Bashir S. (2012). An empirical analysis of higher education and economic growth in West Virginia. Paper presented in the Agricultural & Applied Economics Association Annual Meeting, August 12-14, 2012 Seattle, WA. <https://ageconsearch.umn.edu/bitstream/124829/2/Bashir.pdf>.
4. Cole M.A. and Neumayer E. (2006). The impact of poor health on factor productivity: An empirical investigation. *Journal of development studies*, 42(6):918-938.
5. Saravanan V.S., Idenal M.A. and Saiyed S. (2016). Urbanization and human health in urban India: Institutional analysis of water-borne diseases in Ahmedabad. *Health Policy and Planning*, 31(1):1089–1099.
6. Travasso S.M., Rajaraman D. and Heymann S.J. (2014). A qualitative study of factors affecting mental health amongst low-income working mothers in Bangalore, India. *BMC Women's Health*, 14(22):1-11.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 746	Subject Title	Experimental Design and Data Analysis						
LTP	3-0-0	Credit	3	Subject Category	DSE II	Year	2 nd	Semester	IV

Objectives:

This course would be useful to undergraduate and postgraduate students who are doing experimental related work in various branches of engineering (mechanical, electric, environmental), social sciences (economics, management, psychology, and sociology), biological sciences, and medical sciences.

Unit 1: Basic Introduction

Review of standard discrete and continuous statistical distributions. Sampling distributions such as chi-square, Student's t and, F- distribution.

Unit 2: Simple Regression and Correlation

Estimation and Tests of Hypotheses. Regression and Correlation Analysis. Test for independence and goodness of fit.

Unit 3: Non-Parametric Test

Non-parametric tests. Analysis of Variance (ANOVA): One way and two-way classification. Analysis of Covariance (ANCOVA).

Unit 4: Experimental Design

Experimental Designs: CRD, RBD, LSD, BIBD; Split plot and missing plot technique.

Unit 5: Index Based Estimation

Principal Components Analysis; Factors Analysis; Composite Z-score.

Expected Outcome:

The subject will include different statistical tools to analysis the experimental and collected data through primary field survey and secondary sources.

Suggested Books

1. R.E. Walpole, Probability and Statistics for Engineers and Scientists, Prentice-Hall-Gale, 1998.
2. D.C. Montgomery, Design and Analysis of Experiments (5th edition), John Wiley & Sons (Asia) Pte. Ltd. Singapore, 2004. (ISBN: 0471316490).
3. R. Y. Myers, et al., Response Surface Methodology: Process and Product Optimization using Designed Experiments (3rd edition), Wiley, 2009.
4. M.S. Phadke, Quality Engineering Using Robust Design, Prentice Hall, Englewood Cliff, New Jersey, 1989.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 747	Subject Title	Economics of Social Sector and Gender						
LTP	3-0-0	Credit	3	Subject Category	DSE III	Year	2 nd	Semester	IV

Course Objective:

- To provide the knowledge regarding the role of social sector and gender in economic development.

Unit I: Source of Social Sector

Education as an instrument for economic growth, Economic of Education, Cost of Education. Expenditure of education, Direct & indirect benefit: Education Planning and economic growth manpower planning, educational finance.

Unit II: Role of Health in Social Sector

Economics of Health Essentials of Health Economics, Determinant Factor of Health, Externalities and Health care, Health care and Insurance Problems of Public Health in low Income countries, Problems reforms and lessons for India Infrastructure of health care system in India.

Unit III: Gender Inequality

Gender Economics- Strategy for Women Development in India Role of N.G.O in Women Development in India. Development index (Human Development index. Gender Development index and Gender Empowerment measure (GEM) Women in Media. Factor Affecting Decision making by women. Gender Discrimination, Gender Bias.

Unit IV: Demography Aspects of Social Sector

Demographic Aspects - Demography of female population: Age structure, mortality rates, and sex ratio — Causes of declining sex ratios and fertility rates in LDCs and particularly India — Theories and measurement of fertility and its control; Women and their access to nutrition, health, education, and social and community resources, and their impact on female mortality and fertility, economic status, and in work participation rate.

Unit V: Women Decision in Society

Women in Decision Making- Factors affecting decision making by women; property rights, access to and control over economic resources, assets; Power of decision making at household, class, community level; Economic status of women and its effect on work-participation rate, income level, health, and education in developing countries and India; Role of kinship in allocating domestic and social resources.

Course Outcome:

- Students can get the idea on implications of gender disparities on social sectors.
- Students can develop policies to reduce the gender disparities in India.

Suggested Books:

- Bina Agarwal (2016). "Gender Challenges" A three volume compendium of selected papers. Oxford University Press.
- Eswaran M. (2014). Why gender matters in economics. Princeton University, Princeton and Oxford.
- Inwar Imam (2015). Economics of Social Sector and Environment. Anmol Publications, Pvt. Ltd., United States.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 748	Subject Title	Multinational Enterprises						
LTP	3-0-0	Credit	3	Subject Category	DSE III	Year	2 nd	Semester	IV

Course Objective:

- The main aim of this course will be useful to increase the understanding of students towards multinational enterprises and its role in social and economic development in India.

Unit 1: Introduction of Multinational Enterprise and Investment

Foreign direct versus portfolio investment; Global and regional trends in direct investment; Horizontal and vertical integration; Ownership/location-internalization framework; Endogenous market structures in international trade.

Unit 2: Equilibrium in Multinational Firms

General equilibrium approaches to the multinational firm; Determinants of FDI; Overseas investment and firm exports; Vertical multinationals, fragmentation and outsourcing.

Unit 3: Licensing Process in Multinational Firms

Licensing versus direct investment: Models of internalization of the multinational enterprise; Contracts, intellectual property rights, and multinational investment in developing countries; Multinational firms.

Unit 4: Role of Technology in Multinational Firms

Technology diffusion and trade; International taxation and transfer prices; Do domestic firms benefit from direct foreign investment? MNEs and host country relations.

Course Outcome:

- Students will be able to get the comprehensive idea on multinational enterprises.
- It provides the ecosystem in which multinational firms will boost in India.

Suggested Books

1. Seth, M. (2000). Women and Development: The Indian Experience, Sage Publications, New Delhi.
2. Wazir, R. (2000). The Gender Gap in Basic Education: NGOs as Change Agents, Sage Publications, New Delhi.
3. Srinivasan K. and A. Shariff (1998). India: Towards Population and Development Goals, Oxford University Press, New Delhi.
4. Krishnaraj, M. and R.M. Sudarshan and A. Shariff (1999). Gender, Population and Development, Oxford University Press, New Delhi.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

Subject Code	ECO 749	Subject Title	Population Economics						
LTP	3-0-0	Credit	3	Subject Category	DSE III	Year	2 nd	Semester	IV

Course Objective:

The main objective of this paper is to make the students aware of importance of population in economic development, various theories of population, growth and distribution of population in developed and developing countries including India.

UNIT I: Theories and Structure of Population

Meaning and scope of demography; Theories of population – Malthus theory of population, Optimum theory of population; Theory of demographic transition, Leibenstien theory of population; Population and development: Two way relationship; World population growth and distribution; Pattern of age and sex structure in more developed and less developed countries; Determinants of age and sex structure in more developed and less developed countries; Demographic, economic and social implications of sex and age structure in more developed and less developed countries.

UNIT II: Fertility, Mortality, Migration and Urbanization

Importance of study of fertility; Concepts of fertility; Levels and trends in fertility in more and less developed countries; Socio-economic factors affecting fertility; Concepts of mortality; Levels and trends in mortality in more and less developed countries; Socio economic factors affecting mortality; Concepts of migration; International migration – its effects on population growth and pattern; Factors affecting internal and international migration; Concepts of urbanization, Growth and distribution of rural-urban population in developed and developing countries.

UNIT III: Demographic Data and Population Structure in India

Concept, methodology and characteristics of census in India; Nature of information collected in 2011 census of India; National Family Health Survey; Rapid Household Survey; Population growth and distribution in India; Demographic dividend in India; Fertility and mortality trends in India; Trends and regional variations in age and sex structure of population in India.

UNIT IV: Population-Development Issues

Population, economy and environment linkages; Population, health, nutrition, productivity nexus; Population and human development issues; Relationship between culture, education and fertility.

UNIT V: Population Policy in India

Evolution of population policy in India - The shift in policy from population control to family welfare, to women empowerment; Family planning strategies and their outcomes; Reproductive health, maternal nutrition, and child health policies; New population policy; Tasks before the National Population Commission.

Suggested Books

1. Agarwala S. N. (1972), India's Population Problem, Tata McGraw-Hill Co., Bombay.
2. Baud, I. S. A. (1992), Form of Production and Women's Labour, Gender Aspects of Industrialization in India and Mexico, Sage, New Delhi.
3. Bogue, D. J. (1971), Principles of Demography, John Wiley, New York.

Course Structure & Syllabus of M.A. in Economics

Applicable for Batch: 2021-2023

4. Bose, A. (1996), India's Basic Demographic Statistics, B. R. Publishing Corporation, New Delhi.
5. Choubey, P. K. (2000), Population Policy in India, Kanishka Publications, New Delhi.
6. Coale A. J. and E. M. Hoover (1958), Population Growth and Economic Development in Low Gulati, S.C. (1988), Fertility in India: An Economical Study of a Metropolis, Sege, New Delhi.
7. Srinivasan, K.-and A. Shariff (1998), India: Towards Population and Demographic Goals, Oxford University Press, New Delhi.
8. United Nations (1973), The Determinants and Consequences of Populations Trends, Vol. I, UNO Publications, New Delhi.
9. Agnihotri, S. B. (2000), Sex ratio in Indian Population: A Fresh Exploration, Sage, New Delhi.