

B.A. ECONOMICS SYLLABUS			
Semester	Part	Subject Title	Subject Code
SEMESTER I	Part III	Main Paper I: Micro Economics - I	1ME01b
		Main Paper II: Economic Thought	1ME02c
		Allied I: Marketing	1AME
	Part IV	Value Education	OVE
SEMESTER II	Part III	Main Paper III: Micro Economics - II	2ME03b
		Main Paper IV: Environmental Economics	2ME04c
		Allied II: Corporate Finance	2ACF
	Part IV	Environmental Studies (Theory)	OEST
		Environmental Studies (Project & Viva Voce)	OESPV
SEMESTER III	Part III	Main Paper V: Indian Economy - I	3ME05c
		Main Paper VI: Mathematical Methods - I	3ME06b
		Allied III: Statistical Methods - I	3ASE1
	Part IV	Analytical Reasoning I	SAR I
		Entrepreneurial Development	SED
SEMESTER IV	Part III	Main Paper VII: Indian Economy - II	4ME07c
		Main Paper VIII: Mathematical Methods - II	4ME08b
		Main Paper IX: Money and Banking	4ME09c
		Allied IV: Statistical Methods - II	4ASE2
	Part IV	General Knowledge	OGK
		Analytical Reasoning - II	SAR 2
SEMESTER V	Part III	Main Paper X: Macro Economics - I	5ME10c
		Main Paper XI: Public Finance - I	5ME11b
		Main Paper XII: International Economics	5ME12b
		Main Paper XIII: Managerial Economics	5ME13c
		Main Paper XIV: Econometrics	5ME14b
		Elective - I: Portfolio Management	5EE01a
	Part IV	Analytical Reasoning III	SAR III
SEMESTER	Part III	Main Paper XV: Macro Economics - II	6ME15c

		Main Paper XVI: Public Finance - II	6ME16b
		Main Paper XVII: Development Economics	6ME17b
		Main Paper XVIII: Introduction to Operations Research	6ME18
		Elective II: General Insurance	6EE02b
		Project Work (Optional)	6ECPR
		Project Viva Voce (Optional)	6ECPV
	Part IV	Quality Control Circles (Theory)	OQCC
		Quality Control Circles (Presentation)	OQCCP
	Part V	Extension Services	EXT

MAIN PAPER I: MICRO ECONOMICS - I
SUB CODE: 1ME01b

UNIT 1: INTRODUCTION

- a. Microeconomics and Macroeconomics and their interdependence
- b. Production Possibility Frontier - tools for economic analysis

UNIT 2: CARDINAL AND ORDINAL ANALYSIS OF CONSUMER BEHAVIOUR

- a. Law of diminishing marginal utility and equi-marginal utility
- b. Indifference curves and consumers' equilibrium - concept of consumer surplus using Cardinal and ordinal analysis

UNIT 3: LAW OF DEMAND AND ELASTICITY OF DEMAND

- a. Demand Function - slope of demand curve - exceptions to law of demand
- b. Elasticity of Demand - Price, Income and Cross elasticity of demand – factors Influencing elasticity of demand - Measuring elasticity of demand

UNIT 4: PRICE EFFECT

- a. Decomposition of price effect using indifference curves - Slutsky's law
- b. Distinction between normal, inferior and Giffen goods using indifference curves - Price consumption curve & Income consumption curve

UNIT 5: PRODUCTION, COST AND REVENUE

- a. Short period production function and long period production function- law of supply - supply curve and its elasticity
- b. Concepts of cost and revenue

BOOKS RECOMMENDED

Hal R Varian, Intermediate Micro Economics. Affiliated East West Press (1996)

MAIN PAPER II: ECONOMIC THOUGHT
SUBJECT CODE: 1ME02c

UNIT 1: PRECURSORS OF CLASSICAL SCHOOL

- a. Mercantilism: Factors responsible for the rise of mercantilism – Economic ideas of mercantilism. Ideas of mercantilists. William Petty and Thomas Mun.
- b. Physiocracy - Concept of Natural Order - Circulation of wealth- Francois Quesney

UNIT 2: CLASSICAL SCHOOL

- a. Adam smith's concept of Naturalism and Optimism - Concept of Laissez Faire – Ricardian theory of Rent - Malthusian theory of population - Mills concept of Stationary state.
- b. Classical Theory of Value and Foreign Trade

UNIT 3: NEO CLASSICAL ECONOMICS AND MARGINAL REVOLUTION

- a. Marginal Revolution - William Stanly Jevons and Carl Menger
- b. Alfred Marshall : Definition of Economics, Time period, Market equilibrium , elasticity, demand and supply , economies of scale, Consumers surplus (Ceteris paribus), Representative firm.

UNIT 4: HISTORICAL SCHOOL AND INSTITUTIONALISM

- a. Economic thought of the Historical School – Economic Ideas of Friedrich List
- b. Institutionalism - Economic Ideas of Thorstein Veblen

UNIT 5: KEYNESIAN AND MARXIAN ECONOMIC THOUGHT

- a. Marxian Economic Idea -Labour theory of value - Laws of capitalist Motives - Characteristic of Marxian Communism.
- b. Keynesian Revolution - Relevance of Keynesian economics today

BOOK RECOMMENDED

1. R R Paul.,History of Economic Thought. Kalyani Publications
2. Gide Charles and Rist Charles., History of Economic Doctrines. D.C.Heath and Company,1913
3. Ekelund, Robert, and Robert Hébert, A History of Economic Theory and Method, McGraw-Hill Publishing Co., 1990
4. Haney Lewis., History of Economic Thought. Macmillan, 1949
5. Skousen Mark.,The Making of Modern Economics- The Lives and Ideas of the Great Thinkers. M E Sharp, 2001

ALLIED I: MARKETING

SUBJECT CODE: 1AME

UNIT 1

Nature, Scope and significance of Marketing – Evolution of marketing – Basic concepts of Marketing – Different type of markets – Modern marketing –Marketing Environment.

UNIT 2

Functions of marketing – Functions of exchange – Functions of physical distribution - Facilitating functions – Marketing research.

UNIT 3

Product - New product – Product Life cycle – Classification of consumer goods and industrial goods.

UNIT 4

Pricing – objectives and price determination – Pricing strategies and policies – Pricing strategy of a new product – Methods of Pricing

UNIT 5

Promotional Programme - Advertising and other sales promotional efforts – Effects of advertising, Media and Agencies.

TEXT BOOKS

1. Modern Marketing by R.S. Pillai & Bagavathi. S.Chand Publication, New Delhi.
2. Marketing management by Dr.N.Rajan Nair & C.D.Gupta. Sultan Chand Publications, New Delhi.

BOOKS RECOMMENDED

1. Marketing Management by Dr.Philip Kotler. Pearson Education India
2. Marketing Management by Dr.,L.Natarajan. Margham Publication, Chennai.
3. Principles of Marketing by Prof. Kavitha Sharma & Swathi Agarwal. Taxmann Publications, Chennai.

MAIN PAPER III: MICRO ECONOMICS - II **SUBJECT CODE:2ME03b**

UNIT 1: THEORY OF THE FIRM

- a. Neo classical theory of the firm: Equilibrium of the firm, profit maximization as the Objective – Shut - down point and Break-even point
- b. Modern theory of the firm: Objectives of modern firm – Market morphology

UNIT 2: PERFECT COMPETITION

- a. Price determination under Perfect competition
- b. Short period and long period equilibrium of the firm under Perfect Competition

UNIT 3: MONOPOLY

- a. Supply curve of monopolist – Equilibrium under monopoly
- b. Discriminating monopoly – Degrees of discrimination – Equilibrium of a discriminating monopolist

UNIT 4: MONOPOLISTIC COMPETITION AND OLIGOPOLY

- a. Equilibrium under Monopolistic competition – Excess capacity under monopolistic competition
- b. Oligopoly – Paul Sweezy's kinked demand curve model - Cartels.

UNIT 5: DISTRIBUTION

- a. Marginal productivity theory of distribution.
- b. Wage differentials.

BOOK RECOMMENDED

Hal Varian, Intermediate Micro Economics. Affiliated East West Press (1996)

MAIN PAPER IV: ENVIRONMENTAL ECONOMICS
SUBJECT CODE: 2ME04c

UNIT 1: WELFARE FOUNDATIONS OF ENVIRONMENTAL ECONOMICS

- a. Pareto Optimum – Pareto Efficiency conditions
- b. Deviations from Optimum, Imperfect competition, Externality, Public goods.

UNIT 2: ENVIRONMENTAL PHILOSOPHIES

- a. Values about Nature – anthropocentrism, ecocentrism - shallow environmentalism, deep ecology
- b. History of the environmental movement

UNIT 3: POLLUTION AS AN EXTERNALITY

- a. Definition and types of Externality – Pollution as an externality
- b. Second Best Theorem

UNIT 4: POLLUTION CONTROL POLICY

- a. The precautionary principle - The polluter pays principle - Optimum pollution
- b. Command and Control - Market based instruments such as Pollution Taxes, Subsidies and Pollution Permits

UNIT 5: SUSTAINABLE INDUSTRIALISATION

- a. Sustainable industrialization – Business Charter for Sustainable Development
- b. Industrial ecology – meaning and importance – the Kalundborg example.

BOOKS RECOMMENDED

1. Dr.Karpagam.M Environmental Economics. Sterling Publishers, 2000.
2. Dr.Karpagam.M and Dr.Geetha Jaikumar, Green Management – Theory and Practices. Ane Book House, 2010

ALLIED II: CORPORATE FINANCE
SUBJECT CODE: 2ACF

UNIT 1

- a. Need for accounting – definition of accounting – advantages of accounting – limitations of accounting.
- b. Branches of accounting - financial accounting, cost accounting, Management accounting – Functions of accounting – Role of an accountant in a company

UNIT 2

- a. Preparation of trial balance- Journal and ledger
- b. Preparation of final accounts (with simple adjustments).

UNIT 3

- a. Ratio analysis – Meaning of Ratio - Modes of Expression of Ratio – Steps in ratio analysis
- b. Classification of Ratios – Profitability Ratios – Turnover or Activity ratios – Solvency or Financial Ratios.

UNIT 4

- a. Cost of capital- meaning – cost of equity – cost of debt
- b. Dividend policy – cash dividend and dividend payment

UNIT 5

- a. Financial Statement Analysis - Meaning , nature , function , importance and limitations of financial statements - meaning and process of financial statement analysis and interpretation – objectives of analysis and interpretation procedure for analysis and interpretations.
- b. Types of analysis- techniques or tools of financial statement analysis (Ratio Analysis) – comparative financial statement – common size statement – limitations of financial statement analysis.

TEXT BOOK

1. The Financial and Management Accounting by T.S Reddy & Y.Hari Prasad Reddy, Margham Publications, Chennai.

BOOKS RECOMMENDED

1. Fundamentals of Corporate Finance by Ross Wester field Jordan Tata McGraw-Hill,
2. Principles of Corporate Finance by Richard Brealey, Swerwart.Cmeyers and others, Tata McGraw-Hill.
3. Advanced Accountancy by Jain and Narang, Kalyan Publications, New Delhi.
4. Advanced Accountancy by R.L .Gupta and Radha Swamy, Sultan Chand and Company, New Delhi.

MAIN PAPER V: INDIAN ECONOMY - I
SUBJECT CODE: 3ME05c

UNIT1: PERFORMANCE OF INDIAN ECONOMY

- a. Trends in National Income – sectoral contribution – Structural change – Inter-state disparities in growth in terms of economic and social indicators
- b. Implications of demographic changes in India

UNIT 2: PERFORMANCE OF AGRICULTURE

- a. Review of agricultural performance – Trends in agricultural production – Land use pattern – Changes in cropping pattern – Productivity and production of major crops
- b. Factors affecting agricultural performance

UNIT 3: IMPACT OF POLICIES ON AGRICULTURE

- a. Impact of Agricultural policy on performance of agriculture
- b. Trade, distribution and food security in India: Concept of food security – Definition and constraints – Consumption patterns and Indian food security – Public Distribution System (PDS) and Indian food security – Multilateral trade and National Food Security

UNIT 4: INDUSTRIAL DEVELOPMENT AND POLICIES SINCE LIBERALISATION

- a. Industrial scene since liberalisation – Profile of inter-regional dimensions of industrial growth – Productivity trends in manufacturing sector – Inter-state disparity in industrial development – Factors causing industrial slow-down - Industrial Policy – Policy initiatives since 1990
- b. Micro, Small and Medium Enterprises (MSMEs) – Definition, Classification, role and performance of MSMEs – Challenges ahead MSMEs - Strategies for promotion of MSMEs under Five-Year Plans

UNIT 5: PLANNING IN INDIA

- a. Role of Planning Commission in India – Evaluation of Five-year Plans – NITI Aayog – rationale behind NITI Aayog, objectives, role, appraisal of NITI Aayog – NITI Aayog vs Planning Commission
- b. An overview of Economic Reforms in India since 1990.

TEXT BOOKS:

1. The Indian Economy – Environment and Policy by Ishwar C.Dhingra. Sultan Chand & Sons, New Delhi. Latest Edition.
2. The Indian Economy by Gaurav Datt & Ashwani Mahajan. S.Chand & Company Pvt.Ltd., New Delhi.Latest Edition.

BOOKS RECOMMENDED:

1. Indian Economy – Rudder Datt & K.P.M. Sundaram, S. Chand & Co. Ltd., New Delhi. Latest Edition.
2. Indian Economy since Independence – Uma Kapila (Ed). Academic Foundation, New Delhi. Latest Edition.
3. The Oxford Companion to Economics in India – Kaushik Basu (Ed). OUP, New Delhi.Latest Edition.
4. The Indian Economy since 1991: Economic reforms and Performance–B.A. Prakash (Ed). Pearson Education, S.Asia. Latest Edition.
5. Studies in Indian Economy – K.R. Gupta (Ed). Atlantic Publishers and Distributors Pvt. Ltd., New Delhi.Latest Edition.
6. Inter Regional Disparities in India – Anil Kumar Thakur & Shyam Sundar Singh Chauhan, Deep & Deep Publications Pvt. Ltd.,New Delhi. Latest Edition
7. India's Economy and Growth – Essays in Honour of V.K.R.V. Rao –Pulin B.Nayak, Bishwanath Goldar & Pradeep Agarwal (Ed).Sage Publications India Pvt. Ltd., New Delhi. Latest Edition
8. Indian Economy – Economic Development and Policies by Uma Kapila (Ed).

Academic Foundation, New Delhi.Latest Edition.
9.Indian Economy - Its Development and Performance by V.K.Puri and S.K.Misra
Himalaya Publishing House Pvt.Ltd., Mumbai. Latest Edition.

E- Resources:

1. www.planningcommission.gov.in
2. www.nic.in
3. www.niti.gov.in

MAIN PAPER VI: MATHEMATICAL METHODS - I
SUBJECT CODE: 3ME06b

UNIT 1: MATRIX ALGEBRA

- a. Definition and types of Matrices - Matrix addition, subtraction, and multiplication of matrices –transposes
- b. Problems on determinants - minors and cofactors, Rank – Finding inverse of a matrix of order 2 and 3 only

UNIT 2: SOLUTIONS TO A SYSTEM OF LINEAR EQUATIONS

- a. Solving simultaneous equations using Cramer`s Rule
- b. Solving simultaneous equations using cofactors method

UNIT 3: LINEAR PROGRAMMING

- a. Meaning of Linear Programming - Maximisation and Minimisation programs – problem of production and the problem of diet - graphical solution
- b. Simplex method- Maximisation program only - Relationship between primal and dual – Duality theorems (Statement only)

UNIT 4: INPUT OUTPUT ANALYSIS

- a. Meaning of Input-Output analysis - Structure of an Input Output model – input

output transactions matrix, coefficient matrix, Hawkins-Simon conditions– assumptions, uses and limitations

- b. Problems on output determination - matrix inversion method (simple problems)

UNIT 5: GAME THEORY

- a. Game Theory - Basic concepts - strategy - Payoff Matrix - Types of Games: two - person zero sum games - two-person constant sum games (Theory)
- b. Saddle point solution – Dominated strategies method – Maximin and minimax criterion – Case of no saddle point – solution of mixed strategy game (2x2 Matrix only - simple problems)

BOOKS RECOMMENDED

1. Chiang A.C., Fundamental Methods of Mathematical Economics. McGraw Hill, New Delhi, 1974.
2. Edward T. Dowling., Mathematics for Economists. Schaum Series, McGraw Hill
3. Edward T. Dowling Theory and Problems of Mathematical Methods for Business and Economics.Schaum Series. McGraw Hill
4. Weber, Jean E.Mathematical Analysis - Business and Economic Applications. Harper L & Row Publisher, New York
5. Mehta.B.C. and Madnani.G.M., Mathematical Methods for Economics. SultanChand & Sons., New Delhi

ALLIED III: STATISTICAL METHODS - I **SUBJECT CODE: 3ASE1**

UNIT 1: DATA COLLECTION AND PRESENTATION

- a. Sources of data – Primary and secondary sources of data – Methods of primary data Collection – uses of secondary sources
- b. Census Vs. Sampling methods – Random and non-random sampling techniques – Simple random sampling – Stratified sampling – Systematic sampling – Cluster sampling – Judgment and quota sampling– Convenience sampling
- c. Frequency distribution – Graphs of frequency distribution – Histograms – Frequency Polygon – Ogives – Lorenz curve

UNIT 2: STATISTICAL MEASURES - I

- a. Measures of averages – Mean, median and mode – Computation and uses – Problems on Quartiles, Deciles and Percentiles
- b. Meaning of absolute and relative measures of dispersion – Problems on measures of dispersion– Range – Quartile deviation, Mean deviation and Standard deviation – Computation (simple problems)
- c. Problems on Skewness - A note on Skewness and Kurtosis

UNIT 3: STATISTICAL MEASURES – II

- a. Correlation – Meaning and types – methods of measuring correlation – scatter diagram Method– Karl Pearson's coefficient of correlation – Rank correlation coefficient
- b. Simple linear regression – Fitting of regression lines - Method of least squares

- c. Relationship between correlation and regression coefficients – statement only

UNIT 4: TIME SERIES ANALYSIS

- a. Meaning - Components – Additive and multiplicative models
- b. Measurement of trend –Method of least squares – Forecasting
- c. Method of moving averages - Forecasting

UNIT 5: INDEX NUMBERS

- a. Meaning and types of index numbers – Price, quantity and value index numbers
- b. Computation of index numbers – Weighted and unweighted methods –Laspeyre's formula, Paasche's formula, Bowley's formula, Marshall - Edgeworth formula and Fisher's formula of index numbers
- c. Computation of Cost of living index numbers: Family Budget method – Aggregate method

BOOKS RECOMMENDED

1. Gupta S.P., Elementary Statistics for Economics. Sultan Chand & Co., New Delhi
2. Sivathanu Pillai and Bhagawati. Statistics. S.Chand & Co., New Delhi
3. David Bowers., Statistics for Economists. Macmillan, London

SKILL BASED SUBJECT: ENTREPRENEURIAL DEVELOPMENT

SUBJECT CODE: SED

Unit 1: Concept of Entrepreneurship – origin and evolution of entrepreneurship – classification of entrepreneurs – types of entrepreneur – qualities of entrepreneur – functions of entrepreneur – factors influencing entrepreneurship

Unit 2: Entrepreneurial Development - role of agencies –DICs, NSCIs, SISIs, SIDCO, SIPCOT, KVIC, MSME-DO – Role of All India Financial Institutions – Commercial Banks, IDBI, SIDBI, IFCI,SFC, ICICI, IRBI

Unit 3: Project Management – Business Idea Generation Technique – identification of business opportunities – Feasibility Study – Marketing – Finance – Technology and Legal Formalities – Preparation of Project Report – Tools of Appraisal

Unit 4: Entrepreneurial Development Programme - Role of Govt. in organising EDPs – critical evaluation of EDPs – SHGs – definition – objectives – membership – characteristics of SHGs – role of NGOs - linkage of SHG with Banks – Women SHGs – Training Programmes for Women Entrepreneurs – Micro Credit – Definition, Assessment ,Transaction Cost and Interest, Micro Finance Development Fund, Role of SBIs in Micro Credit – Micro Insurance – definition, need, basic principles of insurance, models, role and obstacles

Unit 5: Economic Development and Entrepreneurial growth – Role of entrepreneurs in Economic Growth – strategic approaches for growth of small scale entrepreneurs – Networking, Niche play, Geographic Concentration, Franchising/Dealership – Development of Women Entrepreneurship – SHGs and Women Empowerment in India – Financial Inclusion in India – challenges and role of Government in Financial inclusion – Pradhan Mantri Jan Dhan Yojana – Six Pillars of its mission objectives

Text Books:

1. Entrepreneurial Development by Dr.S.S.Khanka. S.Chand and Co., Ltd., New Delhi -110055. Latest Edition.
2. Entrepreneurial Development by Dr.(Mrs). Jayashree Suresh. Margham Publications, Chennai – 600017. Latest Edition.

Reference Books:

- 1.Entrepreneurial Development – Principles, Policies and Programmes by P.Saravanavel. Ess Pee Kay Publishing House, Chennai. Latest Edition.
2. Entrepreneurship Development in India by Dr.C.B.Gupta and Dr.N.P.Srinivasan. Sultan Chand & Sons, New Delhi. Latest Edition.

3. Entrepreneurial Development by Dr.(Mrs) V.Radha. Prasanna Publishers and Distributors, Chennai - 600005. Latest Edition.

4. Inclusive Finance India Report 2017 by M.S. Sriram. SAGE Publications India Pvt Ltd. New Delhi. Latest Edition.

E- Resources:

1. www.nmew.gov.in

2. www.ncw.in

3. www.planningcommission.gov.in

4. <http://pmjandhanyojana.co.in/>

MAIN PAPER VII: INDIAN ECONOMY - II
SUBJECT CODE: 4ME07c

UNIT 1: INDIA'S EXTERNAL SECTOR

- a. Trends and patterns of exports and imports in India in post - liberalisation era – Direction and composition of India's foreign trade
- b. WTO and India's foreign trade

UNIT 2: FOREIGN DIRECT INVESTMENT (FDI) IN INDIA AFTER 1991

- a. Sources and direction of FDI – India's share in global FDI inflows
- b. Impact of Government Policy on FDI

UNIT 3: INFRASTRUCTURE DEVELOPMENT IN INDIA

- a. Present scenario of infrastructure development – Transport sector – Role of transport sector in economic development - Growth and performance of transport sector in India – Transport Co-ordination Policy
- b. Policy issues and strategies for infrastructure development under Five Year Plans

UNIT 4: ENERGY

- a. Sources of Energy - Energy crisis in India – Measures to tackle energy crisis in India
- b. Energy Security – Energy Policy

UNIT 5: INFORMATION AND COMMUNICATION TECHNOLOGY (ICT):

- a. Role and performance of ICT
- b. Impact of Telecom Policy on the growth of ICT

TEXT BOOKS

1. Indian Economy – Rudder Datt and K.P.M. Sundaram, S. Chand & Co. Ltd., New Delhi. Latest Edition.
2. The Indian Economy – Environment and Policy by Ishwar C. Dhingra. Sultan Chand & Sons, New Delhi. Latest Edition.

BOOKS RECOMMENDED

1. Indian Economy since Independence – Uma Kapila (Ed). Academic Foundation, New Delhi. Latest Edition.
2. The Oxford Companion to Economics in India – Kaushik Basu (Ed). OUP, New Delhi. Latest Edition.
3. The Indian Economy since 1991: Economic reforms and Performance – B.A. Prakash (Ed). Pearson Education, South Asia. Latest Edition.
4. Studies in Indian Economy – K.R. Gupta (Ed). Atlantic Publishers and Distributors Pvt Ltd., New Delhi. Latest Edition.
5. India's Economy and Growth – Essays in Honour of V.K.R.V. Rao – Pulin B. Nayak, Bishwanath Goldar & Pradeep Agarwal (Ed). Sage Publications India Pvt. Ltd., New Delhi. Latest Edition.
6. Indian Economy – Economic Development and Policies by Uma Kapila (Ed). Academic Foundation, New Delhi. Latest Edition.

7. Indian Economy - Its Development and Performance by V.K.Puri and S.K.Misra.
Himalaya Publishing House Pvt.Ltd., Mumbai. Latest Edition

E- Resources:

1. www.planningcommission.gov.in
2. www.nic.in

MAIN PAPER VIII: MATHEMATICAL METHODS - II
SUBJECT CODE: 4ME08b

UNIT 1: FUNCTIONS AND DIAGRAMMS IN ECONOMICS

- a. Types of functions - Linear, quadratic, cubic and polynomial functions, rectangular hyperbola, exponential and logarithmic functions
- b. Functions in economics – Nature of Demand functions, Cost functions, Revenue and Profit functions

UNIT 2: DERIVATIVES

- a. Concept of limit – Simple Problems on limits of indeterminate forms and Continuity of function at a point - Definition of derivative – Rules of differentiation - Product Rule, Quotient Rule, Chain Rule, Inverse function rule, Implicit differentiation, logarithmic differentiation - Problems - Higher order derivatives – first derivative, second derivative, and third derivative
- b. Partial derivatives - Direct and Cross Partial Derivatives – a note on total differential - simple problems on homogenous functions

UNIT 3: MAXIMA, MINIMA AND POINT OF INFLECTION

- a. Order conditions for maxima, minima and point of inflexion of one independent variable - interpretation of first, and second derivative
- b. Problems on Maxima, Minima and point of inflexion (simple problems)

UNIT 4: APPLICATIONS OF DERIVATIVES IN ECONOMICS

- a. Interpretation of first derivative - Slope of function – Marginal functions – Problems on finding Marginal cost, Marginal Revenue – Interpretation of second derivative – Problems on slope of MR and MC
- b. Problems on elasticity of demand – Problems on AR, MR and elasticity relationships - Problems on AC-MC relationship – Problems on revenue maximization and profit maximization

UNIT 5: INTEGRATION

- a. Meaning and rules of integration, methods of integration – integration by parts and Integration by substitution – definite integrals – simple problems
- b. Application of integration to marginal analysis – Problems on finding total cost function from marginal cost function, total revenue function from marginal revenue – Simple problems on Consumer surplus and Producer surplus

BOOKS RECOMMENDED

1. Chiang A.C., Fundamental Methods of Mathematical Economics. McGraw Hill, New Delhi, (1974)
2. Edward T. Dowling, Mathematics for Economists. Schaum Series. McGraw Hill
3. Weber, Jean E., Mathematical Analysis - Business and Economic Applications. Harper & Row Publisher, New York
4. Pandit V. & Mukherjee Badal., Mathematical Methods for Economic Analysis. Allied Publishers
5. Mehta.B.C. and Madhani.G.M. Sultan., Mathematical Methods for Economics. Chand & Sons., New Delhi

MAIN PAPER IX: MONEY AND BANKING
SUBJECT CODE: 4ME09c

UNIT 1: INTRODUCTION

- a. Functions of money and evolution of money - Classification of money – Significance of money
- b. Monetary standards: Gold standard – Bimetallism - paper currency system – system of note issue.

UNIT 2: MONEY SUPPLY AND DEMAND

- a. Factors influencing demand for money
- b. Components of money supply – monetary base – money multiplier

UNIT 3: COMMERCIAL BANKING

- a. Functions of Commercial Bank – credit creation
- b. Balance Sheet – Commercial banking in India

UNIT 4: CENTRAL BANKING

- a. Definition – Methods of Credit Control
- b. Reserve Bank of India – Objectives and limitations of monetary policy.

UNIT 5: MONEY MARKET

- a. Money market: Instruments and Institutions of money market
- b. Regulation of money market by RBI

BOOKS RECOMMENDED

1. Sethi T.T., Monetary Economics. S.Chand & Company Ltd., New Delhi
2. Paul R.R. Monetary Economics. Kalyani Publishers

ALLIED IV: STATISTICAL METHODS - II
SUBJECT CODE: 4ASE2

UNIT 1: PROBABILITY

- a. Elements of Probability – theorems on probability statement only – addition and multiplication theorems – problems on addition theorem – statement of Bayes' theorem – problems on Bayes' theorem - Random variables – definition of discrete and continuous random variables – definition of probability mass function and probability density function
- b. Mathematical Expectation - definition - properties - mean, variance and covariance. – properties statement only – simple problems on mean and variance given probability mass function

UNIT 2: THEORETICAL DISTRIBUTIONS

- a. Binomial distribution – binomial probability Statement – problems using binomial probability law – applications
- b. Normal distribution – statement of properties of normal distribution – problems on probability and problems on finding mean and variance

UNIT 3: HYPOTHESIS TESTING

- a. Sampling Distribution - Concept of Standard Error – Central Limit theorem
Meaning of null and alternate hypothesis – critical region and level of significance – type I and type II errors - Procedure for testing hypothesis
- b. Large sample tests: Single mean test, Two means test - Single standard deviation test – two standard deviation tests - Small sample tests: t tests concerning single mean, difference of two means and paired t test – problems - F test – Variance Ratio test - problems

UNIT 4: CHI- SQUARE DISTRIBUTION

- a. Chi square test of goodness of fit , test of independence of attributes
- b. Analysis of variance - Problems on one way ANOVA

UNIT 5: ESTIMATION

- a. Parameter and statistic – Point estimation – meaning - properties of a good estimator
- b. Interval estimation – meaning – interval estimation for population mean and variance (both large and small samples)

BOOKS RECOMMENDED

1. S.P. Gupta., Statistical Methods. Sultan Chand & Co., New Delhi
2. John P Onyango and E.M.Plews. A Textbook of Basic Statistics. East African Educational Publishers Ltd., Education Series (2005)
3. David Bowers., Statistics for Economists. Macmillan,London

MAIN PAPER X: MACRO ECONOMICS - I **SUBJECT CODE: 5ME10c**

UNIT 1

- a. Macroeconomic Accounting - Measurement of macroeconomic variables - National

- income – Business cycle – Inflation
- b. Problems in the computation of income and its limitations

UNIT 2

- a. Macroeconomic theory - Classical macro model - Say's law of markets
- b. Quantity theory of money – Cash Transactions and cash balances version.

UNIT 3

- a. Simple Keynesian model of income determination - Concept of effective demand
- b. Consumption function - attributes - Factors influencing consumption function

UNIT 4

- a. Investment function - Autonomous investment and Induced investment - Marginal efficiency of capital and the role of public investment in employment determination
- b. Theory of investment multiplier - Discussion of multiplier as a public policy tool

UNIT 5

- b. Theory of money, prices and interest rate in Keynesian model - Chain of causation and integration mechanism
- c. Liquidity preference theory of interest rate determination and liquidity trap - policy implication.

BOOKS RECOMMENDED

1. Richard T.Froyen., Macro Economics - Theories and Policies. Pearson
2. Edward Shapiro, Macro Economics.Harcourt Brace & World Inc., New York

MAIN PAPER XI: PUBLIC FINANCE - I **SUBJECT CODE: 5ME11b**

UNIT 1: INTRODUCTION

- a. Definition of public finance - Public finance and private finance
- b. Nature and functions of public authority - Principles of public finance - Maximum

Social Advantage

UNIT 2: PUBLIC EXPENDITURE

- a. Definition, Nature and Classification of Public Expenditure - Canons of public expenditure - Effects of public expenditure on production, on distribution, and on employment
- b. Growth of public expenditure in India - Central and State - Control of public expenditure in India

UNIT 3: PUBLIC REVENUE

- a. Meaning and Sources of public revenue – Tax and Non tax revenue – Sources of non tax revenue: Grants and Gifts - Administrative revenues - Commercial revenues
- b. Tax revenues – Direct and indirect tax.

UNIT 4: TAXATION

- a. Objectives of Taxation - Canons of taxation - theories of taxation - Cost of Service Theory – Benefit theory - Ability to pay
- b. Taxable capacity - Effects of taxation - Shifting and incidence of taxation

UNIT 5: SPECIFIC TAXES WITH REFERENCE TO INDIA

- a. Personal Income tax - Tax on corporate income - Gift tax - Inheritance tax – Wealth tax
- b. Expenditure tax - Excise duty - Sales tax - Non-tax revenue in India.

BOOKS RECOMMENDED

1. Tyagi B.P., Public Finance. Jai Prakash Nath & Co., Meerut.
2. Lekhi., Public Finance. Kalyani Publishers

MAIN PAPER XII: INTERNATIONAL ECONOMICS SUBJECT CODE: 5ME12b

UNIT 1: INTERNATIONAL TRADE

- a. Classical Theories of trade – Absolute Cost Advantage and Comparative Cost Advantage
- b. Modern approach – Mill's Law of Reciprocal Demand – Heckscher - Ohlin factor endowments theory

UNIT 2: BALANCE OF PAYMENTS AND FOREIGN EXCHANGE

- a. Balance of Payments – meaning – components – Disequilibrium – Measures to correct
Disequilibrium
- b. Exchange Rate System – Fixed and Floating Exchange Rate

UNIT 3: INTERNATIONAL MONETARY FUND

- a. Objectives – Functions – Financing facilities
- b. International Liquidity – Special Drawing Rights

UNIT 4: REGIONAL TRADE ARRANGEMENTS

- a. European Common Market – SAARC – ASEAN – Euro Currency
- b. Role of UNCTAD

UNIT 5: TRADE LIBERALISATION

- a. GATT – Objectives and Principles - Uruguay Round
- b. WTO – Agriculture, TRIPS, TRIMS

BOOKS RECOMMENDED

1. Cherunilam Francis., International Economics. Tata McGraw Hill Publishing Company Ltd, New Delhi.
2. B'Sodersten., International Business. Macmillan, London.
3. Dominick Salvatore., International Economics. Macmillan Publishing Co., New York.

**MAIN PAPER XIII: MANAGERIAL ECONOMICS
SUBJECT CODE: 5ME13c**

UNIT 1: INTRODUCTION TO BUSINESS ECONOMICS

- a. Relationship to economic theory - Demand analysis - law of demand - Market demand - Company demand - Demand Schedule – Demand curve - Elasticity of demand - Price elasticity - Income elasticity - Cross elasticity - usefulness of the concept in making business decision.
- b. Demand forecasting - qualitative and quantitative tools of forecasting

UNIT 2: COST AND REVENUE

- a. Cost concepts related to business decisions - Cost and Revenue functions
- b. Break-even Analysis - Managerial applications of Break-even analysis

UNIT 3: PRODUCT DIFFERENTIATION

- a. Product policy - Definition of product - Product life cycle
- b. Product promotion - Role of advertising in promotion

UNIT 4: PRICING IN PRACTICE

- a. Pricing of new products - Skimming and penetration pricing – pricing of established products
- b. Price discrimination - Pricing of public utilities - Peak-load pricing

UNIT 5: CAPITAL BUDGETING

- a. Techniques - Net Present Value - Internal Rate of Return - Profitability index – Average Rate of Return - Choice of techniques.
- b. Cost of capital - Debt capital - Equity capital – Capital Asset Pricing - Composite cost of capital

BOOKS RECOMMENDED

1. Peterson.H., Managerial Economics. Prentice Hall
2. Evans Douglas., Managerial Economics. N.J.Prentice Hall, London
3. P. L Metha, Managerial Economics. S. Chand & Co., Ltd., New Delhi

MAIN PAPER XIV: ECONOMETRICS

SUBJECT CODE: 5ME14b

UNIT 1: NATURE AND SCOPE OF ECONOMETRICS

- a. Definition and meaning of econometrics – Methodology of econometrics – Econometrics and mathematical economics – Econometrics and Statistics – Goals of econometrics
- b. Nature of econometric approach – scope and limitations of econometrics

UNIT 2: ORDINARY LEAST SQUARES METHOD

- a. Simple Linear Regression model – Specification, assumptions, and estimation
- b. Properties of Least Squares Estimators – Gauss-Markov Theorem

UNIT 3: INTERPRETATION OF REGRESSION OUTPUT

- a. Student t test for testing the significance of least squares parameters – a note on coefficient of determination
- b. Interpretation of regression output (demand function, consumption function)

UNIT 4: PROBLEMS OF SINGLE EQUATION

- a. Multicollinearity, Heteroscedasticity – Meaning, detection and consequences
- b. Autocorrelation – Meaning, detection and consequences

UNIT 5: SIMULTANEOUS EQUATIONS METHOD

- a. Simultaneous equations models – Market model – Structural and reduced forms – Consequences of ignoring simultaneity
- b. Meaning of identification, under identification, over identification and exact identification – rank and order conditions of identification

BOOKS RECOMMENDED

1. Johnston J, Econometric Methods. McGraw Hill
2. Koutsoyiannis .A, Theory of Econometrics. Macmillan
3. Damodar Gujarati, Basic Econometrics . McGraw Hill
4. Maddala G.S., Introduction to Econometrics. Macmillan

ELECTIVE I: PORTFOLIO MANAGEMENT

SUBJECT CODE: 5EE01a

UNIT 1

- a. Concept of portfolio – Objectives of personal investment - Financial security - Assets acquisition – Investment for family obligation.

- b. Factors influencing the structure of a Portfolio

UNIT 2

- a. Spectrum of financial and real assets – safety, liquidity, return, tax benefits, risk-return trade-off – nominal and effective rate of return.
- b. An assessment of alternative avenues of investment in terms of select criteria such as safety, liquidity, return, tax benefits

UNIT 3

- a. Investment securities and their characteristics – bank deposits – postal savings schemes – equity – debentures and bonds
- b. Mutual funds – Insurance – NBFC deposits

UNIT 4

- a. Investment in equity – stock market functions
- b. Stock exchange trading in corporate securities – terms related to operations

UNIT 5

- a. Regulatory role of SEBI – Listing – Forward trading – Futures and options
- b. Fundamental and technical analysis – Guidelines for investment in securities.

BOOKS RECOMMENDED

1. Prasanna Chandra., Investment Analysis and Portfolio Management Tata McGraw Hill
2. Jeff Madura., Personal Finance. Pearson.
3. Robert Strong., Portfolio Management. Jaico Publishing House.

MAIN PAPER XV: MACRO ECONOMICS - II **SUBJECT CODE: 6ME15c**

UNIT 1

- a. Extensions of theories of Consumption – The consumption puzzle – Permanent Income Hypothesis

- b. Relative Income Hypothesis – Life Cycle Hypothesis

UNIT 2

- a. Extensions of theories of Investment – Principle of acceleration
- b. Application of Multiplier – Acceleration interaction in Trade cycle theories - Hicks, Kaldor and Samuelson

UNIT 3

- a. Extensions of theories of Money - Friedman's Restatement of Quantity theory – Patinkin and Real Balance Effect
- b. Tobin's theory of demand for money – Baumol's Inventory theoretic approach to transactions demand for money

UNIT 4

- a. Hicks-Hansen's ISLM Analysis – Shifts in IS-LM functions
- b. Impact of monetary and Fiscal Policies and IS-LM curves

UNIT 5

- a. Macroeconomic policies for controlling inflation and unemployment
- b. Phillips curve in short run and long run

BOOKS RECOMMENDED

1. Edward Shapiro, Macro Economic Analysis. Harcourt Brace & World Inc., New York
2. Richard.T. Froyen - Macro Economics: Theories and Policies, Pearson Prentice Hall

MAIN PAPER XVI: PUBLIC FINANCE - II **SUBJECT CODE: 6ME16b**

UNIT 1: PUBLIC DEBT

- a. Meaning – Public debt and private debt – Causes for the increase in public debt –

Classification

- b. Burden of public debt redemption – Management of public debt – Indian public debt

UNIT 2: BUDGET

- a. Purpose of budgeting - Budgetary procedure
- b. Budget and economic control – Analysis of current central budget

UNIT 3: LOCAL FINANCE

- a. Principles of local finance – Local bodies and their sources
- b. Local finance in India – Defects of Indian local finance

UNIT 4: PRINCIPLES OF FEDERAL FINANCE

- a. Central-State Financial relationship – Principles of federal finance
- b. Role of Finance Commission - Report of Current Finance Commission

UNIT 5: FISCAL POLICY

- a. Objectives of a fiscal policy - Role of fiscal policy in a developing economy
- b. Types of deficit and Deficit financing as a policy tool

BOOKS RECOMMENDED

1. Tyagi.,B.P.,Public Finance. Jai Prakash Nath & Co., Meerut.
2. Lekhi.,Public Finance. Kalyani Publishers.

MAIN PAPER XVII: DEVELOPMENT ECONOMICS
SUBJECT CODE: 6ME17b

UNIT 1: SOURCES OF ECONOMIC GROWTH & DEVELOPMENT

- a. Definition of Economic Development and Economic Growth - Measuring Development - GDP –PPP – HDI
- b. Factors Contributing to Development/Growth – Institutional, Technological, Human factors.

UNIT 2: THEORIES OF DEVELOPMENT

- a. Rostow's Stages of Economic growth – Leibenstein's Critical Minimum Effort thesis
- b. Doctrine of balanced growth – Big pushes theory.

UNIT 3: CONSEQUENCES OF DEVELOPMENT & GROWTH

- a. Income Distribution – Measuring inequality – Inequality in income and growth –The inverted U Hypothesis
- b. Externality – Environmental Kuznet's curve - sustainability

UNIT 4: BARRIERS TO GROWTH/ DEVELOPMENT

- a. Poverty cycle – conceptual issues – poverty measures – Impact of poverty – Meaning of Human Suffering Index
- b. Institutional and Political factors – International trade barriers – International financial barriers - social and cultural factors.

UNIT 5: DEVELOPMENT STRATEGIES

- a. Harrod-Domar growth model - Lewis' Structural change/dual sector model
- b. Types of aid - Export-led growth/outward oriented strategies - Import substitution/inward-oriented strategies/ protectionism - Micro-credit schemes – Foreign Direct Investments (FDI)

BOOKS RECOMMENDED

1. Gerald M. Meier, James E. Rauch, Leading Issues in Economic Development. OUP

MAIN PAPER XVIII: INTRODUCTION TO OPERATIONS RESEARCH
SUBJECT CODE: 6ME18

UNIT 1: TRANSPORTATION MODEL

- a. Introduction - Nature and scope of operations research
- b. Transportation model - Definition - Methods of finding initial basic feasible solution - North-West Corner Rule, Least cost method, Vogel's Approximation Method
- c. Solution of a transportation problem (NON-DEGENERATE PROBLEMS ONLY) - MODI method

UNIT 2: DECISION THEORY

- a. Structure of decision making problems - Types of decision making
- b. Decision making under uncertainty - Maximin, Minimax, Maximax, Hurwicz and Minimax regret criteria - simple problems
- c. Decision making under risk - Expected Value criterion, Expected Opportunity Loss criterion, Expected Value Perfect Information - simple problems - Decision tree analysis (only theory)

UNIT 3: INVENTORY CONTROL

- a. Meaning, Objectives and Types of inventory
- b. Factors affecting inventory control - Benefits of inventory control
- c. Economic Order Quantity - theory and simple problems

UNIT 4: NETWORK ANALYSIS

- a. Meaning, objectives and basic components of a network
- b. Management applications of network analysis - Construction of network for projects - simple problems
- c. Network computations - Earliest completion time of a project - Critical Path Method - simple problems - Concept of Program Evaluation Review Technique (simple problems)

UNIT 5: MISCELLANEOUS TOPICS

- a. Statistical Quality Control: Definition - Objectives - Benefits - Types of limits Control, specification and tolerance limits - Process and product control - Control charts for variables, range and standard deviation
- b. Queuing Theory : Meaning - Benefits - Elementary queuing system - Arrival pattern - Queue and Service facility - Single channel queuing model theory
- c. Simple Problems on elementary queuing models

BOOKS RECOMMENDED

1. Wagner.H., Principles of Operations Research - Prentice Hall
2. Gupta P.K. & Hira D.S., Operations Research and Quantitative Analysis. S.Chand & Co. Ltd.,
3. Kapoor.V.K., Operations Research. Sultan Chand & Sons

ELECTIVE II: GENERAL INSURANCE

SUBJECT CODE: 6EE02b

UNIT 1: MEANING, OBJECTIVES AND FUNCTIONS OF INSURANCE

- a. Meaning, Origin of Insurance – Purpose & Need of Insurance – Insurance as a Social Security Tool – Role of insurance in the Development of Economy – Types of Insurance
- b. Objective of Insurance: Investment and Risk Coverage – concept of risk – Risk Management - concept of re-insurance and double insurance.
- c. Contract of insurance : The Law of Contract – Definition – Types of contracts – Elements or essentials of a Contract

UNIT 2: PRINCIPLES OF INSURANCE - I

- a. Insurable Interest: Definition - Importance of Insurable Interest – Its essential criteria – How it arises - When is it needed?
- b. Utmost Good Faith : Definition - Types of Breach of utmost good faith - remedies for breach of utmost good faith
- c. Proximate Cause: Meaning and importance of the principle – Application of the Principle – policy modification of the principle

UNIT 3: PRINCIPLES OF INSURANCE -II

- a. Indemnity: Definition – Implications – Link with insurable interest – How indemnity is provided – Salvage – Abandonment – Policy provisions for preventing indemnity – Policy provisions for providing more than indemnity - the practical problems with indemnity
- b. Contribution: Doctrine of Equitable Contribution – rateable proportions
- c. Subrogation: Definition - How arising – How Applicable – other considerations

UNIT 4: INSURANCE ADMINISTRATION

- a. Some Concepts: Prospectus – Proposal forms – Policy forms – Policy privileges – conditions & restrictions.
- b. More concepts: Endorsements - renewal procedure - revival - settlement of claims
- c. Fundamentals of agencies: Definition of an agent - Functions of the agent – Procedure for becoming an agent - Remuneration to the agent - code of conduct – obligation of insurance agent.

UNIT 5: PRACTICE OF INSURANCE IN INDIA

- a. Policies available in Public and Private Sector
- b. Life and Non - life insurance in India
- c. Role of IRDA

BOOKS RECOMMENDED

1. Palande P.S, R.S, Shah and Lunawat M.L, Insurance in India. Sage Publications, 2003.
2. Insurance Institute of India, Principles of Insurance. Mumbai