

CHOICE BASED CREDIT SYSTEM

Two year M.A. Course in Economics of 4 Semesters

SYLLABUS
(RESTRUCTURED)

With Effect From: 2018-19

Semester	Credits	Marks
I	23	500
II	20	450
III	24	550
IV	23	500
Total	90	2000



KUVEMPU UNIVERSITY

Department of Studies in Economics

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I Semester						
Paper No.	TITLE OF THE PAPER	Credits	Theory Marks	Practical	Internal Assessment Marks	Total Marks
	HARD CORE PAPERS					
1.1(H)	Micro Economic Analysis	05	75	-	25	100
1.2(H)	Economics of Growth and Development	05	75	-	25	100
1.3(H)	Mathematical Methods for Economists	05	75	-	25	100
SOFT CORE PAPERS						
1.4(S)	Financial Institutions and Markets	04	75	-	25	100
1.5(S)	Economics of Social Sector	04	75	-	25	100
	Total	23				500

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II Semester						
Paper No.	TITLE OF THE PAPER	Credits	Theory	Practical Marks	Internal Assessment Marks	Total Marks
	HARD CORE PAPERS					
2.1(H)	Macro Economic Analysis	05	75	-	25	100
2.2(H)	Statistical Methods for Economists	05	75	-	25	100
SOFT CORE PAPERS (2 of the following)						
2.3(S)	Mathematical Economics	04	75	-	25	100
2.4(S)	Agricultural Economics	04	75	-	25	100
2.5(S)	Economic Planning	04	75	-	25	100
2.6(S)	Karnataka Economy	04	75	-	25	100
ELECTIVE PAPERS (1 of the following)						
2.7(E)	Karnataka Economic Development	02	40	-	10	50
2.8(E)	Rural Development	02	40	-	10	50
2.9(E)	Economics of Infrastructure	02	40	-	10	50
	Total	20				450

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III Semester						
Paper No.	TITLE OF THE PAPER	Credits	Theory Marks	Practical Marks	Internal Assessment Marks	Total Marks
	HARD CORE PAPERS					
3.1(H)	Public Economics	05	75	-	25	100
3.2(H)	Computer Applications in Economic Analysis	05	75	-	25	100
SOFT CORE PAPERS (3 of the following)						
3.3(S)	Research Methodology	04	75	-	25	100
3.4(S)	Theory of Econometrics	04	75	-	25	100
3.5(S)	Environmental Economics	04	75	-	25	100
3.6(S)	Demography	04	75	-	25	100
3.7 (S)	Managerial Economics	04	75	-	25	100
3.8 (S)	Rural Development and Co-operation	04	75	-	25	100
ELECTIVE PAPERS (1 of the following)						
3.9(E)	Indian Economy	02	40	-	10	50
3.10(E)	Human Resource Development	02	40	-	10	50
3.11(E)	Economics of Gender	02	40	-	10	50
	Total	24				550



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IV Semester						
Paper No.	TITLE OF THE PAPER	Credits	Theory Marks	Practical	Internal Assessment Marks	Total Marks
	HARD CORE PAPERS					
4.1(H)	International Economics	05	75	-	25	100
4.2(H)	Time Series Data Analysis	05	75	-	25	100
SOFT CORE PAPERS (2 of the following)						
4.3(S)	Indian Public Finance	04	75	-	25	100
4.4(S)	Operations Research for Economists	04	75	-	25	100
4.5(S)	Indian Economic Policy	04	75	-	25	100
4.6(S)	Industrial Economics	04	75	-	25	100
4.7(S)	Economics and Law	04	75	-	25	100
4.8(S)	Theory of Co-operation	04	75	-	25	100
4.9(S)	Economics of Insurance	04	75	-	25	100
	PROJECT WORK (Compulsory)	05	100 (75 Marks for Project Report & 25 Marks for Viva-Voce)		-	100
	Total	23				500

Contents

Paper Nos.	Paper Titles	Page No
I SEMESTER		
1.1 (H)	: Micro Economic Analysis	: 01-02
1.2 (H)	: Economics of Growth and Development	: 03-04
1.3 (H)	: Mathematical Methods for Economists	: 05-00
1.4 (S)	: Financial Institutions and Markets	: 06-07
1.5 (S)	: Economics of Social Sector	: 08-09
II SEMESTER		
2.1 (H)	: Macro Economic Analysis	: 11-12
2.2 (H)	: Statistical Methods for Economists	: 13-14
Any Two of the Following		
2.3 (S)	: Mathematical Economics	: 15-00
2.4 (S)	: Agricultural Economics	: 16-00
2.5 (S)	: Economic Planning	: 17-18
2.6 (S)	: Karnataka Economy	: 19-20
Any One of the Following (For other Dept. Students)		
2.7 (E)	: Karnataka Economic Development	: 21-00
2.8 (E)	: Rural Development	: 22-00
2.9 (E)	: Economics of Infrastructure	: 23-00
III SEMESTER		
3.1 (H)	: Public Economics	: 25-26
3.2 (H)	: Computer Applications in Economic Analysis	: 27-28
Any Three of the Following		
3.3 (S)	: Research Methodology	: 29-00
3.4 (S)	: Theory of Econometrics	: 30-00
3.5 (S)	: Environmental Economics	: 31-32
3.6 (S)	: Demography	: 33-00
3.7 (S)	: Managerial Economics	: 34-35
3.8 (S)	: Rural Development and Co-operation	: 36-00
Any One of the Following (For other Dept. Students)		
3.9 (E)	: Indian Economy	: 37-00
3.10 (E)	: Human Resource Development	: 38-39
3.11 (E)	: Economics of Gender	: 40-41
IV SEMESTER		
4.1 (H)	: International Economics	: 43-44
4.2 (H)	: Time Series Data Analysis	: 45-00
Any Two of the Following		
4.3 (S)	: Indian Public Finance	: 46-00
4.4 (S)	: Operations Research for Economists	: 47-00
4.5 (S)	: Indian Economic Policy	: 48-00
4.6 (S)	: Industrial Economics	: 49-00
4.7 (S)	: Economics and Law	: 50-51
4.8 (S)	: Theory of Co-operation	: 52-00
4.9 (S)	: Economics of Insurance	: 53-00
Project Work (Compulsory)		

Note:1) H= Hard Core Paper, 2) S= Soft Core Paper, 3) E = Elective (Interdisciplinary) Paper

PAPER-1.1 (H): MICRO ECONOMIC ANALYSIS

MODULE-1: DEMAND ANALYSIS

Cardinal Utility Approach- Law of Diminishing Marginal Utility, Consumer's equilibrium, Derivation of Demand Curve- Ordinal Utility Approach – Utility Maximization Problems, Indifference Curves; Properties, Consumer's Equilibrium, Price, Income & Substitution Effects, Derivation of Demand Curve; Revealed Preference Theory of Demand; Recent Developments in Demand Theory- Hicksian Revised Theory, Lancaster's Characteristics of Goods approach, Consumer's Choice under Risk and Uncertainty. Demand and Supply Equilibrium, Cobweb Theorem

MODULE-2: THEORY OF PRODUCTION AND COSTS

Production Function with one variable input and two variable inputs, Cost minimizing input choices, Production Functions-Cobb-Douglas, Constant Elasticity of Substitution Production Function, Trans Long Production Function, Returns to Scale , Duality theory, Expansion path, Short run and Long run costs and their relationship in Traditional Cost Theory- Average Marginal relationships; Modern cost theory, Economies and diseconomies of Scale

MODULE-3: MARKET STRUCTURE

Perfect competition- features, equilibrium of the Firm and Industry, short run supply curves; Monopoly- Price and output determination, Degree of monopoly power, price-output determination under discriminating monopoly; Bilateral Monopoly and Monopsony; Monopolistic competition- price and output determination, critique of Chamberlin's Theory of Monopolistic competition, The concept of Excess capacity, Selling costs; Oligopoly- Non collusive (Cournot, Bertrand, Kinked demand curve and Stackleberg's solution) and Collusive (Cartels, Mergers and price leadership) models, Sales maximization model of oligopoly, Theory of Game- The Nash equilibrium, Neuman Morgenstern game theory.

MODULE-4: THEORY OF DISTRIBUTION

Marginal productivity theory; Product exhaustion theorem; Modern Theory of Distribution- Clark's Dynamic theory of profit, Schumpeter's Innovation theory of profits, Risk and Uncertainty theory; Macro theories of distribution- Ricardian, Marxian, Kalecki and Kaldor's

MODULE-5: GENERAL EQUILIBRIUM AND WELFARE ECONOMICS

Partial and General equilibrium- General equilibrium of exchange and consumption, Edgeworth Box and General equilibrium of production; Welfare Economics- Pigouvian welfare economics, Pareto optimal conditions, Kaldor Hicks welfare criterion, Bergson Samuelson social welfare function, Theory of Second Best- Arrow's impossibility theorem.

BOOKS FOR REFERENCE

- Ahuja H.L (2017), **Advanced Economic Theory**, S. Chand and Company Ltd., New Delhi, Twenty First Edition
- Robert Pindyck ,Daniel Rubinfeld (2017),**Microeconomics**: Pearson Education, Eight Edition
- Dominick Salvatore (2017), **Microeconomic Theory** Mcgraw Hill Education Third Edition
- Pankaj Tandon (2015), **Microeconomic Theory** , SAGE Test
- Seth.M.L. (2013-14) Microeconomic, Laskhmi Narayan Agarwal Educational Publishers, Anupam Plaza-I Block No- 50, Sanjaya Place, Agra
- Andrew Schotter (2008), **Microeconomics: A Modern Approach**, Southwest Cengage Learning Publication, Mason, USA.
- Salvatore, D. (2003), **Micro economics; Theory and Applications**. Oxford University Press, New Delhi.
- Kotsoyiannis A Modern Microeconomics, Macmillan, London
- Daniel. L Resbinfeld : Microeconomics Pearson Prentice Hall, New Jersey

PAPER-1.2(H): ECONOMICS OF GROWTH AND DEVELOPMENT

MODULE-1: ECONOMIC DEVELOPMENT AND ECONOMIC GROWTH: AN OVERVIEW

Economic Growth and Development- Deference between Economic Growth and Economic Development- Measurement of Economic Development; Human Development Index(HDI)- Gender Development Index(GDI), Gender Related Development Index; Importance of Economic Development, Characteristics of Developed and Underdeveloped Countries (LDCs), Indicators of Underdevelopment, International Income Inequality

MODULE - 2: THEORIES OF DEVELOPMENT AND GROWTH MODELS

Classical Models-Smith, Ricardo, Malthus, Karl Marx Theory of Social Evolution, Surplus Value and Exploitation, The Marxian Dynamic Process; Neo Classical Models-Schumpeter, Harrod-Domar Model, Rostow's Stages of Economic Growth, Joan Robinsons Model of Capital Accumulation, Solows Long Run Growth Model, Kaldors Model of Growth, Lewis Model, Rosentein Rodan's Big Push Theory, Balanced and Unbalanced Growth Theory

MODULE - 3: ECONOMIC DEVELOPMENT

Determinants of Economic Development; Obstacles to Development; Role of Industry and Agriculture in Economic Development; Resources and Economic Development; Capital and Economic Development; Determinants of Capital Formation, Problems of Capital Formation in UDCs, Inflation and Economic Development International Trade and Economic Development

MODULE -4: TECHNOLOGY AND ECONOMIC DEVELOPMENT

Role of Technology in Economic Development- Labour Intensive Technology, Capital Intensive Technology, Determinants of Capital Output Ratio - Investment Criteria in Economic Development - Dualism: Social Dualism, Technology Dualism - Role of Government in Economic Development

MODULE-5: PLANNING AND ECONOMIC DEVELOPMENT

Meaning and Definition of Planning, Need for Planning, Objectives of Planning-Planning Commission and Neeti Ayog of India, Mohalanobis Two Sector Model –Human Resources and Economic Development- Importance, Human Capital Formation, Effects of Population Growth – Man Power Planning- Role of Entrepreneur in Economic Development.

BOOKS FOR REFERENCE

- Todaro M.P & Smith (2007), **Economic Development in the 3rd World**, Orient & Longman, London.
- Thirlwall A.P, (2000),**Growth & Development**, 6th Edition ,Wesr press pvt. Ltd. New Delhi
- Higgins Benjamin (1999),**Economic Development – Theory Principles & History**, W.W Norton, New York.
- Srivastava O.S (1996),**Economics of Growth, Development & Planning**, Vikas publication, new Delhi.
- Meier.G.M. (1995), **Leading Issues in Economic Development** (6th edition), Oxford University Press, New Delhi.
- Bhagavathi J and Desai, (1970), **India: Planning for Industrialization**, Oxford University Press, Oxford.
- Adelman. I (1961), **Theories of Economic Growth and Development**, Stanford Universities Press, Standford.
- Agarwal and Singh (1958), **The Economics of Underdevelopment**, Oxford University Press, New Delhi.

PAPER-1.3 (H) MATHEMATICAL METHODS FOR ECONOMISTS

MODULE-1: INTRODUCTION

Importance of Mathematical Methods in Economic Analysis; Some Elementary Mathematics Number Systems, Sets-Algebraic Expressions, Exponential Functions, Constants, Variables, Coefficients, Parameters; Relations and Functions

MODULE-2: SYSTEM OF EQUATIONS AND IDENTITIES

Straight Lines- Equations of Straight Lines, Linear and Non-Linear Functions; Identities; System of Simultaneous Equations; Graphs of Equations; Market Equilibrium- Effects of Specific and Sales Taxes on Equilibrium Price and Quantity. Pareto's Law of Distribution of Income – Product Transformation Curve

MODULE-3: MATRIX ALGEBRA

Definitions of a Matrix; Matrix Operations; Special Types of Matrices; Transpose of a Matrix; Determinants and their Basic Properties; Solution of Simultaneous Equations Through Cramer's Rule, Input and Output Analysis

MODULE-4: DIFFERENTIAL CALCULUS

Limits; Continuous and Discontinuous Functions; Rules of Differentiation; Maxima and Minima Functions of Two Variables; Partial Derivative - Functions of Several Variables- Marginal Cost, Marginal Demand, Production Functions, Homogenous Functions, Euler's Theorem, Returns to Scale, Cobb-Douglas Production Function. Elasticity of Demand, Relationship between MR, AR and ED

MODULE-5: INTEGRAL CALCULUS

Concept of Integration- Indefinite Integration, Definite Integration; Rules of Indefinite and Definite Integration; Application to Consumer's Surplus and Producer's Surplus

BOOKS FOR REFERENCE

- Yogish.S.N. (2006), *Mathematical Methods for Economists*, Mangal Deep Publications, Jaipur
- Veerachamy.R.(2002), *Quantitative Methods for Economists*, Mangal Deep Publications, Jaipur
- Renukarya.C.K (2000), *Quantitative Techniques*,
- Monga.G.S (1972), *Mathematical and Statistics for Economists*, Vikas Publishing House, New Delhi.

PAPER-1.4 (S): FINANCIAL INSTITUTIONS AND MARKETS

MODULE-1: NATURE AND ROLE OF FINANCIAL SYSTEM

Money and Finance- Money and Near Money – the Structure of the Financial System, Functions of the Financial Sector, Equilibrium in Financial Market Financial System and Economic Development; Risk and Financial Assets- Types of Risks- Returns on Assets- Risk – Return Trade off - Valuation of Securities

MODULE-2: BANKING AND NBFIs

Difference between Private, Public Sector and Co-operative Banks; Types Branch Banking, Unit Banking, Chain Banking - Commercial Banking – Functions, Credit Creation and its Control, Non Performing Assets- Priority Sector Advances, Central Bank Credit Control Measures; Development Banks – NBFIs and their Role and Functions, Insurance and Mutual Funds; Financial Sector Reforms in India- Recent Issues

MODULE-3: FINANCIAL MARKETS: MONEY MARKET & CAPITAL MARKET

Role and Structure of Money Market- Call Money Market- Treasury Bill Market; Commercial Bill Market Including Commercial Paper and Certificate of Deposits; Discount Market- Govt. Securities Market- Market for Derivatives; Forwards- Futures Options and Swaps; Structure of Capital Market - Stock Exchange Markets - Trading Regulations, SEBI – National Stock Exchange

MODULE-4: INTERNATIONAL FINANCIAL MARKETS

Foreign Exchange Rates, Determination of Exchange Rate - International Financial Flows- International Monetary Fund- International Liquidity- Leading Operation of World Bank and its Affiliates- Working of International Development Agency and International Finance Corporation; Growth of Regional Financial Institutions- Asian Development Bank and India- Euro-Dollar and Euro Currency Markets

BOOKS FOR REFERENCE

- Anthony Saunders & Marcia Cornett, (2017) **An Introduction to the Risk Management Approach**, McGraw Hill Education; 3 edition
- Barbara Casu & Daniela Fabbri & John O.S. Wilson, (2016) **Contemporary Issues in Financial Institutions and Markets: Volume II**, Routledge; 1 edition
- Frederic S. Mishkin and Stanley Eakins, (2017) **Financial Markets and Institutions**, Pearson Education; Eighth edition
- Niti Bhasin (2010), **Financial Institutions & Financial Markets in India: Functioning & Reforms**, New Century Publications; 1 edition
- Bholey L.M.(2000), **Indian Financial Systems**, Chugh Publications, Allahabad
- Prasad. K.N. (2001), **Development of India's Financial System**, Sarup and Sons, New Delhi
- Bholey L.M. (1999), **Financial Institutions and Markets**, Tata McGraw Hill Co Ltd, New Delhi
- Johnson H.J.(1993), **Financial Institutions and Markets**, McGraw Hill Co Ltd, New York

PAPER-1.5 (S): ECONOMICS OF SOCIAL SECTOR

MODULE-1: INTRODUCTION

Concept of Social Sector and Social infrastructure; Components of Social Sector- Education, Health, Nutrition, Sanitation and Social Security concept; Concept and Components of Human Capital; Essential components of Human development –HDI, Gender Inequality Index and Multidimensional Poverty Index.

MODULE-2: ECONOMICS OF EDUCATION

Education as an instrument for Economic Growth; Determinants of demand for Education; Cost Benefit Analysis of Education- Cost of Education, Private costs and Social Costs, Benefits of Education-Direct and Indirect benefits, Private and Social benefits, Education as Consumption and Investment good; Contribution of education to Economic Growth.

MODULE -3: EDUCATIONAL PLANNING AND ECONOMIC GROWTH

Economics of Educational Planning in Developing countries with special reference to India; Role of Financing in Education; Role of Public v/s Private Educational Institutions; Implications of Sarva Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan; Development of Education in India.

MODULE-4: HEALTH ECONOMICS

Definition and Scope of economics of Health; Economic Dimensions of health care; Determinants of Health- Poverty, Malnutrition and Environmental Issues; The concept of human life value; Institutional issues in health care delivery; Resource mobilization and utilization for health care in India, Role of Public v/s Private health care institutions; Nutrition and Food Security in India

BOOKS FOR REFERENCE

- Baru, R.U(1998), **Private Health Care in India; Social Characteristics and Trends**, Sage Publications, New Delhi.
- Becker, G.S, (1972), **Human Capital**, 2ndedn, NBER, New York.
- Blaug, M.(1972), **An Introduction to Economics of Education**, Cambridge University Press.
- Henderson, J.W, **Health Economics and Policy**.
- Jandhyala.B.G.Tilak (1987), **The Economics of Inequality in Education**, Sage Publishers, New Delhi.
- Klarman.H.E. (1965), **The Economics of Health**, Columbia University Press, New York.
- Panchamukhi, P.R, **Economics of Health A trend report in ICSSR**, A survey of Research in Economics, vol.V1, Allied Publishers, Delhi.
- Schultz.T.W.(1971), **Investment in Human Capital**, Free Press, New York.
- V.K.R.V. Rao (1966), **Education and Human Resources Development**, Allied Publishers, New Delhi
- World Bank(1983), **The World Development Report Investing in Health**, Oxford University Press.

PAPER-2.1 (H): MACRO ECONOMIC ANALYSIS

MODULE-1: NATIONAL INCOME ACCOUNTING

Measurement of National Income and Macro Performance – National Income Accounts- Accounting Concepts & Identities measuring the cost of Living – GNP and Quality of life- Importance of National Income Analysis, Circular flow of Money, Green accounting.

MODULE-2: EQUILIBRIUM MODELS

Classical approach – Full employment equilibrium – Policy implications and critical evaluation; Keynesian Approach – Effective Demand – Consumption Function: Debate and Evidences – Investment Function- Equilibrium Income and output – Role and critique of Keynesian Policies. Multiplier and Accelerator- Keynes's Investment Multiplier, Leakages and the Multiplier.

MODULE-3: MONEY AND INFLATION

Money and Inflation: Demand for Money- Friedman, Baumol, Tobin, Patinkin's Real Balance Effect, Issues regarding endogenous and exogenous supply of money, R.B.I.'s Approach to Supply of Money Demand-Pull and Cost-Push Inflation, Calculation of Inflation, Phillips Curve Controversy, Natural Rate of Unemployment-Adaptive expectation and Rational expectation models, Lessons from the Indian Economy.

MODULE-4 THEORY OF BUSINESS CYCLES

Business cycles- characteristics of Business cycles, Phases of a Typical Business cycle, Monetary Theories of the Business cycles, Theories based on Multiplier Accelerator Interaction, Kaldor's Model of Business Cycles, Theories of Long Waves, Control of the Business Cycle. IS-LM model.

MODULE-5: MACRO ECONOMICS IN OPEN ECONOMY

Balance of Payments- Balance of Trade and Balance of Payments, Structure of Balance of Payments; Mundell Fleming Model, Role of Interest and Exchange Rate, Simultaneous Equilibrium and Automatic Adjustment, Monetary and Fiscal policy in an Open Economy.

BOOKS FOR REFERENCES

- Ahuja.H.L (2016), **Macroeconomics** , S Chand & Company
- Jhingan M.L (2016), **Macro-Economic Theory**, Vrinda Publications Pvt. Ltd Delhi
- Burda (2014), **Macroeconomics**, Oxford University Press
- Seth M.L (2014), **Macro Economics**, Lakshmi Narain Agarwal, Agra.
- Richard T Froyen (2005), **Macroeconomics**, 7th Edition, Pearson Education. Delhi.
- Shapiro Edward (2004) **Macroeconomic Analysis**, Galgotia Publications Pvt Ltd, New Delhi.
- Mankiw N Gregory (2003) **Macroeconomics**, Worth Publishers, New York.
- Romer D. (2001) **Advanced Macroeconomics**. McGraw Hill Book Company: London,
- Gupta S.B. (1994), **Monetary Economics**, S Chand and Co, New Delhi.

PAPER- 2.2 (H): STATISTICAL METHODS FOR ECONOMISTS

MODULE – 1: COLLECTION OF DATA AND SAMPLING

Meaning and Scope of Statistics; Primary and Secondary Data; Direct Personal Information; Indirect Oral Interview; Information Through Agencies, Mailed Questionnaires, Schedules Sent Through Enumerators, Sources of Secondary Data - Precautions in the Use of Secondary Data; Framing a Questionnaire; Basic Concepts of Sampling - Sampling Techniques

MODULE-2: CLASSIFICATION AND TABULATION

Meaning of Classification; Characteristics of Classification; Types of Classification; Frequency and Frequency Distribution Cumulative Frequencies; Statistical Series; Tabulation - Types of Tables, Characteristics of a Good Table, Difference between Classification and Tabulation

MODULE-3: MEASUREMENT ANALYSIS

Measures of Central Tendency; Measures of Dispersion; Correlation; Regression Analysis; Probability- Elementary Concept of Probability, Theorem of addition and Multiplication and its Applications, Random Variable, Expectation of Random Variable

MODULE-4: INDEX NUMBERS

Index Numbers – Problems in the Construction of Index Numbers; Laspeyres Paaches's and Fisher's Ideal Index Numbers; Wholesale Price Index Numbers and Cost of Living Index Numbers

MODULE-5: STATISTICAL HYPOTHESIS

Formulation of Statistical Hypothesis – Simple and Alternative Hypotheses – Type I and Type II Errors – Level of Significance – Illustration Suitable Examples from Economics – Some Statistical Tests of Significance – Z, t, and X^2 Tests and their Applications.

BOOKS FOR REFERENCE

- Yogish.S.N. (2008), **Statistical Methods for Economists**, Mangala Deep Publication, Jaipur
- Gupta.S.P. and Gupta.M.P. (2004), **Business Statistics**, Sultan Chand and Sons, Educational Publishers, New Delhi
- Veerachami .R (2002) **Quantitative Methods for Economists** , New Age Internationals Publications, new Delhi
- Monga.G.S (2000) **Mathematics and Statistics for Economics**, Vikas Publishing house, New Delhi
- Gupta.S.P. (1983), **Statistical Methods**, S.Chand and Company, New Delhi

PAPER – 2.3(S): MATHEMATICAL ECONOMICS

MODULE-1: THEORY OF CONSUMER CHOICE

The Problem Facing the Consumer; Marshallian Cardinal Utility Approach; Hicks Ordinal Utility Approach; Consumer Equilibrium Demand Functions; Substitution and Income Effects; Shortcomings of Ordinal Utility Theory; Revealed Preference Theory; Uncertainty and Consumer Choice

MODULE-2: THEORY OF THE FIRM AND ITS DECISIONS

The Firm: Production and Loss Minimizing Costs for any Level of Production; Production Function Approach – Profit Maximization; Costs - Modern Approach- Cost Functions and Profit Maximization in the Long Run – The Multiple Plant Firm – Multiple Product Firm - The Profit Maximization Hypothesis ; Production Functions for an Entire Industry

MODULE-3: MONOPOLY AND OLIGOPOLY EQUILIBRIUM

Monopoly and Profit Maximization – Monopoly Profit Maximization Using Production Functions ; Monopoly and Price Discrimination; The Multiple – Point Monopolist ; The Multiple Product Monopolist ; Taxing the Monopolist – Monopoly and Revenue Maximization ; Oligopoly – Profit Maximization Under Oligopoly ; Assuming Dominant Firm Leadership- Profit Maximization Under Oligopoly; Assuming Fixed Market Shares

MODULE-4: MARKET EQUILIBRIUM

Competitive Market Equilibrium ; Single Market Equilibrium; Marshallian and Walrasian Equilibrium Condition; Lagged Market Equilibrium; General Equilibrium Systems of Walras and Debreu Conditions of Stability of Equilibrium

BOOKS FOR REFERENCE

- Veerachamy.R.(2002), ***Quantitative Methods for Economists***, Mangal Deep Publications, Jaipur
- Chiang.A.C.(2000), ***Introduction to Mathematical Economics***, McGraw Hill, New York.
- Allen. R.GD (1976), ***Mathematical Economics***, Macmillan Publishing House, London
- Monga.G.S (1972), ***Mathematical and Statistics for Economists***, Vikas Publishing House, New Delhi.
- Barry Bressler, ***A Unified Introduction to Mathematical Economics***

PAPER – 2.4 (S): AGRICULTURAL ECONOMICS

MODULE-1: NATURE AND SCOPE

Nature and Scope- Agriculture and Economic Development- Difference between Agriculture and Industry; Farming Systems- Role of Land, Labour and Capital in Farming; Farm Management Concept and its Significance in Modern Farming.

MODULE-2: THEORIES OF AGRICULTURAL DEVELOPMENT

Transformation of Traditional Agriculture; Theories of Mellor, Boserup, Lewis, Fei-Ranis, Dale Jorgenson and Schultz.

MODULE-3: PRODUCTION RELATIONSHIPS IN AGRICULTURE

Laws of Returns- Production Functions – Factor- Product, Factor-Factor and Product-Product relationships; Cobb – Douglas Production.

MODULE-4: AGRICULTURAL MARKETING AND INFRASTRUCTURE

Marketable and Marketed Surplus- Meaning and Functions of Agricultural Marketing, Problems of Agricultural Marketing; Regulated Markets, Co-operative Markets – Nature of Demand for and Supply of Agricultural Products; Behavior of Agricultural Prices – Cobweb Theory – Terms of Trade in Agriculture and Industry – Agricultural Price Policy; WTO and Indian Agriculture; Rural Infrastructure – Capital Formation in Indian Agriculture – Sustainable Agriculture, Contract Farming, Organic Farming, Issues related to Indian Agriculture

BOOKS FOR REFERENCE

- Joginder Singh Lekhi.R.K. (2016) **Agricultural Economics –An Indian Perspective**, Kalyani Publishers
- R.N.Soni (2015), **Leading Issues in Agricultural Economics** , Vishal Publishing Co
- Amarjeet.S (2015), **Fundamentals of Agricultural Economics**, Himalaya Publishing House, New Delhi.
- Sadhu and Singh (1985), **Fundamentals of Agricultural Economics**, Himalaya Publishing House, Mumbai

PAPER-2.5 (S): ECONOMIC PLANNING

MODULE-1: INTRODUCTION TO PLANNING

Meaning and Importance of Economic Planning-Distinction between Planned and Market Economies - Need for Planning in a Globalized Economy - Techniques of Planning - Various steps in Aggregate Planning-Input-Output Analysis-Linear Programming-Cost Benefit Analysis and Project Evaluation-Choice of Techniques

MODULE-2: PLANNING IN INDIA

The Emergence of Planning in India - Goals and Strategies of Indian Planning- Mahalanobis Model and Vakil and Brahmananda's Wage - Goods Model - Instruments of Planning: Direct and Indirect Controls - A Brief Resume of Five Year Plans in India with Emphasis on Recent Five Year Plan - Planning Machinery at the Centre, State and Local levels-Problems of Plan Implementation

MODULE -3: MOBILISATION AND ALLOCATION OF RESOURCES FOR THE PLANS

Methods and Sources of Resource Mobilization; Their Merits and Demerits-Pattern of Financing Under Five Year Planning – Allocation among Various Sectors - A critical Appraisal of the Resource Mobilization and Allocation Methods

MODULE-4: SECTORAL PLANNING

Need for Sectoral Planning - Strategy, Progress and Appraisal of Agricultural and Industrial Development under Plans - Poverty and Planning-Unemployment in India- (Human Resource Development) HRD and Population Policy - Regional Imbalance - Planning for Infrastructure Development in the Indian Economy

BOOKS FOR REFERENCE

- Mishra S.K. and Puri V.K (2008), 26th Edition, ***Indian Economy***, Himalaya Publishing House Pvt. Ltd., Mumbai-400 004 and Latest Editions can be referred
- Dhingra.I.C. and V.K.Garg (2000), ***Economic Development and Planning in India***, Sulthan Chand Publications, New Delhi
- Agarwal A.N. and Kundanlal (1999), ***Economics of Development and Planning***, Vikas Publishing House, New Delhi
- Seth.M.L. and S.P. Singh (1998), ***Economic Planning: Theory and Practice***, S.Chand and Company Ltd., Ram Nagar, New Delhi
- Madan Mohan Batra (1987), ***Planning in India: development perspective towards the 21st century***, V.K. Publishing House, Mysore
- Desai and Bhale Rao (1986), ***Economic Planning and Policy***, Himalaya Publishing House, Mumbai

PAPER – 2.6 (S): KARNATAKA ECONOMY

MODULE-1: INTRODUCTION TO KARNATAKA ECONOMY

Characteristics of Karnataka Economy - Place of Karnataka Economy in India – Growth of State Income and Per Capita Income; Natural Resources in Karnataka- Land, Forest, Mineral, Energy and Water Resources - Human Resources in Karnataka; Demographic Profile of Karnataka - Trends in Population Growth - Growth Rate - Density –Age- Sex and Size Composition– Population Policy; Karnataka as Knowledge Capital of India

MODULE-2: DEVELOPMENT OF INFRASTRUCTURE

Physical Infrastructure Facilities; Transportation- Road, Rail, Water and Air Transport, Information and Communication Technology Facilities, Recent Developments in Power Projects; Status of Exports and Imports of Karnataka, Karnataka’s Trade Policy; Social Infrastructure Facilities: Drinking Water, Sanitation, Housing, Health, Education; Social Security in Karnataka; Institutional Sources of Finance- Structure and Organization - Government, Co- Operatives, Commercial Banks and Regional Rural Banks (Grameena Banks)

MODULE- 3: AGRICULTURE AND INDUSTRY

Importance of Agriculture in Karnataka Economy; Trends in Agricultural Production- Causes for low Agriculture Productivity- Dry Land Farming- Cropping Pattern; Agricultural Development Programmes in Karnataka; Land Reforms in Karnataka; Agriculture Finance in Karnataka - Institutional and Non-institutional Sources, Cooperative Credit, Role of Micro Finance in Agriculture; Agricultural marketing and Warehousing in Karnataka. Agriculture Price Policy, Irrigation in Karnataka. Industrial Development; Trends and Importance of Major, Medium and Small Scale Industries-Problems and Prospects; IT Industries in Karnataka; Industrial Finance in Karnataka; Recent Industrial Policy of Government of Karnataka

MODULE- 4: POVERTY AND UNEMPLOYMENT IN KARNATAKA

Concept of Poverty- Causes and Magnitude, Relevance of Tendulkar and C.Rangarajan poverty indices; Unemployment- Types and Causes for Unemployment, Measures to Reduce Unemployment, Wage Employment Programmes, Self Employment Programmes, Recent Special Programs Initiated by Government of Karnataka, Dr.D.M.Nanjudappa Committee Report-Issues related to Hyderabad Karnataka, Public Distribution System in Karnataka

BOOKS FOR REFERENCE

- Adul Aziz and K.G. Vasnki (Eds)., (1998),**Karnataka Economy**, Karnataka University, Hampi.
- Hanumantha Rao, **Regional Disparities and Development in Karnataka.**
- Madaiah M and Ramapriya (1988),**Karnataka Economy**,Himalaya Publishing House, Girgaon, Mumbai.
- Shamashakar N.T.,**Karnataka Economy.** Chaitra Publications, Bangalore.
- Government of Karnataka, **Economic Survey**, Latest and Old Issues
- Government of Karnataka, **Human Development in Karnataka.**
- **Karnataka at a Glance - Annual Publication**, Government of Karnataka.

PAPER – 2.7 (E): KARNATAKA ECONOMIC DEVELOPMENT

MODULE-1: INTRODUCTION

Characteristics of Karnataka Economy - Place of Karnataka Economy in India –Natural Resources in Karnataka: Land, Forest, Mineral, Energy and Water Resources - Human Resources in Karnataka

MODULE-2: INFRASTRUCTURE DEVELOPMENT

Physical Infrastructure Facilities: Transportation- Road, Rail, Water and Air Transport, Information and Communication Technology facilities, Recent Developments of Power Projects; Status of exports and imports of Karnataka, Karnataka's trade policy; Institutional Sources of Finance- Structure and Organization - Government, Co- Operatives, Commercial Banks and Regional Rural Banks (Grameena Banks)

MODULE- 3: HUMAN RECOURSES DEVELOPMENT IN KARNATAKA

Demography of Karnataka; Unemployment- Types and Causes for unemployment, Measures to Reduce Unemployment, Wage employment Programmes, Self employment Programmes, Recent special programs initiated by Government of Karnataka, Dr.D.M.Nanjudappa Committee Report-Issues related to Hyderabad Karnataka

BOOKS FOR REFERENCE

- Adul Aziz and K.G. Vasnki (Eds)., (1998),**Karnataka Economy**, Karnataka University, Hampi.
- Hanumantha Rao, Regional Disparities and Development in Karnataka.
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- Government of Karnataka, **Human Development in Karnataka**.
- **Karnataka at a Glance - Annual Publication**, Government of Karnataka.

PAPER-2.8 (E): RURAL DEVELOPMENT

MODULE-1: RURAL DEVELOPMENT THEORIES AND APPROACHES

Meaning and Objectives of Rural Development - Indicators of Rural Development – Characteristics of Rural Economy – Social, Political and Economic Characteristics - Unbalanced Growth Theory – Growth Pole Theory, Dualistic Models of Development – Approaches to Rural Development in India – Community Development Approach -Target Area Approach - Integrated Rural Development Approach - Institutional Approach – Land Reforms and Rural Development in India

MODULE-2: POVERTY AND UNEMPLOYMENT

Rural Poverty – Concept and Measurement – Income and Non-Income Indicators – Extent - Regional Disparity – Causes – Rural Unemployment – Concepts – Types and Extent – Regional Disparity – Causes – Review of Poverty Alleviation and Employment Generation Programmes in India

MODULE-3: DIVERSIFICATION OF RURAL ECONOMY

Agricultural Growth and Rural Development in India – Farm and Non- Farm Interdependence – Diversification of Agriculture – Livestock and Dairying – Fishery – Non-Farm Employment in India – Trends – Size and Determinants – Rural Industrialization – Strategies and Policies

BOOKS FOR REFERENCE

- Dr.Biradar.R.R (2009), **Rural Non Agriculture Employment in India: An Analysis of Its Determinants and Impact on Poverty and Integrality**, Concept Publication, New Delhi
- Jain, Gopal Lal (1997), **Rural Development** , Mangal Deep Publications, Jaipur
- Gopal Lal Jain (1997), **Rural Development**, Mangal Deep Publication, Jaipur
- Vasant Desai (1988), **Rural Development Issues and Problems**, (Vol. I), Himalaya Publishing House, Mumbai
- Chambers, R. (1983), **Rural Development : Putting the Last First**, Longman, Harlow
- Dantwala, M.L (1973), **Poverty in India: Then and Now 1870-1970**, Macmillan, Mumbai
- Dandekar, V.M. and N.Rath (1971), **Poverty in India**, GIPE, Pune

PAPER – 2.9 (E): ECONOMICS OF INFRASTRUCTURE

MODULE -1: INTRODUCTION

Infrastructure: Concept and Salient Features of Infrastructure – Classification of Infrastructure – Infrastructure and Economic Development – Infrastructure Development Policy – Role of Government

MODULE -2: ECONOMIC INFRASTRUCTURE

Structure of Transport – Demand for Transport – Principle of Pricing – Inter-Modal Condition in the Indian Situation – Rural - Urban Transport Planning; Communication: Concept, Significance and Role of Communication in Development; Electricity: Significance and Pricing – Thermal, Hydel and Nuclear Power Plants – National Power Grid- Irrigation – Investment and Measurement of Benefits –Social Rate of Return on Investment –Energy Economy Linkages – Demand for and Supply of Energy Pricing – Energy Crisis – Private Participation – Energy Policy- Urban Infrastructure - Smart City Mission

MODULE -3: SOCIAL INFRASTRUCTURE – EDUCATION AND HEALTH

Role of Education in Development – Development of Primary, Secondary and Higher Education in India – Sarva Shiksha Abhiyan, Skill Development Mission and Employment: Health Dimensions of Development – Financing of Health Care – Health Inequalities –Health Security and Health Care Delivery System in India – Evaluation of National Rural Health Mission; Human Development; General Issues

BOOKS FOR REFERENCE

- Dev, Mahendra .S (2018), **India Development Reprot 2017**, Oxford University Press, New Delhi
- Menberu Teshome (2010), **Infrastructure and Development**, VDM Verlag
- A Kapil (2010), **Infrastructure And Economic Development**, Deep & Deep Publications Pvt. Ltd
- B.Jayarama Bhat, (ed.) (2008), **Infrastructure Development in India**, Published by the Author, Dos in Economics, Kuvempu University, Shankaraghatt-577 451, Shivamogga District
- National Council of Applied Economic Research (1988) **India Infrastructure Report : Policy Implications for Growth & Welfare**, New Delhi
- Indian Council of Social Sciences Research (1976), **Economics of Infrastructure**, Vol. 6, New Delhi.

PAPER- 3.1 (H): PUBLIC ECONOMICS

MODULE – 1: INTRODUCTION

Scope and Methods of Public Economics; Functions of a Modern State; Public goods- Pure and partial public goods, Private goods and Merit goods; Externality Theory; Fiscal functions- Allocation, distribution and stabilization role of government; Positive and Normative aspects of Public finance; Public finance vs. Private finance.

MODULE – 2: THEORY OF PUBLIC CHOICE

Public Mechanisms for Resources Allocation Voting and Public Choice; Voluntary Exchange Model; Problems of Preference Revelation and Aggregation of Preferences; Demand Revealing Methods; Contributions of Clarke, Groves and Leyard; Tibout Model; Theory of Club Goods; Arrow's Impossibility Theorem; Economic Bureaucracy; Rent Seeking and Directly Unproductive Profit Seeking Activities

MODULE – 3: PUBLIC EXPENDITURE

Causes of increasing Public Expenditure; classification and effect of public expenditure; Wagner's Law of increasing state activity; Peacock-wiseman Hypothesis; Canons of public expenditure; Pure theory of Public Expenditure; Pigou and Ability to pay theory; Benefit Principle; Lindahl's Voluntary Exchange Theory; Samuelson's Pure Theory; Evaluation of Public Expenditure; Cost Benefit analysis; Estimates of Benefits and Costs; Discount rate

MODULE – 4: THEORY OF TAXATION AND PUBLIC DEBT

Sources of Public Revenue- Direct, Indirect taxes, VAT and GST effects of tax on Production, Distribution and Economic activities; Principles of Taxation; The Benefit Principle, The Ability to pay Principle, Pigou's Principle of Least Aggregate Sacrifice; Proportional and Progressive Taxation; Taxable Capacity; Incidence of Taxation; Features of Indian Tax system; Tax Reforms in India; Public Debt- Internal and External; Sources, importance of public borrowing, effects of Public Debt, The burden of Public Debt, Issues in Debt Management in India.

MODULE – 5: BUDGETARY POLICY AND FISCAL FEDERALISM

Budgetary Policy- Balanced vs. Unbalanced budget, budget as an instrument of economic policy, Capital and Revenue Accounts; objectives of Fiscal Policy- Interdependence of Fiscal and Monetary Policies; Fiscal Federalism- Concept of Fiscal Federalism, Economic aspects of Fiscal Federalism, Fiscal Federalism in India; Centre-State Financial relations in India, Finance Commission- Powers and Functions of the Finance Commission.

BOOKS FOR REFERENCE

- Hajela T.N (2015), **Public Finance**, Ane Books Pvt. Ltd., New Delhi.
- Singh S.K (2015), **Public Finance in Theory and Practice**, S.Chand and Company Ltd., New Delhi.
- Tyagi B.P. (2015), **Public Finance**, Jayaprakash and company, Meerut, India.
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- Anderson. John E (2003), **Public Finance: Principles and Policy**, Houghton Mifflin Company, Boston.
- Challiah R. et.al. (1996), **Trends and Issues in India's Federal Finance**, Allied Publishers Private.Ltd. CRISIL (The Credit Rating Information Services of India Ltd.), Princep Street, Kolkata.
- Bernand P. Herber (1994), **Modern Public Finance**, (5th Edition), Aitbs Publishers, East Delhi, Gurgaon.
- Jha, R: **Modern Public Economics**, Routlege, London.
- Musgravw R.A. and P.B. Musgrave (1989), **Theory and Practice of Public Finance**, 5th ed, Tata Mc Graw Hills.
- Atkinson, A. B. and J. E. Stiglitz. (1980), **Lectures on Public Economics**, Tata McGraw Hill, New York.

PAPER –3.2 (H): COMPUTER APPLICATIONS IN ECONOMIC ANALYSIS

MODULE-1: INTRODUCTION TO COMPUTERS AND PERIPHERALS

Basic Components of Computer – CPU – Input and Output Devices, Data Storage and their Applications – Computer Networking – Hardware and Software.

MODULE-2: DATA PROCESSING TECHNIQUES AND ALGORITHMS

Concept of Data- Types of Data Information-Data Processing- Cycle Types of Data Processing. Computer Processing Operations-the Data Analysis Process – Qualitative and Quantitative Data Analysis – Data Base DBMS and RDMS – Algorithms.

MODULE-3: STATISTICAL PROCESSING TECHNIQUES

Graphs- Generating Graphs - Histogram, Pie Charts, Bar Graphs- Probability Distributions- Binominal, Poisson and Normal Distributions- Calculation of Means and Variance.

MODULE -4: ANALYSIS OF VARIANCE AND CO-VARIANCE

Introduction- Meaning - The Basic Principle of ANOVA- ANOVA Technique- One – way ANOVA and Two-way ANOVA- Setting up Analysis of Variance Table -without and with Coding Method. Analysis of Co-Variance - ANCOVA Technique, Assumption in ANCOVA.

MODULE – 5: MULTIVARIATE ANALYSIS TECHNIQUES

Growth of Multivariate Technique- Characteristics-Classification of Multivariate Techniques- Factor Analysis –Important Methods of Factor Analysis-Rotation in Factor Analysis- R-Type and Q- Type Factor Analysis – Cluster Analysis- Path Analysis.

BOOKS FOR REFERENCE

- Rajaraman, V. (1996), ***Fundamentals of Computers***, Prentice Hall of India, New Delhi
- Sinha P.K. (1992), ***Computer Fundamentals*** , BPB Publications, New Delhi
- Sanders D.H (1988) ***Computer Today***, McGraw Hill (3rd Edition), New York
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- Lipschultz, M.M and S. Lipschultz (1982), ***Theory and Problems of Data Processing***, Schaum's Outline Series, McGraw Hill,, New York
- Intrilligator, M.D (1978), ***Econometric Models, Econometrics and Applications***, Prentice Hall. Hanglowood Cliffs,

PAPER – 3.3 (S): RESEARCH METHODOLOGY

MODULE -1: INTRODUCTION

Meaning and Importance of Research – Research and Theory; Theoretical Models - Social Science Vs Natural Science Research – Scientific Method – Limitations – Review of Literature – Research Proposal

MODULE -2: RESEARCH DESIGN

Meaning of Research Design-Statement of Research Problem – Objectives, Scope and Time-Period of Study – Formulation of Hypotheses – Methodology – Types and Method of Collection of Data - Types of Research - Explorative, Experimental, Analytical, Case Studies

MODULE – 3: STATISTICAL TECHNIQUES FOR ANALYSIS OF DATA

Sampling Techniques – Probability and Non- Probability Sampling – Testing of Hypothesis - ‘t’ Test Chi² Test, F Test – Application in Economic Analysis

MODULE – 4: RESEARCH REPORT

Meaning, Purpose and Functions of a Research Report –Outline of a Research Report, Title Page, Table of Contents, Summary, Introduction, Findings, Limitations, Conclusions and Recommendations, Appendices, Guidelines for Writing the Research Report, Criteria Used for Writing the Research Report, Criteria Used for Judging the Suitability of Report for Publication.

BOOKS FOR REFERENCE

- C R Kothari (2014), **Research Methodology: Methods and Techniques**, New Age International, Ansari Road, Darya Ganj, New Delhi-110 002, INDIA
- Catherine Dawson (2010), **Introduction to Research Methods, A Practical Guide for Anyone Undertaking a Research Project**, 4th Edition, Viva Books Pvt. Ltd., 4737/23, Ansari Road, New Delhi-110 002
- Kothari.C.R. (2008), (Second Edition), **Research Methodology and Techniques**, Wiley Eastern Limited , New Delhi
- B. C. Tandon (2007), **Research Methodology in Social Sciences**, (2nd Edition) Chaitanya Pub. House, 1979
- William Nicholas (2005), **Your Research Project**, Vistar Publications, New Delhi
- Tandon.B.C (Ed.) (1979), **Research Methodology in Social Sciences**, Chaitanya Publishing. House, Allahabad.
- Goode.W.J and Hatt.P.K (1952), **Methods in Social Research**, McGraw Hill, New York

PAPER- 3.4 (S): THEORY OF ECONOMETRICS

MODULE-1:TWO-VARIABLE REGRESSION ANALYSIS: SOME BASIC IDEAS

The Concept of Population Regression Function(PRF)-The Meaning of the Term “Linear” – Stochastic Specification of PRF – The Nature of the Stochastic Disturbance Term- The Sample Regression Function (SRF)

MODULE-2: TWO-VARIABLE REGRESSION MODEL: THE PROBLEM OF ESTIMATION

The Method of Ordinary Least Squares - Properties of Least-Squares Estimators: The Gauss-Markov Theorem – The Coefficient of Determination r^2 : A Measure of “Goodness of Fit”- An Illustrative Example –Functional Forms of Regression Models

MODULE-3: NORMALITY ASSUMPTION: CLASSICAL NORMAL LINEAR REGRESSION MODEL

The Probability Distribution of Disturbances u_i - The Normality Assumption – Properties of OLS Estimators under the Normality Assumption- The Method of Maximum Likelihood (ML)

MODULE-4: TWO-VARIABLE REGRESSION: INTERVAL ESTIMATION AND HYPOTHESIS TESTING

Interval Estimation: Some Basic Ideas – Normal, t , X^2 , and F Distributions: A Digression- Confidence Intervals for Regression Coefficient β_0 and β_1 - Confidence Interval for σ^2 – Hypothesis Testing :General Comments – Hypothesis Testing : The Confidence –Interval Approach – Hypothesis Testing : The Test-of-Significance Approach – Regression Analysis and Analysis of Variance

BOOKS FOR REFERENCE

- Damodar Gujarathi (2007), **Basic Econometrics** , Macgraw Hill, International Student Edition
- A.Koutsoyianms (2001), **Theory of Econometrics** , (Second Edition) Palgrane Publication

PAPER-3.5 (S): ENVIRONMENTAL ECONOMICS

MODULE-1: INTRODUCTION

Introduction – Economics and Environment – Definition and Role of Environmental Economics – Transformation Curve – Scope and Significance of Environmental Economics – Integration of Conservation and Development- Environmental Ecology – Environmental Segments – Ecology and Ecosystem – Organisation, Structure and Dynamics of the Ecosystem – Abiotic Factors – Biotic Factors- Biotic Community- Dynamics : productivity and Energy Flow – Energy Flow: Food Chain – Food Web – Trophic levels and Ecological Pyramids – Energy Flow Chart

MODULE – 2: THEORY OF ENVIRONMENTAL ECONOMICS

Market Failure and Externality – Concept of Welfare Economics – Competitive Economy and Social Welfare- Efficiency and Perfect Competition – What is Efficiency- Definition and Meaning of Pareto Efficiency – Maximum Social Welfare and perfect Competition – Firms Equilibrium in Production – Pollution Externality and Economic Efficiency – The Economics of Externalities – Pecuniary Externalities – Non-Pecuniary of Technological Externality – Externality and Industrial Output- Imperfect Market – Externality and Efficiency – Monopoly and Externalities : The Problem of Second Best

MODULE – 3: NATURAL RESOURCES, CONSERVATION AND ENERGY RESOURCES ECONOMICS

Concept of Resources and Definition – Classification of Resources – Renewable and Non-Renewable Resource- Natural Resource Scarcity: Historical Approach – The Classical Economists – The Neo-Classicals – Contemporary Perspectives- Theories of Natural Resources Uses – Optimal Depletion of Resources and Time Preference – Optimal Depletion of an Endowment – Optimum Resource Use and Pricing – The Concept of Extraction Cost- Inter-temporal Allocation in Biological Resources- Conservation of Resources and Energy Economics

MODULE - 4: ENVIRONMENT : PROBLEMS POLLUTION AND QUALITY

Global Warming –Depletion of Ozone –Green House Effect- Green House – Effects of Global Warming – Contribution of India towards Warming – Programmes in India- Climate Change Convention - Water, Air and Noise Pollution – Forest and Environmental Quality – Benevolent role of the Forest – Destruction and Deforestation –Deforestation in developing Countries and in India –Effects of Deforestation –Forests in India and Policies – Growing awareness in India – CHIPKO Movement- APPIKO Movement – International agreements – Social Forestry

BOOKS FOR REFERENCE

- Charles D. Kolstad (2010), **Environmental Economics**, Oxford University Press, New Delhi.
- Nick Hanley, Jason F. Shogren, Ben White (2008), **Environmental Economics in theory and practice**, Palg.
- Barry C. Field, Martha K. Field (2008), **Environmental Economics**, McGraw-Hill Irwin
- Karpagam M. (2007), **Environmental Economics** (5th revised Edition), Sterling Publishers, New Delhi.
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- Ramprasad Sengupta (2001), **Ecology and Economics: An Approach to Sustainable Development**.
- Dr. S.Sankaran , (1998) , **Environmental Economics**, Margham Publications Abhiramaouram, Chennai
- Shankar U (Ed) (1979), **Environmental Economics** (Readers in Economics) Oxford University Press.

PAPER – 3.6(S): DEMOGRAPHY

MODULE-1: INTRODUCTION

Meaning and Scope of Demography – Population Studies and Demography – Relation with other Disciplines- Size, Composition and Distribution of Population - Demographic Data Base in India: Census, Civil Registration System and Sampling Surveys

MODULE -2: THEORIES OF POPULATION

An overview of Pre-Malthusian Theories – Malthusian Theory- Post Malthusian Theories-Marx ideas on Population- Optimum Theory of Population – Theory of Demographic Transition

MODULE-3: FERTILITY, MORTALITY AND MIGRATION

Fertility- Differential Fertility- Measurement of Fertility – Factors Influencing Fertility - Fertility levels and Trends in Developed and Developing Countries - Fertility in India; Mortality –Measurement of Mortality – Mortality levels and Trends in Developed and Developing Countries - Declining Trends in Fertility and Mortality – Reasons for Infant Mortality, Life Table; Theories of Migration

MODULE-4: MIGRATION AND URBANIZATION

Basic Concept and Definitions of Migration, Types- Factors Affecting Migration - Measures, Types, Causes and Consequences; Theories of Migration related to internal Migration; Urbanization-Process, Determinants, Extent, Implications and Sustainability; Growth and Distribution of Rural-Urban Population in Developed and Developing Countries; Urbanization in India

BOOKS FOR REFERENCE

- Jhingan M L (2016), **Demography**, Vrinda Publications P Lt-Delhi
- Dr. V.C. Sinha & Dr. Pushpa Sinha (2015), **Demography**, SBPD Publications; Latest Edition
- ICFAI / Samir / Dasgupta (2011) , **Social Demography**, Pearson Education India; First edition
- Chaube. P.K (2000), **Population Policy in India**, Kenosha Publication, New Delhi
- Seth. M (2000), **Women and Development : Indian Experience**, Sage Publication, New Delhi
- Srinivasa.K, **Basic Demographic Technique**, Sage Publication, New Delhi
- Choubey. P.K. (2000), **Population Policy in India**, Kanishka Publications, New Delhi

PAPER- 3.7 (S): MANAGERIAL ECONOMICS

MODULE-1: NATURE AND SIGNIFICANCE OF MANAGERIAL ECONOMICS

Introduction – Definitions, Salient Features and Significance of Managerial Economics- Functions; Normative or Positive; Managerial Economics and Economic Theory –Decision Sciences- Functional Areas of Business Administration Studies; Fundamental Concepts and Methods of Managerial Economics

MODULE-2: OBJECTIVES OF THE FIRM AND BREAK –EVEN ANALYSIS

Introduction – Staff, Sales, Growth, and Managerial Utility Maximisation - Meaning- The Break-Even Chart- Formula Method for Determining BEP- Assumptions and Limitations of BEA and Their Applications- Cost Control – Techniques of Cost Control – Areas of Cost Control

MODULE-3: DEMAND ESTIMATION AND FORECASTING

Estimating the Demand Function, Major Steps in Demand Estimation- Functional Forms in Estimation -Properties of Empirical Results-Demand Function Illustration/Problem- Hypothetical Cases of Demand Estimation- A Review of Select Case studies- Meaning of Demand Forecasting- Significance of Demand Forecasting- Short –Term and Long-Term Forecasting- General Approach to Demand Forecasting- The Sources of Data Collection for Demand Forecasting- Market Survey/Studies- Statistical Methods of Forecasting Demand- Consumption Level Method- Trend Projections- Regression Analysis and Econometric Model Building - Criteria of a Good Forecasting Method- Business Forecasting Function

MODULE-4: LINEAR PROGRAMMING

Meaning – Assumption and Applications of Linear Programming – Basic Linear Programming Concepts – Procedure used in Formulating and Selecting Linear Programming Problem – Linear Programming and Profit Maximization - Linear Programming and Cost Minimization – the Dual Problem and Shadow Prices- Linear Programming and Logistics in the Global Economy

BOOKS FOR REFERENCE

- Ahuja.H.L (2017), **Managerial Economics** , S Chand Publishing
- V.C. Sinha and Dr.Ritika Sinha (2015), **Managerial Economics**, SBPD Publishing House Latest Edition
- D.N.Dwivedi (2015), **Managerial Economics**, Himalaya Publications , Seventh Edition
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- Jaswinder Singh, (2012) Managerial Economics , Dreamtech Press
- Salvatore Dominick (2008), **Managerial Economics- Principles and Wide Applications**, (6th Ed.), Oxford University Press, New Delhi

PAPER-3.8 (S): RURAL DEVELOPMENT AND CO-OPERATION

MODULE-1: RURAL DEVELOPMENT THEORIES AND APPROACHES

Meaning and Objectives of Rural Development - Indicators of Rural Development - Characteristics of Rural Economy - Social, Political and Economic Characteristics - Unbalanced Growth Theory - Growth Pole Theory, Dualistic Models of Development - Approaches to Rural Development in India - Community Development Approach -Target Area Approach - Integrated Rural Development Approach - Institutional Approach - Land Reforms and Rural Development in India

MODULE-2: POVERTY AND UNEMPLOYMENT

Rural Poverty - Concept, Causes and Measurement - Income and Non-Income Indicators of Poverty, Extent of Poverty; Depletion of Face to Face Economy, Rural Industries, Subsistence Agriculture - Rural Unemployment - Concept - Types, Causes and Extent - Regional Disparity - Causes - Review of Poverty Alleviation and Employment Generation Programmes in India Role of Panchayats in the Implementation of Government Policies and Rural Development

MODULE-3: DIVERSIFICATION OF RURAL ECONOMY

Agricultural Growth and Rural Development in India - Farm and Non- Farm Interdependence - Diversification of Agriculture - Livestock and Dairying - Fishery - Non- Farm Employment in India - Trends - Size and Determinants - Rural Industrialization - Strategies and Policies, Contract Farming

MODULE-4: RURAL DEVELOPMENT AND CO-OPERATION

Meaning of Co-operation, Brief History of Co-operation - Basic Values , Principles and Objectives of Co-operation - Role and Importance - Functions of Co-operatives; Forms of - Co-operative Societies - Credit and Non Credit Societies

BOOKS FOR REFERENCE

- Jain, Gopal Lal (1997), *Rural Development* , Mangal Deep Publications, Jaipur
- Gopal Lal Jain (1997), *Rural Development*, Mangal Deep Publication, Jaipur
- Vasant Desai (1988), *Rural Development Issues and Problems*, (Vol. I), Himalaya Publishing House, Mumbai
- Chambers, R. (1983), *Rural Development : Putting the Last First*, Longman, Harlow
- Dantwala, M.L (1973), *Poverty in India: Then and Now 1870-1970*, Macmillan, Mumbai
- Dandekar, V.M. and N.Rath (1971), *Poverty in India*, GIPE, Pune

PAPER -3.9(E): INDIAN ECONOMY

MODULE-:1: INTRODUCTION TO INDIAN ECONOMY

Trends in Development of Indian Economy since Independence – Role of State – Market and Other Institutions; Indicators of Development- PQLI – Human Development Index (HDI) – Gender Development Index – Basic Demographic Issues _ Population growth and its Implications

MODULE-2: SECTORAL ANALYSIS

Institutional Structure _ Land Reforms in India - Technical Change in Agriculture – Pricing of Agricultural Inputs and Output _ Terms of Trade Between Agriculture and Industry – Agricultural Finance Policy; Agricultural Marketing and Warehousing - Issues in Food Security – Policies for Sustainable Agriculture - Industrial Policy – Public Sector Enterprises and their Performance – Problems of Sick Units in India – Privatization and Disinvestment Debate – Growth and Pattern of Industrialization _ Small Scale Sector – Productivity in Industrial Sector Exit Policy – Issues in Labour; Market Reforms – Approaches for Employment Generation -Service Sector Problems , Prospects and Solutions.

MODULE – 3: ECONOMIC REFORMS

Rationale of Internal and External Reforms – Globalization of Indian Economy- WTO and its Impact on the Different Sectors of the Economy – Need for and Issues in good Governance – Issues in Competition and Safety Nets in Indian Economy - Fiscal Reforms: GST

BOOKS FOR REFERENCE

- Dev, Mahendra .S (2018), **India Development Report 2017**, Oxford University Press, New Delhi
- Misra S.K. Puri V.K (2017) , **Indian Economy**, Himalaya Pub.House- New Delhi; Revised edition
- Ramesh Singh (2017) , **Indian Economy**, McGraw Hill Education; Ninth edition
- Sanjiv Verma, (2017) , **The Indian Economy**, Unique Publishers; Third Revised Edition
- Nanda Kumar S R and Noushad Chengodan (2016), **Indian Economy**, Smiling Unicorn Publications; First edition
- Prakash.B.A., (2009), **The Indian Economy Since 1991-Economic Reforms and Performance**, Edited Volume, Dorling Kindersley (India) Pvt. Ltd., 482 FIE Patparganj, Delhi, 110 092

PAPER -3.10 (E): HUMAN RESOURCE DEVELOPMENT

MODULE-1: INTRODUCTION

Concepts of HRD: Development of Knowledge, Skills and Capacities – Formal and Non-formal Education-Improvement in Health and Nutrition-Economic Analysis of Investment in Man: Investment-Expenditures on Education and Income – the Residual Approach in Determining the Contribution of Education to GNP - the Rate of Return from Expenditures on Education-Major Problems Of HRD: Generation And Utilization of High Level Manpower – Utilization of Redundant Manpower – Strategies of HRD-Indicators of HRD; Stock of Human Capital - Rate of Human Capital Formation - Composite Index of Levels of HRD- Need for Human Resource Planning

MODULE-2: COST-BENEFIT ANALYSIS OF EDUCATIONAL EXPENDITURES

Educational Investment: Characteristics of Educational Investment – Educational Priorities- the Rate of Return on Investment on Education-Education and Productivity - Public and Private; Financing of Education-Trends in Public Expenditures on Education in India - Expenditures on Different Sectors of Education such as Primary, Secondary, Vocational, Higher, Technical and Adult Education - Educational Planning in India-a Review of Educational Development in India.

MODULE-3: HEALTH AND ECONOMIC DEVELOPMENT

Health and Economic Development: Health Output and Input Indicators and their Correlation with the Level of Economic Development and with the Public Expenditures on Health; Resource Allocation in the Health Sector-the Demand for Health Services- Failure of the Market to Provide Essential Health Services; Public Expenditure on Health - Private Benefits and Private Costs of Providing Health Services – the Need for a General Health Insurance - The Concept of Human Life Value – Theory and Empirical Studies of Production of Health care – Inequalities in Health.

BOOKS FOR REFERENCE

- IIBF (Indian Institute of Banking and Finance) (2010), **Human Resource Management**, Macmillan; 1st edition
- R. Krishnaveni (2008), **Human Resource Development: A Researcher's Perspective**, Excel Books
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- Human Development Report, (2000), **United Nations Development Program**, Oxford University Press, New York
- Abusaleh Shariff (1999), **Indian Human Development Report**, Oxford University Press, New Delhi
- Srinivasan K (1998), **Basic Demographic Techniques and Applications**, Sage, New Delhi
- Srinivasan K and A. Shariff (1998), **India Towards Population and Demographic Goals**, Oxford University Press, New Delhi
- Gulati.S.C (1988), **Fertility in India an Economic Study of a Metropolis**, Sage, New Delhi
- Simon J.L (1982), **Population and Development in Poor Countries**, Princeton University Press, Princeton

PAPER-3.11 (E): ECONOMICS OF GENDER

MODULE – 1: INTRODUCTION

Basic Concepts - Differences between Gender and Sex - Gender Bias - Gender Division of Labour - Gender Order - Gender Segregation - Gender Mainstreaming – Gender Laws – Gender Discrimination – Gender Audit – Gender Budgeting - Importance and Need for the Study of Economics of Gender - Women in Matriarchal and Patriarchal Societies, Economic Basis and Functioning of Patriarchy in LDCs - Gender Bias in the Theories of Production – Value and Distribution -- Invisibility of Women’s Work; The Concepts of Gender and Development - Women in Development (WID), Women and Development (WAD), Gender and Development (GAD), Human Development Index (HDI), Gender Development Index (GDI) and Gender Empowerment Index (GEM), Women Development Approaches in Indian Five Year Plans – From Welfare to Empowerment Approach - New Economic Policy- Globalization, Liberalization and Privatization-Impact on Women – Science and Technology and Employment of Women

MODULE – 2: GENDER AND DEMOGRAPHIC ISSUES

Gender Differences in the World Economies - Gender Differences in Education and Health in Developed Economies and Less Developed Economies – Gender Differences in India – Demographical Differences – Age Structure, Mortality Rates – Sex Ratio – Causes for Declining Sex Ratio – Differences in Access to Health and Education – Inter-State Differences – Rural-Urban Differences

MODULE – 3: GENDER AND LABOUR MARKET

Trends in Labour Force Participation - Causes for the Changing Trends - Economic Factors Affecting Labour Force Participation - Extensions of the Simple Economic Model - Gender Segregation in the Workplace - Theories of Segregation–The Relationship between Segregation and Earnings - Causes of Earnings Differences: Human Capital - Human Capital Investments and Earnings -Policy Application - Affirmative Action Legislation – Impact of Technology on Women’s Work – Women in Unorganized Sector – Social Security Issues

BOOKS FOR REFERENCE

- Siuli Sarkar (2016), **Gender Disparity in India**, Prentice-Hall of India Pvt.Ltd
- Chandramoulesh .G. K (2016), **Gender, School And Society**, Sirivara Prakashana; First Edition
- Muzamil Jan (2010), **Gender Disparity in Economic Sector**, LAP Lambert Academic Publishing
- Mary E. John (2008), **Women's Studies in India – A Reader**, Penguin Books, New Delhi.
- Abusaleh Shariff (ed.) Maithreyi Krishnaraj (*ed.*) (2007), **State, Markets and Inequalities: Human Development in Rural India** , Orient Longman.
- Joyce Jacobsen, (2007), **The Economics of Gender**, 3rd Edition, (Wesleyan University) ©2007, Wiley-Blackwell
- Claramma Jose (2005), **Feminist – An Introduction**, An Aresseril House, Publication, Chennai.

PAPER-4.1 (H): INTERNATIONAL ECONOMICS

MODULE-1: INTERNATIONAL TRADE AND ECONOMIC DEVELOPMENT

Meaning of International Trade, Difference between Internal and International Trade and Economic development, Terms of Trade- Determinants of Terms of Trade; Terms of Trade and Economic development, Protectionist V/S Free Trade. Trade Liberalization and Growth of Developing Countries, Present Trade Problems in Developing Countries

MODULE-2: THEORIES OF INTERNATIONAL TRADE

The Pure Theory of International Trade – Comparative Advantages and Labour Productivity differences as the basis of Trade; Heckscher- Ohlin Theory of Trade –Empirical testing of Heckscher- Ohlin Theory. The Standard Theory of International trade- The Production Frontier with Increasing Costs, Community Indifference Curves, Equilibrium in Isolation. Gains from Trade in Neo-Classical Trade Theory- Edgeworth Box Diagram and Production Possibility Curve; Offer Curves and Terms of Trade.

MODULE-3: INTERNATIONAL TRADE POLICY

The Theory of Interventions- Tariff and the Theory of Tariff Structure; Nontariff Trade barriers and the New Protectionism- Import Quotas, Voluntary Export Restraints, International Cartels, Dumping and Export Subsidies, Economic effects of Tariffs and Quotas, Dumping Policy of USA, China, Japan, UK; GATT, GATS, TRIPS, TRIMS

MODULE-4: INTERNATIONAL MONETARY ECONOMICS

Balance of Payments –Components of Balance of Payments, equilibrium and disequilibrium in the BOP, Critical review of Monetary approach to the Theory of Balance of Payments Adjustment; Foreign Exchange Markets – Foreign Exchange Risks, Hedging, Speculation, Eurobond and Euronote Markets. Open –Economy Macroeconomics- Aggregate demand in an Open Economy under Fixed and Flexible Exchange Rates, Macro Economic Policy Co-ordination under Floating Exchange Rates.

MODULE-5: ECONOMIC INTEGRATION AND COOPERATION

Trade Agreements - Uni Lateral, Bi Lateral and Multi Lateral Forms of Economic Co-operation; Theory of Customs Union- Second best argument – Trade Creation and Trade Diversion; Free Trade and Efficiency, Free Trade Areas Versus Customs union; Rational and Economic Progress of SAFTA, ASEAN, SAARC, NAFTA, OPEC and European Union; United Nations Conferences on Trade and Development (UNCTAD) and WTO. Multinational Corporations –Reason for the Existence of Multinational Corporations, Problems created by Multinational Corporations in the home and Host Country, WTO and India, General effects of Globalization on Indian Economy

BOOKS FOR REFERENCE

- K.C.Rana & Amp.K.N.Verma (2017), **International Economics**, Vishal Publishing Company 7th Edition
- Paul R. Krugman and Maurice Obstfeld (2017), **International Economics: Theory and Policy** , Global Edition, Pearson 11th Edition
- Jhingan.M.L (2016), **International Economics** , Vrinda Publications Pvt. Ltd Delhi
- Dominick Salvatore (2014) , **International Economics: Trade and Finance**, Wiley , 11th Edition
- Salvatore, D. (2014), **International Economics, 11th Edition**, Wiley India, New Delhi
- Bhagwati, J (Ed) **International Trade, Selected Readings**, Cambridge University Press, Massachusetts.
- M.L.Seth , **Money, Banking And International Trade**, Lakshmi Narain Agarwal, Educational Publishers, Anupam Plaza, Block No. 50, Sanjay Place Agra-282002.

PAPER – 4.2: (H): TIME SERIES DATA ANALYSIS

MODULE-1: INTRODUCTION

Meaning and Scope of Econometrics; Nature and Sources of Data for Econometric Analysis; Steps involved in Formulating Econometric Models

MODULE – 2: DATA AND FORECASTING

Introduction to Time-Series Data; Collection –Sources, Comparability of Data over time Components, Smoothing Time Series Data; Calculating Compound Annual Growth Rates; Forecasting; Introduction, Methods of Forecasting

MODULE – 3: LINEAR AND CURVILINEAR TREND

Modeling Trend Using Regression Analysis; Introduction, Building Estimating, Forecasting Linear and Curvilinear Trend

MODULE -4: EXPONENTIAL TREND

Exponential Curves for trend Values; Exponential Smoothing; Forecasting by Exponential Smoothing with a Linear Trend and with a Curvilinear Trend; Advantages and Disadvantages of Exponential Smoothing

MODULE- 5: ADDITIVE AND MULTIPLICATIVE MODELS

Decomposition Method – Additive and Multiplicative Models; Measurement of Seasonal Variations, Measurement of Cyclical Fluctuations and Irregular Variations

BOOKS FOR REFERENCE

- Robert H. Shumway and David S. Stoffer (2010), 3rd Edition, ***Time Series Analysis and Its Applications: With R Examples***, Springer Publication, New York.
- Peter J. Brockwell and Richerd A. Davis (2009), ***Time Series: Theory and Methods***, 2nd Edition, Springer Publication, New York.
- Helmut Lutkepohl (2007), ***New Introduction to Multiple Time Series Analysis***, Springer Publication, New York.
- William W.S. Wei (2006), ***Time Series Analysis: Universal and Multivariable Methods***, Pearson Addison Wesley Publication, USA.
- George E. P. Box, Gwilym M.Jenkins and Gregory C. Reinsel, (2003), ***Time Series Analysis , Forecasting and Control*** Published by Pearson Education (Signapur) Branch Patparganj Delhi

PAPER- 4.3 (S): INDIAN PUBLIC FINANCE

MODULE-1: INTRODUCTION

Meaning, Nature and Scope of Public Finance; Indian Federal Financial structure after Independence; Division of Resources between Centre and States; Finance Commission and Planning Commission, Neeti Ayog Issues in India's Fiscal policy.

MODULE-2: INDIAN TAX STRUCTURE

Salient features of Indian Taxation structure; Role of Direct (All to be discussed) and Indirect (All to be discussed) Taxes of both the Centre and States; Enquiry Committee Reports on Indian Taxation- Taxation Enquiry Commission, Chellaiah Committee Report, Report of the Kelkar Task Force; Issues in GST.

MODULE-3: BUDGET

Meaning of Budget; Importance of Revenue Budget and Capital Budget; Zero Budget, Performance and Programme budgeting in India; Deficit Financing in India- Revenue Deficit, Budget Deficit, Fiscal Deficit, Primary Deficit, Advantages of Budget Deficit. Analysis of latest Central budget and Karnataka state budget.

MODULE-4: FEDERAL DECENTRALIZATION IN INDIA

Evaluation of Federal Finance in India - Fiscal Decentralization under the Constitution- Inter- Governmental Grants and Revenue Sharing - Role of Finance Commissions- Recommendations of the Fourteenth Finance Commission

BOOKS FOR REFERENCE

- Misra S.K and V.K.Puri (2011), **Indian Economy**, Himalaya Publishing House Pvt.Ltd., Mumbai.
- Singh S.K (2010), **Public Finance in Theory and Practice**, S.Chand and Company Ltd., New Delhi.
- Hajela T.N (2010), **Public Finance**, Ane Books Pvt. Ltd., New Delhi.
- Bhatia.H.L., (2009),**Public Finance**, (22nd Revision Edition) Vikas Publishing House Pvt. Ltd.
- Government of India, **Economic Survey**(Annual), Ministry of Finance, New Delhi
- Reserve Bank of India, **Report on currency and Finance** (Annual).
- Musgrave R. A. and Musgrave P. B. (2001),**Public Finance in Theory and Practice**, McGraw Hill Book Company, New Delhi.
- Tyagi.B.P., **Public Finance** ,Jai Prakash Nath & Co., Meerut

PAPER-4.4 (S): OPERATIONS RESEARCH FOR ECONOMISTS

MODULE-1: INTRODUCTION

Operations Research- Definitions and Characteristics of Operations Research – Methodology and Scope of Operations Research

MODULE- 2: LINEAR PROGRAMMING-PROBLEM FORMULATION AND GRAPHICAL SOLUTION

Basic Terminology – Requirements and Assumptions – Formulation of Linear Programming Models and Graphical Solutions of Linear Programming Models

MODULE-3: LINEAR PROGRAMMING-SIMPLEX METHOD

Standard Form of Linear Programming Model, Simplex Method - Application to Maximization and Minimization Cases – Big ‘M’ Method of Charri’s M Technique, Special Cases – Degeneracy Unbounded Solution _ Multiple or Alternative Solutions

MODULE-4: TRANSPORTATION MODELS

Transport Analysis – Optimum Solution for Transportation Problems- using North-West Corner Rule (NWCR) - Matrix Minimum Method (MMM) and Vogel’s Approximation Method (VAM)

BOOKS FOR REFERENCE

- Dr. Anitha.H.S (2002) **Operations Research for Management**, Mangal Deep ,Publications, Jaipur
- Kothari, C.R., (1982), **Introduction to Operations Research**, Vikas Publishing House Pvt. Ltd. New Delhi
- Swarup Kanti, Gupta, P.K., and Mohan, M., (1977), **Operations Research**, Sultan Chand and Sons, New Delhi,
- Taha, H.A., (1976), **Operations Research an Introduction**,(2nd Edition) Macmillan Publishing Company, New York,
- Wagner, H.B., (1975), **Principles of Operations Research with Applications to Management Decisions**, 2nd Ed., Englewood Cliffs, N.J. Prentice Hall Inc.
- Douglass J. Wilde, Charles S. Beightler (1967), **Foundations of Optimization**, Prentice-Hall, Englewood Cliffs, New Jersey

PAPER-4.5 (S): INDIAN ECONOMIC POLICY

MODULE – 1: INTRODUCTION TO INDIAN ECONOMY

Structure of the Economy – National Income – Growth and Trends - PQLI
Human Development Index – Population and Human Resources – Natural
Resources – Rural–Urban Divide – Poverty Index – Informal Sector –
Environmental Aspects - Regional Variations in Growth

MODULE- 2: SECTORAL ISSUES

Role of Agriculture in Indian Economy – Growth Trends in Productivity –
Cropping Pattern-Agricultural Finance and Marketing – Price Policy –
Development of Industries – Growth of Public and Private Sectors –
Small Industries – Industrial Policy – Industrial Finance – Industrial
Sickness – Indian Industries in Global Market Context – Growth of
Service Sector in India

MODULE-3: ECONOMIC POLICY FOR INFRASTRUCTURE DEVELOPMENT

Physical Infrastructure – Transport – Energy – Telecommunications –
Information Technology - Social Infrastructure – Health: National Rural
Health Mission (NRHM) – Education- Sarva Shiksha Abhiyan (S.S.A)
Programme-Evaluation of Policies in Housing, Drinking Water and
Sanitation

MODULE-4: PROBLEMS AND POLICIES OF INDIAN ECONOMY

Poverty and Unemployment – MGNREGA – SGSY- Evaluation-
Globalisation – Economic Reforms – Trade Reforms - Financial Sector
Reforms- Special Economic Zones (SEZ) - India and WTO

BOOKS FOR REFERENCE

- Prakash.B.A., (2009), ***The Indian Economy Since 1991-Economic Reforms and Performance***, Edited Volume, Dorling Kindersley (India) Pvt. Ltd., Licensees of Person Education in South Asia
- Arya.P.P. and Tandon (2003), ***Economic Reforms in India***, Edited Volume, Deep and Deep Publications Pvt. Ltd. Rajouri Garden, New Delhi
- Brahmananda. P.R. and V.R. Panchmukhi (Eds.) (2001), ***Development Experience in the Indian Economy: Inter State Perspectives***, Bookwell, New Delhi
- Planning Commission, Government of India, ***Five Year Plan Documents***

PAPER - 4.6 (S): INDUSTRIAL ECONOMICS

MODULE-1: INTRODUCTION

Meaning and Importance of Industrial Economics – Concepts and Organisation Firm - Optimum Firm – Ownership Control and Objectives of the Firm- Passive and Active Behaviour of the Firm

MODULE-2: INDUSTRIAL LOCATION AND PRODUCTIVITY

Theories of Industrial Location – Weber and Sargent Florence – Central Place Theory of Walter Isard, Christaller’s Central Place Theory - Factors affecting Location of Industries - Regional Industrial Distribution in India –Industrial Productivity – Efficiency and Capacity Utilisation – Concept and Measurement, Indian Situation – Project Appraisal – Cost Benefit Analysis

MODULE-3: INDUSTRIAL GROWTH PATTERN AND FINANCE IN INDIA

Growth of Industries in India –Industrial Policy in India – Recent Issues- Role of Public and Private Sectors – Role of Small and Medium Enterprises (SMEs) – Problems and Prospects- Recent Issues – MNCs and Transfer of Technology – Liberalization and Privatisation – Industrial Finance – IDBI, IFCI, SFCs, SIDC, Commercial Banks - Financial Statement – Balance Sheet- Assessment of Financial Soundness – Ratio Analysis

MODULE – 4: INDUSTRIAL LABOUR

Industrial Labour Market- Employment Dimensions of Indian Industry- Industrial Legislation - Industrial Relations – Exit Policy and Social Security- Wages and Problem of Bonus – Labour Market Reforms

BOOKS FOR REFERENCE

- Ranjana Seth (2010), **Industrial Economics**, Ane Books Pvt. Ltd., 1st Flore , 24 Ansari Road, Darya Ganj, New Delhi-110002, (India)
- R.R. Barthwal (2010), **Industrial Economics: An Introductory Textbook**, NEW AGE
- Ranjana Seth (2010), **Industrial Economics**, Ane Books Pvt. Ltd
- Kiran Jothawani (2010), **Industrial Economics**, Nirali Prakashan
- Paul R. Ferguson, Glenys J. Ferguson (1994) **Industrial Economics: Issues and Perspectives**, (2nd Edition), New York University Press, New York
- Barthwai. P.R. (1985), **Industrial Economics - Indian Prospective** (3rd edition), Himalaya Publishing House, Mumbai
- Sivayya. K.V and Das V.M, **Indian Industrial Economy**, S Chand and Co, New Delhi
- Government of India , **Economic Survey** (Annual Issues)

PAPER-4.7 (S): ECONOMICS AND LAW

MODULE-1: INTRODUCTION TO LAW AND LEGAL INSTITUTIONS

Economics and Law Economic Analysis of Law - Introduction to Legal Reasoning and Efficiency - The Civil Law and the Common Law Traditions - Institutions of the Federal and State Court Systems- the Nature of Legal Disputes - Evolution of Legal Rules.

MODULE-2: LAWS RELATING TO CONSUMER ACTIVITIES

Bargain Theory - Economic Role of Contract - Economic Theory of Contract - Remedies as Incentives, Formation, Defenses and Performance Excuses; Duress; Bargaining Power and Unconsciousness Ability; defining Tort Law, Economics of Tort Liability; Tort Liability and Economic Models- Economics of Accidents, Fault, Victim - Fault and Strict Liability - Function of Damages - Consumer Protection - Consumer Courts

MODULE-3: ECONOMIC THEORY OF CRIME AND PUNISHMENT

The Traditional Theory of Criminal Law - Economic Theory of Crime and Punishment- Efficient Punishment- Efficiency of Capital Sentence- Addictive Drugs and Crime, Plea Bargaining - Reforms of Criminal Procedure and Futility Thesis - Law Relating to Economic Offences and Corruption- Violation of Human Rights

MODULE-4: LEGAL ISSUES UNDER GLOBAL REGIME

International Laws-Law and Distribution of Income and Wealth – Inequality - Contract Theory of Distributive Justice - Personal and Corporate Taxation - Legal Issues in Federalism - Legal Issues Involved in Liberalisation, Privatisation and Globalisation - Legal Dimensions of International Environmental Agreements – WTO - TRIPs and TRIMs - Export and Import Policy - Custom Duties - FEMA

BOOKS FOR REFERENCE

- Amartya Kumar Sen (2009), ***The Idea of Justice*** , Harvard University Press, USA
- Cooter R.D. and T.S. Ulen (2000), ***Law and Economic Anthology***, Addison Wesley, New York
- Dan-Schmidt.K.G. and T.S. Ulen (Ed.) (2000), ***Law and Economic Anthology***, Addison Wesley, New York
- Bouckaert. B. and G. De Geest (Ed.) (1999), ***Encyclopedia of Law and Economics***, Vol. I to V, Edward Elgar Publishing Ltd. U.K
- Newman.P (Ed.) (1998), ***The New Palgrave Dictionary of Economics and Law*** , Stockton Press, New York
- Massey.I.P (1995), ***Administrative Law***, Eastern Book Company, Lucknow
- Indian Law Institute, ***Annual Survey of Indian Law***, Indian Law Institute, New Delhi

PAPER 4.8 (S) THEORY OF CO-OPERATION

Module -1: THEORY OF COOPERATION

Evolution of Cooperation; Concept of Cooperation; Principles of Cooperation; Cooperation and Economic Development; Cooperative Movement in India; Cooperation and Rural Development; Problems of Cooperation; Future of Cooperation

Module-2: CO-OPERATIVE BANKING

Relevance of Management in Banking- Industry- Nature, Objectives and special features of Co-operative Banks; Place of Co-operative Banks in Indian Banking Systems; Differences between Co-operative Banks and Commercial Banks, Regional Rural Banks and Co-operative Banks, Dual Control of Co-operative Banks

Module-3 : CO-OPERATIVE CREDIT INSTITUTIONS

Objectives, Functions & Problems of PACs, DCCBs, State Co-operative Banks, PCARDBs, SCARDBs -- Revitalization of Rural Co-operative Banks, Major recommendations of the Task force to study the Co-operative Credit system- Aims and Objectives of Rural Cooperative Credit- Cooperative Banking V/S Commercial Banking; Classification Of Cooperative Bank; Problems Of Rural Cooperative Credit; Major Deficiencies of Rural Cooperative Credit System

Module- 4 : NON -CREDIT COOPERATION

Non - Credit Cooperatives; Cooperative Marketing Importance of Cooperative Marketing - Structure, Functions, Progress, Problems, Remedial Measures; Cooperative Processing- Importance, Functions, Progress, Problems, Remedial Measures; Dairy Cooperatives in India; Contract Farming - Importance; Types of Farming System- State, Collective Farming, Cooperative Farming ; Present Status

BOOKS FOR REFERENCE

- Hajela T.N.- (2010) '**Co-operation, Principles, Problems and Practice**'. Ane Books Private Ltd.
- Nakkiran- (2007) '**A Treatise on Co-operative Management**' Rainbow Publications, Coimbatore
- Pawar I.D. & Vaze A.T (1999) '**Co-operative Banking**', Pragati Prakashan, Mumbai.
- Palanetrappa M.C (1999) '**Co-operative Banks & the Banking Regulation Act 1949**' Sree Dyamalamba Publications, Banagalore.

PAPER 4.9 (S): ECONOMICS OF INSURANCE

MODULE – 1: INTRODUCTION

Economics of Insurance as a Branch of Economics - Human Security Issues through time - Insurance-Concept , Definition , Scope and Importance – Functions and Features of Insurance - Economic, Social and Legal Perspective of Insurance – Planning for Wealth Accumulation through Insurance, Types of Insurance - Life - Health, Crop -General

MODULE -2: INSURANCE AND ECONOMIC DEVELOPMENT

Insurance and Economic Development-Business Environment and Insurance-Risk Management through Insurance - Risk Pooling, Sharing, Transfer, Management and Risk Assessment – Insurance Institutions as Financial Intermediaries and Investment Institutions – Insurance Institutions in the Indian Capital Market and their Regulation – Organization and Management of Insurance Companies, Malhotra Committee Recommendations

MODULE-3: ESSENTIALS OF LIFE AND HEALTH INSURANCE

Fundamentals of Life and Health Insurance- Functions of Life and Health Insurance – Insurance Products and Documentation – Basics of Premium Construction – Actuarial Valuation and Underwriting – Bonus and Distribution of Surplus – Superannuation (Pension) and Insurance – Group Insurance

MODULE-4 : ESSENTIALS OF GENERAL INSURANCE

General Insurance – Concept, Importance and Types - Functions of General Insurance –Performance Evaluation – General Insurance and Short Term Risks – Insurance Regulation – Insurance Regulation Development Authority (IRDA) – Insurance Sector Reforms, Public Sector Insurance v/s Private Sector Insurance Players, Emerging Challenges

BOOKS FOR REFERENCE

- S. Hun Seog (2010), ***The Economics of Risk and Insurance***, John Wiley and Sons, The Atrium, Southern Gate, Chichester, West Sussex, PQ 19 85 Q, UK
- B.S. Bodla, MC Garg and K.P. Singh (2006), ***Insurance Fundamentals, Environment and Procedure***, Deep & Deep Publishing House, F-159, Rajouri Garden, New Delhi - 110027
- M.N. Mishra and S.B. Mishra (2004), ***Insurance - Principles and Practice***, Sultan Chand and Sons, New Delhi
- Black. K. J.R and H.D. Skipper J.R (2000), ***Life and Health Insurance*** Printice Hall, New Jersey