Semester		Paper Number	Title of the Paper	Subject Code
I	Part A	Paper I	Advanced Micro Economics	1EC01
		Paper II	Advanced Macro Economics	1EC02
		Paper III	Public Economics I	1EC03
		Paper IV	Applied Mathematics	1EC04
		Paper V	Agricultural Economy of India	1EC05
	Part B		Analytical Reasoning I	SAR1
II	Part A	Paper VI	Theory of the Firm	2EC06
		Paper VII	Macro Economic Policies	2EC07
		Paper VIII	Public Economics II	2EC08
		Paper IX	Applied Statistics	2EC09c
		CBC Paper I	Human Development	2CBEC1a
	Part B		Analytical Reasoning II	SAR2
III	Part A	Paper XI	Environmental Economics	3EC11a
		Paper XII	Economics of Money and Credit	3EC12
		Paper XIII	International Economics	3EC13b
		Paper XIV	Introduction to Econometrics	3EC14b
		CBC Paper II	Insurance	3CBEC1a
	Part B		Analytical Reasoning III	SAR3
IV	Part A	Paper XVI	Indian Financial System	4EC16b
		Paper XVII	Industry and Planning in India	4EC17b
		Paper XVIII	Economics of Growth and Development	4EC18a
		Paper XIX	Economics of Social Sector	4EC19b
		Paper XX	Research Methodology	4EC20a
			Project Work	4ECPR
			Project Viva Voce	4ECPV
	Part B		Quality Control Circle (Theory)	OQCC
			Quality Control Circle (Presentation)	OQCCP

PAPER I: ADVANCED MICRO ECONOMICS

SUB CODE: 1EC01

UNIT 1 CONSUMER CHOICE I

   a. Indifference curves - Properties of indifference curve – consumer's equilibrium using indifference curves.

   b. Decomposition of price effect into substitution effect and income effect – Comparative demand curves – Slutsky's and Hicksian demand curve – Normal, Inferior and Giffen goods.

   c. Consumers' surplus - Marshall's and Hicksian measures – Application of indifference curves.

UNIT 2 CONSUMER CHOICE II

   a. Revealed Preference Theorem

   b. Choice under Uncertainty – N-M Index and derivation of Marginal Utility schedule for money income – Friedman Savage Hypothesis.

   c. Inter-temporal choice

UNIT 3 PRODUCTION

   a. Isoquants – Properties – Production function using isoquants

   b. Linearly homogeneous production function – Cobb Douglas Production function – Constant Elasticity of Substitution(CES) production function

   c. Producer's equilibrium using isoquants curves.

UNIT 4 ECONOMICS OF INFORMATION

   a. Informational Asymmetrics and market failure

   b. Adverse Selection in insurance markets and solution

   c. Moral Hazard – Labour market and asymmetric information – Signals – Efficient wage theory

 UNIT 5 DISTRIBUTION AND GENERAL EQUILIBRIUM

   a. Derivation of firm's and market demand curve for labour under perfect competition – Derivation   of firm's and market demand curve for labour under imperfect competition – Derivation of supply   curve for labour – Determination of wage rate.

   b. Exploitation of labour – Role of trade unions – Collective bargaining

   c. General equilibrium – 2 x 2 x 2 model (Restricted to static properties of general equilibrium)

BOOKS RECOMMENDED

   1. Koutsoyiannis – Modern Micro Economics, Macmillan

   2. Richard Varian – Intermediary Micro Economics, Affiliated East West Press.

   3. Robert Pindyck and Daniel L.Rubinfield, (1989) Micro Economics, Macmillan

PAPER II: ADVANCED MACRO ECONOMICS

SUB CODE: 1EC02

UNIT 1: INTRODUCTION AND MEASUREMENT

a. A unified approach to macroeconomics – An overview of alternative macro economic theories

b. Measuring Economic growth, Business cycle, GDP, Wealth , and Unemployment

UNIT 2: CLASSICAL APPROACH TO AGGREGATE DEMAND AND SUPPLY

a. Demand for labour, supply of labour and theory of production – theory of aggregate supply

b. Theory of aggregate supply and price level

UNIT 3: MODERN APPROACH TO AGGREGARTE DEMAND AND AGGREGATE SUPPLY

a. Recent trends in theory of unemployment – Aggregate labour market and the natural rate of unemployment The new Keynesian theory of unemployment

b. The new Keynesian theory of aggregate supply

UNIT 4: IS-LM Analysis

a. Theory of the capital market – the IS curve – Variables that shift the curve

b. The demand for money and the LM curve – Variables that shift the LM curve – IS-LM integration

UNIT 5: MICRO FOUNDATIONS OF MACRO ECONOMICS

a. Consumption – Irving Fisher's inter-temporal choice – Alternative theories of consumption : Permanent Income Hypothesis, Life Cycle Hypothesis

b. Investment and savings functions – components of investment and factors affecting investment – Tobin's Q.

BOOKS RECOMMENDED

1. N. Gregory Mankiw, (1999), Macro Economics Macro Economics, Worth Publishers, New York

2. Roger E.A. Farmer, (2002), Macro Economics Thompson Asia Pvt., Ltd., Singapore

PAPER III: PUBLIC ECONOMICS – I

SUB CODE: 1EC03

Unit 1: MAJOR FISCAL FUNCTIONS

 Need for the Public sector - Allocation function - Distribution function - Fiscal function in a

 Developing Economy

Unit 2: THE CONCEPT OF PUBLIC GOODS

 Private goods, public goods, Merit goods and mixed goods –Rationale for Government

 Intervention in the provision of public goods - market failure

Unit 3: PUBLIC CHOICE

 Public Choice in democracy - Unanimity rule - Majority rule Wicksell approach to revealing

social

 Preferences

Unit 4: PUBLIC EXPENDITURE

 Structure and growth of public expenditure - Peacock-Wiseman-Wagner Hypothesis –

 Causes for growth of public expenditure – Principles of Expenditure evaluation - Cost-

 Benefit analysis

Unit 5: TAXATION

 Principles of taxation - Cost of service approach - Benefit approach - Lindahl's model –

Bowen

 Model - Ability to pay approach - Measures of ability to pay – Characteristics of a good tax

system

 – Shifting and incidence of taxes- Measuring changes in distribution – Taxes on income

wealth and

 Consumption – Economic effects of taxation

BOOKS RECOMMENDED

 1. Richard A. Musgrave & Peggy B Musgrave, Public Finance in Theory and Practice.

 2. Bernard P. Herber Modern Public Finance, Irwin Series.

 3. Tyagi.B.P., Public Finance. Sultan Chand & Sons. Co., Ltd., New Delhi

 4. Singh S.K., Public Finance in Developed and Developing Countries. Sultan Chand &

Sons

 Co.Ltd., New Delhi

PAPER IV: APPLIED MATHEMATICS

SUB CODE 1EC04

UNIT I: MATRIX ALGEBRA

a. Types and operations – Determinants and rank of a matrix – Solution of equations: Cramer's rule, Matrix inversion method – Problems

b. Input-output analysis – Open model – Problems

c. Game theory: i. Basic concepts – types of games: two-person zero sum game, constant sum game ii. Saddle point solution – maximin and minimax criterion – value of the game – note on dominated strategies – case of mixed strategies – graphical solution (2x2 matrix only) – Problems.

UNIT 2: DERIVATIVES

a. Techniques of differentiation – Partial derivatives – first and second order total differential – Simple Problems

b. i. Maxima and minima of functions of one and two independent variables – Problems

c. constrained optimisation – Use of Lagrangian multiplier - Problems

Unit 3: Application of derivatives – I

b. Interpretation of derivatives: i. Slope of a function: Marginal Utility, Marginal Cost and Marginal Revenue functions – Problems ii. Convex and concave functions - point of inflexion – Nature of short run total cost function in cubic form

c. i. Elasticity of demand - Simple Problems. ii. Relationship among AR, MR, elasticity of demand Problems - Relationship between Total revenue and marginal revenue. iii. Relationship between AC and MC functions - Problems

d. Equilibrium conditions of a firm - Profit Maximisation: i. Monopoly equilibrium, effect of taxes on Monopoly – Problems, ii. Multi plant monopoly – Problems iii. Discriminating monopoly, - Problems iv. Equilibrium under Duopoly – ignoring interdependence (Cournot solution) and recognizing their interdependence – Problems.

Unit 4: Application of derivatives - II

a. Theory of consumer/Producer equilibrium – slope of indifference curve/isoquants – convexity

of indifference curves/isoquants - Problems on consumer's equilibrium and producer's equilibrium

b. Homogenous functions – Euler's theorem – Problems

c. Cobb-Douglas production function: Properties – CES production function: Properties

UNIT 5: INTEGRATION

a. Elementary integration techniques: integration by substitution and integration by parts – Problems Definite integrals – Problems

b. Application of integration: Finding of Total utility, Total Cost, Total revenue and consumption functions - Problems

c. Consumers' surplus and producers' surplus - Problems

BOOKS RECOMMENDED

1. Chiang A.C, Fundamental Methods of Mathematical Economics. McGraw Hill, New Delhi

2. Edward T. Dowling (Schaum Series) Theory and Problems of Mathematical Methods for Business and Economics

3. Weber, Jean E. Mathematical Analysis - Business and Economic Applications

4. Mehta and Madnani, Mathematical Methods in Economics, Sultan Chand Publications, New Delhi

PAPER V: AGRICULTURAL ECONOMY OF INDIA

SUB CODE: 1EC05

Unit 1: State of Agriculture in India - agricultural development in India - agrarian structure on the eve of
economic reforms - reforms and impact on the farming community - causes for slow-down in
agriculture in post-reform era.

Unit 2: Reforms in land system in post-independent India - policy objectives for structural
re-organisation - the reforms controversy- impact of structural re-organization - emerging
perspectives and policy issues

Unit 3: Agriculture and food security – trends in food security – food security at the national level –
food security at the household level – role of agriculture in food security – agriculture and
national level food security – agriculture and household level food security - policy impacts on
food security

Unit 4: Agriculture and environment – environmental impacts of Indian Agriculture – systems
classification in Indian agriculture – linkage between agriculture and the environment –
externalities arising from Indian agriculture – review from agricultural policies and their
implications on environment

Unit 5: Agricultural policies in recent decades – indicators of effective incentives and support to
agriculture – Globalization and Indian Agriculture – emerging trends and impact of Globalization
on agriculture

BOOKS RECOMMENDED

1. Uma Kapila (ed) (2006) – Indian Economy Since Independence, Academic Foundation, New Delhi.
2. R.Radhakrishna (ed) (2008) – India Development Report 2008, Oxford University Press, New Delhi.
3. Kaushik Basu (ed) (2007) – The Oxford Companion to Economics in India, Oxford University Press, New Delhi.
4. Shovan Ray (ed) (2007) – Hand book of Agriculture in India, Oxford University Press, New Delhi.

PAPER VI: THEORY OF THE FIRM

SUB CODE: 2EC06

UNIT 1 THEORY OF THE FIRM

a. Traditional Vs Modern theory of cost - Economies of scale and Economies of scope - average revenue, marginal revenue and elasticity of demand.

b. Firm in the traditional theory – objective and equilibrium of the firm under perfect and imperfect competition in the traditional theory of the firm.

c. Critique of the neo classical theory of the firm.

UNIT 2 MANAGERIAL THEORIES OF THE FIRM

a. Baumol's Sales Maximization model restricted to static single product model with and without advertisement – Bushnel, Kafogilss, De Bartolo and Haveman's extension of Baumol's sales maximization model.

b. Marris' Balanced Growth Model

c. Williamson's Expense Preference Theorem.

UNIT 3 PRICE/ OUTPUT AS COMPETITIVE TOOL

a. Non collusive Oligopoly Models: Cournot's Duopoly model – Bertrand's price war model – Stackelberg's duopoly model - role of reaction function.

b. Bain's Limit Price model – barriers to entry- predatory pricing

c. Kinked demand curve model

UNIT 4 NON PRICE COMPETITIVE STRATEGIES I

a. Product Differentiation: Horizontal and vertical product differentiation – product differentiation in the traditional theory

b. Product differentiation in the modern theory.

c. Role of advertisement in the traditional and modern theory

UNIT 5 NON PRICE COMPETITIVE STRATEGIES II

a. Vertical Integration – motives for vertical integration – transfer pricing – a simple model of transfer pricing – effects of vertical integration

b. Merger - types of mergers and motives for merger – mergers and growth maximization: Mueller's model of conglomerate merger.

c. Corporate Diversification – types and motives for diversification

BOOKS RECOMMENDED

1 Koutsoyiannis.A Non Price decisions – The Firm in a Modern Context, Macmillan, (1982)

2 Koutsoyiannis.A. Modern Micro Economics, Macmillan, (1982)

PAPER VII: MACRO ECONOMIC POLICIES

SUBJECT CODE: 2EC07

UNIT 1: MACRO ECONOMIC THEORY BEHIND POLICY

    a.   Classical theory and its implication for monetary and fiscal policy

    b.   Policy implications of New Keynesian theory of unemployment – Rational expectations and policy ineffectiveness postulate

UNIT 2: FISCAL POLICY AND BUDGET DEFICIT

    a.   Does fiscal policy matter? – Economics of Government budget constraint

    b.   Sustainability, solvency and optimality of budget deficit – alternative perspectives of budget deficit

UNIT 3: MONETARY POLICY

    a.   Instruments of Central banks – monetary targeting of interest rate and money supply

    b.   Monetary base and money multiplier

UNIT 4: POLICIES IN OPEN ECONOMY MACRO MODEL

    a.   Theory behind macro economic policy in an open economy in IS-LM framework

    b.   Monetary and fiscal policies under flexible and fixed exchange rate system

UNIT 5: MACRO ECONOMIC IMPLICATIONS AND POLICY ISSUES OF INDIAN ECONOMY

    a.   Understanding the macro economy of India – Services led growth-The Indian experience External capital flows and foreign exchange reserves

    b.   Inflation in a developing economy - Theory and policy

BOOKS RECOMMENDED

1. N. Gregory Mankiw (1999), Macro Economics, Worth Publishers, New York
2. Roger E.A. Farmer (2002), Macro Economics, Thompson Asia Pvt., Ltd., Singapore
3. Mihir Rakshit (2007) Money and Finance in the Indian Economy, OUP, New Delhi, India
4. Mihir Rakshit (2007) Macro Economics of Post Reform India, OUP, New Delhi, India

PAPER VIII: PUBLIC ECONOMICS II

SUB CODE: 2EC08

Unit 1: PUBLIC REVENUE: PUBLIC BORROWING AND NON-TAX REVENUE

Role of public borrowing in a developing economy - Economic effects of public debt - Burden on future generation – Musgrave model, Buchanan model - Management of Public debt – Non-tax revenue

Unit 2: THEORY OF FISCAL FEDERALISM

Theory and economic aspects - Division of function and financial resources - Principles of Efficient division of resources - Mechanism of financial adjustment in a federation – Machinery of financial adjustment in India - Impact of financial adjustment in India – Central-state financial relation

Unit 3: PUBLIC ENTERPRISES

Forms - Financing and pricing - Marginal cost pricing - Departures from marginal cost Pricing under second best considerations - Peak-load pricing - Administered pricing – Dual pricing – Shadow pricing

Unit 4: FISCAL POLICY

Theory of fiscal policy - Fiscal policy for stability and growth

Unit 5: INDIAN PUBLIC FINANCE

An over view – Budgetary procedure in India - Structure and pattern of union government Revenue and expenditure - Growth - Structure-pattern of state government revenue and Expenditure - Local finance

BOOKS RECOMMENDED

1. Richard A. Musgrave & Peggy B. Musgrave, Public Finance in Theory and Practice, Tata McGraw Hill Publishing Co. Ltd., New Delhi.
2. Modern Public Finance Bernard P. Herber. Irwin Series.
3. Tyagi B.P. Public Finance, Sultan Chand & Sons Co., Ltd., New Delhi
4. Singh S.K., Public Finance in Developed and Developing Countries Sultan Chand & Sons Co., Ltd., New Delhi

PAPER IX: APPLIED STATISTICS

SUB CODE: 2EC09c

UNIT 1: THEORY OF PROBABILITY

a. Concept of sample space and events, probability of an event, addition and multiplication theorems, conditional probability and independence of events, Bayes' theorem (Statement only)

b. Concept of Random variable – Probability distributions – Marginal and conditional distributions

definition of probability mass function and probability density function – Concept of

Mathematical Expectation – mean, variance and covariance – theorems on expectation

UNIT 2: THEORETICAL DISTRIBUTIONS

a. Binomial distribution : Binomial Probability law, properties - fitting of Binomial distribution – Problems - problems on probability, fitting

b. Normal distribution: Properties, problems on normal distribution – finding probability and mean

and variance

UNIT 3: SAMPLING DISTRIBUTION

a. Sampling distribution - Concept of standard error and utility of the concept of standard error – a note on Central limit theorem – Hypothesis Testing: Null and alternative hypotheses - Type I and Type II errors, Critical Region and level of significance

b. Point and Interval estimation: estimate and estimator, properties of a good estimator

UNIT 4: STATISTICAL INFERENCE - LARGE SAMPLES

a. Hypothesis tests for population means – Hypothesis tests for population proportions Interval estimation of population means, variance and proportions – interval estimation - problems

b. Student't' distribution – density function and properties - Application of t distribution – problems – single mean test, two means test, paired t test, t test for correlation coefficient –

a note of interval estimation

c. F distribution – properties – variance ratio test.

Unit 5 Non parametric distributions

a. Meaning of non parametric distributions – Chi square distribution: properties - problems on

goodness of fit and independence of attributes – a note on the relationship between normal, t, F and

Chi square distributions

b. Sign test Wilcoxin test

c. Man Whitney test

BOOKS RECOMMENDED

1. Paul Newbold, William Carlson, Betty Thorn (2010), Statistics for Business and Economics 7/E, Publisher: Prentice Hall
2. Paden D.and W Lindquist,Statistics for Economics and Business. .McGraw Hill Inc.,U.S.
3. S.P. Gupta, Statistical Methods. Sultan Chand & Sons Co., Ltd, New Delhi

CBC PAPER I: HUMAN DEVELOPMENT

SUB CODE: 2CBEC1a

UNIT 1:

a. Development Paradigm: Approaches to Human Development; Economic Development verses Human Development; Growth and Human Development,

b. Human Development - Past, Present and Future

UNIT 2:

a. Measurement of Human Development: Dimensions of Human Development; Human Development Index, Human Poverty Index, Gender-Related Development Index, and Gender Empowerment Measure

b. Human Development and Income Inequalities

UNIT 3:

a. Institutions and Technologies in Human Development

b. Public Policies towards Human Development

UNIT 4:

a. Mobilizing Grass – roots support; Millennium Development Goals

b. Human Development and Human Rights

UNIT 5:

a. Human Development in India – Financing Human Development Expenditure

b. Human Development in India – 2020 vision

BOOKS RECOMMENDED

1. Human Development in India – Gopal Ji and Suman Bakri, Ane Books
2. Human Development Reports – NCAER, Oxford University Press

PAPER XI: ENVIRONMENTAL ECONOMICS

SUB CODE: 3EC11a

UNIT 1 THEORETICAL FOUNDATIONS FOR ENVIRONMENTAL ECONOMICS

a) Welfare economics foundations of environmental economics: Pareto Optimum and efficiency conditions – Market failure – Kaldor – Hicks criterion – Pareto criterion of Welfare improvement.

b) Interlinkages between the economy and the environment

c) Economic growth / development VS environmental quality – Limits to Growth Model – Environmental Kuznet's curve.

UNIT 2 ECONOMICS OF ENVIRONMENT – BASIC THEORIES

a) Economics of pollution: Pollution as an externality – Second Best Theorem

b) Environmental Quality as a public good – Coase Theorem.

c) Economics of Natural Resources: Optimum extraction / harvesting of renewable and nonrenewable resources.

UNIT 3 ECONOMICS OF ENVIRONMENTAL PROTECTION

a) Optimum Pollution –Pollution Abatement and Pollution Damage Costs

b) Policy options for environmental protection: Command and Control – Market based instrument - Liability rules – Public Disclosure

c) Valuation of various policy tools – Experiences of various countries with the different instruments

UNIT 4 METHODS OF VALUING ENVIRONMENTAL COSTS AND BENEFITS

a) Valuing environment and categories of environmental values

b) Direct methods of measuring environmental benefits: Contingent valuation method

c) Indirect methods of valuation: Travel cost method and Hedonic pricing method
Dose Response, Averting expenditure and Avoided cost Methods.

UNIT 5 ENVIRONMENTAL ISSUES IN A MACRO ECONOMIC PERSPECTIVE

a) Accounting for environmental degradation in national income accounting – Trade and Environment

b) Global environmental issues and responses: Climate change – Biodiversity loss – Hazardous Waste Management – Ozone Depletion

c) India's Environmental Policy.

BOOKS RECOMMENDED
1. Dr.Karpagam.M, Environmental Economics. Sterling Publishers, 2000.

2. Dr.Karpagam.M and Dr.GeethaJaikumar, Green Management – Theory and Practices. Ane

Book House, 2010

PAPER XII: ECONOMICS OF MONEY AND CREDIT

SUB CODE: 3EC12

Unit 1: MONEY IN MACRO ECONOMY

Classical system - Classical dichotomy and neutrality of money, Keynesian system – Full Employment equilibrium and the process of full employment (Theory of money and Prices)

Unit 2: THE DEMAND FOR MONEY

Classical approach - Quantity theory of money (Cash Transaction Approach & Cash Balance Approach) - Keynesian approach - Liquidity preference theory - Friedman's Restatement of quantity theory - Portfolio analysis of James Tobin - Risk analysis

Unit 3: SUPPLY OF MONEY

Measurement of money supply – High powered money and money multiplier - Money Supply in India

Unit 4: COMMERCIAL BANKS

Evolution - Definition – importance – types - principles governing commercial bank – Assets and liabilities - credit creation – Recent Trends – Post 1991 Reforms

Unit 5:   CENTRAL BANK

Central Bank of India (RBI) objectives – instruments - Monetary and credit - policy of RBI

BOOKS RECOMMENDED:

1. Laidler Dew,The Demand for Money: Theories and Evidence. Allied Publishers
2. Essays in Monetary Economics - Johnson H.G.
3. Pierce D.G. & Shaw D.M, Monetary Economic Theories: Evidence and Policy. (Butterworth, London)
4. Mansuri B.B, Shaukat. (Ed).,Economic Reforms in India – Issues and Challenges. Hasan, Shahla J Chandel, New Century publications, New Delhi 2007
5. Banking and financial markets in India 1947-2007, Niti Bhasin – New Century Publications, India 2007.
6. Reports of RBI

PAPER XIII: INTERNATIONAL ECONOMICS

SUB CODE: 3EC13b

UNIT I TRADE THEORIES

Basis of Trade - Differences in costs – Absolute Cost Advantage – Comparative Advantage –

Opportunity cost – Mills Law of Reciprocal demand – Offer curve – Heckscher - Ohlin Theorem –

Factor price Equalization – Gains from trade.

UNIT II POST WAR INTERNATIONAL MONETARY SYSTEM

International monetary system – SDR – European monetary union – Euro Currency – Euro Bond

Market.

UNIT III REGIONAL TRADE ARRANGEMENTS

Types of Regional Trading Arrangements – Customs Union – ASEAN – SAARC – UNCTAD

UNIT IV INTERNATIONAL TRADE POLICY

Tariffs – Free Trade – Uruguay Round – Trade Liberalization – From GATT to WTO – India's

Role at Doha ministerial conference – Trade policy in Developing countries.

UNIT V INTERNATIONAL CAPITAL AND CURRENCY

International Capital Market and gains from Trade – International Banking and International

Capital market – Regulating International Banking – Theory of optimum currency areas.

REFERENCES:

1. Paul R Krugman, Maurice Obstfeld, International Economics. Pearson Education, 2007.

2. Robert J Carbaugh, International Economics. Thomson Asia Pvt. Ltd.,

3. Keith Pilbeam, International Finance. Palgrave Macmillan 2006

PAPER XIV: INTRODUCTION TO ECONOMETRICS

SUB CODE: 3EC14b

UNIT 1: INTROCUCTION

a. Nature, scope and limitations of Econometrics
b. Methodology of Econometrics
c. Types of data for empirical analysis: Time series, Cross sectional data and Pooled data – Sources of data

UNIT 2: CLASSICAL LINEAR REGRESSION MODEL

a. Choice of functional forms - Specification , assumptions and estimation of parameters of Simple

linear regression model – Properties of Least Squares Estimators – Gauss-Markov Theorem

t test of significance – ANOVA - A note on coefficient of determination

b. Specification, assumptions and estimation of parameters of Multiple linear regression model

c. Interpretation of regression output – A note on dummy variables

UNIT 3: VIOLATIONS OF THE ASSUMPTIONS OF CLSSICAL REGRESSION MODEL

a. Autocorrelation: Meaning, consequences, detection and tests - DW Statistic , and a note on remedial measures
b. Heteroscedasticity: Meaning, consequences, detection and tests, and a note on remedial measures
c. Multicollinearity: Meaning, detection and consequences, tests and a note on remedial measures

Unit 4 : SIMULTANEOUS EQUATIONS MODEL

a. Structural and reduced forms – Consequences of ignoring simultaneity
b. Problem of identification, under identification, over identification and exact identification
c. Rank and order conditions of identification

Unit 5   METHODS OF ESTIMATION

  a. Least Squares Method,
  b. Method of Instrumental Variables,
  c. Two- stage least squares method

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

CBC PAPER II: INSURANCE

SUB CODE: 3CBEC1a

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

PAPER XVI: INDIAN FINANCIAL SYSTEM

SUB CODE: 4EC16b

UNIT 1

    a. Introduction to financial system – Components of financial system -growth and development of financial system in India

    b. Financial sector reforms – Role of credit rating in the development of financial markets

UNIT 2

    a. Money market- An overview of money market – Instruments of money market: Treasury bills,

    Commercial paper, Certificate of deposits, Call money markets

    b. Money market intermediaries – Regulation of money market: Role of Reserve Bank of India

UNIT 3

    a. Capital Markets – An Overview of Primary and Secondary markets – Primary market instruments – New Issues market

    b. Intermediaries in New Issues market: Merchant bankers, Underwriters, bankers to issue and share transfer agents – SEBI and regulation of primary markets

UNIT 4

    a. Secondary market – An overview of stock market, Functions of Stock Exchanges, SEBI regulation of Stock Exchanges

    b. Intermediaries in Secondary market – Recent developments in secondary market

UNIT 5

    a. Derivatives market – History, types, and derivatives markets in India

    b. Forward contracts and futures contracts.

BOOKS RECOMMENDED

1. N. K. Gupta, Monika Chopra, Financial Markets, Institutions and Services. Ane Book House, Chennai, 2008
2. Bharathi. V. Pathak, Indian Financial System. Pearson Education 2004
3. A.K. Sharma and G.S. Batra , Indian Stock Market – Regulation, Performance and Policy Perspectives. Deep and Deep Publication. 2005
4. Nithi Bhasin, Banking and Financial Markets in India 1947 to 2007, New Century Publications, New Delhi, India.2007

PAPER XVII: INDUSTRY AND PLANNING IN INDIA
SUB CODE: 4EC17b

Unit 1: Role of industries in economic development – production and productivity trends

in Indian industries – industrial development in India and China – a comparison

Unit 2: Industrial Finance – specialised financial institutions for large - scale industries, small - scale

Industries, MSMEs and rural industries

Unit 3: Industrial Policy Resolution – paradigm shift in industrial policy – changes in industrial

structure since liberalisation

Unit 4: Micro, Small and Medium Enterprises (MSMEs) – performance of MSMEs – impact of

reservation policy on MSMEs

Unit 5: Planning in India – institutional structure of planning in India – financing of Five -Year

Plans – sources of financing plans – achievement, assessment and modification of Planning and

Planning Commsission

Reference Books:

1. Uma Kapila (ed) (2006)-Indian Economy Since Independence, Academic Foundation, New Delhi.
2. R.Radhakrishna (ed) (2008) - India Development Report 2008, Oxford University Press, New Delhi.
3. Kaushik Basu (ed) (2007) - The Oxford Companion to Economics in India, Oxford University Press, New Delhi.
4. G.P.Deshpande and Alka Acharya (ed) (2001) - Crossing a Bridge of Dreams- 50 Years of India China, Tulika Print Communication Services, New Delhi.

PAPER XVIII: ECONOMICS OF GROWTH AND DEVELOPMENT

SUB CODE: 4EC18a

UNIT 1 MEASUREMENT OF GROWTH AND DEVELOPMENT

a. Meaning and definition of economic growth and development – Income and growth – Measurement Issues – Purchasing Power Parity measurement of income - Human Development – An index of Human Development – Per capita income and human development

b. Theories of growth: Harrod-Domar Model – Solow Model .

UNIT 2 THEORIES OF DEVELOPMENT

a. Rostow's Stages of Economic Growth – Lewis theory of development – Leibenstein's Critical Minimum Effort theis.

b. Nelson's Low Level Equilibrium rap – Doctrine of Balanced Growth.

UNIT 3 INEQUALITY

a. Measuring economic inequality – Four criteria of inequality measurement – The Lorenz Curve complete measures of inequality

c. Inequality, income and growth - The inverted U Hypothesis – Inequality, savings, income and growth – Effect of inequality on savings and income

UNIT 4 POVERTY AND DEVELOPMENT

a. Introduction - Conceptual issues - Poverty measures - Some empirical observations

b. Rural and Urban poverty - Nutrition poverty - Demographic features – The functional impact of poverty - Poverty, credit and insurance - Poverty, nutrition and labour markets - Poverty and the household

UNIT 5 SUSTAINABLE DEVELOPMENT

a. Definition and components of sustainable development – Weak and Strong sustainable development – Strategies for sustainable development

b. Theoretical Approaches to sustainable development – Hartwick Solow Approach – Ecological Economics Approach – Safe Minimum Standards Approach.

BOOKS RECOMMENDED

1. Debraj Ray, Development Economics. Oxford University Press
2. Gerald M. Meir and Joseph E. Stiglitz,(Ed).,Frontiers of Development Economics. World Bank
   and OUP, 2002

PAPER XIX: ECONOMICS OF SOCIAL SECTOR

SUB CODE: 4EC19b

UNIT 1: ECONOMICS OF SOCIAL SECTOR

a. Theory of Social goods and optimum provision of social goods – Efficiency, Equity issues

b. Need for government intervention – Case for Social Sector as a public good and a merit good

c. Sen's views on social sector development

UNIT 2: EDUCATION

a. Aims of education, maximization of social welfare, economic efficiency and equity in education

b. Measuring costs and benefits - Costs : Direct costs, indirect costs and capital costs; Benefits: Education and earnings - monetary and non-monetary returns, external benefits, Human capital model, relationship between education and economic growth

c. Arguments for government intervention in the provision of education with reference to efficiency and equity – Indian educational system

UNIT 3: HEALTH

a. Definition of health – efficiency and equity aspects of health, justification of state intervention, forms of state intervention

b. Direct and indirect costs of illness and price discrimination in health care

c. Economic evaluation of provision of health care, Health care expenditures in India

Unit 4 : WOMEN

a. Women as a human resource, causes for underestimation of women's contribution to GNP

b. Women and labour market, economics of gender discrimination, determinants of participation of women in labour force

c. Policy and programmes for empowerment of women

UNIT 5: INDIA's SOCIAL SECTOR DEVELOPMENT POLICY

a. Education – An overview of challenges faced and policy response

b. Health – Major issues in health care provision in India

c. Women – Status of women and programmes for development of women in India

BOOKS RECOMMENDED:

1. Edited John Eatwell, Murray Milgate & Peter, Scocial Economics - The New Palgrave, Newman,

2.   Julian Le Grand & Ray Robinson, Economics of Social Problems. Palgrave, London

3.   A.D.N. Bajpai, P.K. Joshi, S.K. Chaubey, Anjila Gupa, and N.G. Pandse (Ed)..Post – Reform

Leading Issues of Indian Economy –1. Atlantic Publishers and Distriubtors, New Delhi 2002 (pages 262 to 300)

4. Economic Reforms and Social Sector Development (K. Seetha Prabhu), Sage Publication,

New Delhi

5. Mira Seth Women & Development – The Indian Experience (Sage Pulications), New Delhi

6. Rama V. Baru (2002) Private Health Care in India, Sage Publication, New Delhi

7. Himanshu Sekhar Rout, Prasant Kumar Panda (Eds.) (2007) Health Economics in India, New

Century Publications, New Delhi, India

8. Laxmi Devi (1998) Economics of Education, Institute for sustainable development, Lucknow &

Anmol Publications Pvt. Ltd. New Delhi, India

PAPER XX: RESEARCH METHODOLOGY

SUB CODE: 4EC20a

UNIT I: INTRODUCTION

a. Meaning of research – Objectives of research – Types of research: Descriptive vs. Analytical, Applied vs. Fundamental research, Quantitative vs. qualitative, conceptual vs. empirical – significance of research – research methods and research methodology

b. Research process: Steps in research process – Criteria of good research Problems encountered by researchers in India – Construction of questionnaire

c. Defining the research problem – components of research problem – techniques involved in defining a research problem

UNIT II   RESEARCH DESIGN

a. Meaning of research design – Need for research design – Features of a good design – Concepts

related to research design : Dependent and independent variable, extraneous variable, confounded

relationship, research hypothesis, experimental and control groups, treatments, experiments, and

experimental units

b. Categories of research design: Research design in case of exploratory research studies, research design in case of descriptive and diagnostic research studies, research design in case of hypothesis testing research studies

c. Basic principles of experimental design – Important experimental designs: informal and formal experimental designs.

UNIT III: MEASUREMENT AND SCALING TECHNIQUES

a. Meaning of measurement – Scales of measurement: Nominal, ordinal, interval and ratio scales – Sources of error in measurement – Criteria for good measurement: Test of validity, reliability, practicality.

b. Qualitative measurement: Meaning of scaling – bases of scale classification – important scaling techniques: Rating scales, Ranking scales

c. Techniques of constructing scales: Different scales for measuring attributes of people – arbitrary scales, differential scales such as , Summated scales such as Likert scale, cumulated scales such as Guttmann Scalogram scale, Factor scales – procedures, advantages and limitations of each

UNIT IV: PREPARATION OF REPORT

a. Meaning, significance and types of reports – Technical report and popular report

b. Contents of a report – Steps in writing report – Format of a research report

c. A detailed note on bibliography – Characteristics of a good report

UNIT V: SOURCES OF DATA ON INDIAN STATISTICS & COLLECTION OF DATA

a. Demographic statistics: CSO and NSSO

b. Sources of industrial and agricultural statistics

c. Sources of Health and Education Statistics

Books Recommended
1. C.R. Kothari (2009) Research Methodology, New Age Publication
2. J.A. Khan, Research Methodology. A.P.H.Publishing Corporation.