

NATIONAL COLLEGE (AUTONOMOUS), TIRUCHIRAPALLI – 1

M.A., ECONOMICS – Course Structure under CBCS

(Applicable to the candidates admitted from the academic year 2013-2014 onwards)

Semester	Paper No.	Title of the Paper	Instr Hrs/ Week	Credit	Exam Hrs.	Marks			Total
						Internal	External		
							W	O	
I	CC I	Micro Economic Theory I	6	5	3	25	75		100
	CC II	Macro & Monetary Economics I	6	5	3	25	75		100
	CC III	Mathematical Methods for Economic Analysis	6	5	3	25	75		100
	CC IV	Public Finance	6	5	4	25	70	5	100
	EC I	Financial Economics	6	4	3	25	75		100
		Total	30	24					500
II	CC V	Micro Economic Theory II	6	5	3	25	75		100
	CC VI	Macro & Monetary Economics II	6	5	3	25	75		100
	CC VII	Statistics	6	5	3	25	75		100
	CC VIII	International Economics	6	5	4	25	70	5	100
	EC II	Labour Economics & Industrial Relations	6	4	3	25	75		100
		Total	30	24					500
III	CC IX	Research Methodology	6	5	3	25	75		100
	CC X	International Economics	6	5	3	25	75		100
	CC XI	Industrial Economics	6	5	4	25	70	5	100
	EC III	Computer Applications in Economics	6	4	3	25	75		100
	EC IV	Project Appraisal	6	4	3	25	75		100
		Total	30	23					500
IV	CC XII	Economics of Development	6	5	3	25	75		100
	CC XIII	Environmental Economics	6	5	4	25	70	5	100
	EC V	Management Information System	6	4	3	25	75		100
		Project (Dissertation 75 marks & Viva Voice – 25 Marks)	12	5	-	75	-	25	100
		Total	30	19					400
				90					1900

There will be oral test for all practical examinations. The oral test will carry 5 marks in the external component.

CORE COURSE I : MICRO ECONOMIC THEORY I – P13EC1

Semester : I

Core Course: I

Instruction Hours/Week: 6

Credit: 5

UNIT I: DEMAND ANALYSIS

Law of diminishing marginal utility -law of demand- Demand schedule – Indifference curve theory – Neumann-Morgenstern Theory – Hicks Revision of demand theory – Revealed Preference Theory – Supply curve.

UNIT II: PRODUCTION AND COST

Production-define production – Homogeneous production function – Law of variable proportions – Cobb-Douglas Production function – Iso-quants- Properties – MRTS – Producer's equilibrium – Expansion path – Equal Product Curves.

UNIT III: PRICE OUTPUT DETERMINATION

Perfect competition – Conditions – Short run long run equilibrium – Monopolistic competition – Equilibrium of the firm – objectives – Monopoly – Price determination – Controlling measures – Selling cost – Difference between perfect competition and Monopolistic Competition – Profit Maximization – Cost and Revenue analysis.

UNIT IV: DUOPOLY MODELS

Characteristic features of Oligopoly – Types of oligopoly – Duopoly – Definition – Conditions – Price determination – Cournot model of Duopoly – Kinked demand curve – Monopsony features - models of Duopoly.

UNIT V: ALTERNATIVE THEORIES OF FIRM

Modern theories of firm – Williamson's model of marginal discretion, Cyert & March theory – Marris Model – Bain's limit pricing theory – Baumol's sales maximization.

Books for reference:

1. Ramesh Chandra Das (2011), Micro Economics, Theory and Practice, Kunal Books – Publisher & Distributors, New Delhi – 110 002.
2. Koutsayannis A, (1979) Modern Micro Economics
3. Baumol W J (1982) Economic theory and operation analysis
4. H. L. Ahuja (2006) Advanced Economic Theory, S.Chand & Company Ltd, New Delhi – 110 055.
5. G. Stigler (1996) Theory of Price.

CORE COURSE II : MACRO AND MONETARY ECONOMICS I – P13EC2

Semester : I

Core Course: II

Instruction Hours/Week: 6

Credit: 5

UNIT I: National Income and Sector Accounts

National Income and National Product: Concepts, National Income and National Product in a simple Market economy – Sector Accounts: Personal, Business, Government and Rest of the World Sectors –Social Accounting – Input-Output Accounting – Flow of funds Accounts.

UNIT II: Consumption Function

Income-Consumption Relationship: Classical and Keynesian Views – Post-Keynesian Developments – Reconciliation of Short-Period and Long-Period Consumption functions: Relative Income, Permanent Income and Life-Cycle hypotheses.

UNIT III: Money Supply

Money supply: Composition of Money supply, Money supply function, Inside and Outside money (Gurely and Shaw), RBI's approach to money supply - High-powered money and money multiplier – Financial Intermediation: Process of intermediation, Role of Financial intermediaries.

UNIT IV: Demand for Money

Classical approach to demand for money – Classical Dichotomy - Keynesian approach: Liquidity preference – Post-Keynesian Development: Patinkin and the Real balance effect, Boumol's approach, Tobin's theory, Friedman's Quantity theory.

UNIT V: Neo-Keynesian Synthesis and New Classical Macro Economics

Keynesian views on interest -IS-LM Model – Relative ineffectiveness of monetary and fiscal policies – Monetary and Fiscal Mix - New Classical Macro Economics, Policy implications of New Classical Macro Economics.

Basic Reading List

1. Ackley, G(1978), Macro Economics: Theory and Policy, Macmillian, New York.
2. Gupta R.D, Keynesian and Post-Keynesian Economics, Kalyani Publishers, Ludhiana.
3. Hajela, T. N.,(2009), Money and Banking:Theory with Indian Banking, AneBooks Pvt. Ltd., New Delhi.

4. Jhingan M.L. (2003), Macro Economic Theory, Vrinda publications (P) Ltd.,Delhi. Rana K.C. and Verma K.N , Macro Economic Analysis, Vishal Publication, Jalandhar.
5. Shapiro, E (1996), Macroeconomic Analysis, Galgotia Publicationm New Delhi.
6. Vaish M.C, Macro Economics Theory,Wishwa Prakashan, New Delhi.

CORE COURSE III : MATHEMATICAL METHODS FOR ECONOMIC ANALYSIS – P13EC3

Semester : I

Core Course: III

Instruction Hours/Week: 6

Credit: 5

UNIT I: Terminology, Concepts and tools

Constants, variables, parameters, intercepts Coefficients – Functions: inverse, general and specific functions – Equations – Applications - Demand and supply functions - Cost and revenue functions - Consumption function - IS & LM functions -Multivariable functions - Market equilibria.

UNIT II: Differential Calculus

Rules of differentiation - higher order derivatives - partial derivatives - Young's Theorem - unconstrained optimization - Use of derivatives in economics – Maximization, minimization, elasticities, Utility function, production function – revenue, cost and profit functions (simple problems).

UNIT III: Integration

Concept-simple rules of integration-application to Consumer's surplus & producer's surplus - Costs & revenues.

UNIT IV: Matrices

Fundamentals of linear algebra - matrix, solving equations - Crammer's rule - Uses - Input-output analysis – Open and closed models.

UNIT V: Linear Programming

Basic Concepts, formulation of an LP problem - feasible, basic and optimal solution - graphic and simplex methods - formulation of the dual of a programme and its interpretation - Applications of LP technique.

Book for study:

Metha and Madnani (2012), Mathematics for Economists, Sultan Chand & Sons, New Delhi.

Reference Books:

1. Chiang, A.C. (1986), Fundamental Methods of Mathematical Economics, McGraw Hill, New York.
2. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi
3. Monga, G.S. (1972), Mathematics and Statistics for Economists, Vikas Publishing House, New Delhi.
4. Salvatore, Dominick (1992), Mathematics for Economists, Schaum Series.

CORE COURSE IV: PUBLIC FINANCE – P13EC4

Semester : I

Core Course: IV

Instruction Hours/Week: 6

Credit: 5

UNIT I: Theory of public goods and public choice

The economic role of government – Allocation, growth and stabilization – Private goods, public goods and merit goods: market failure – Imperfections, decreasing costs, externalities, public goods: Uncertainty and non – existence of futures markets: Informational asymmetry – Theory of second best – Arrow’s impossibility theorem.

UNIT II: Public Expenditure

Wagner’s law of increasing state activities: Wisemen – Peacock hypothesis: Pure theory of public expenditure: Structure and growth of public expenditure: Criteria for public investment: Social cost – Benefit analysis – Project Evaluation, estimation of costs, discount rate.

UNIT III: Taxation and Public debt:

Theory of incidence – Alternative concepts on incidence – Allocative and equity aspects of individual taxes – Benefit and ability to pay approaches – Theory of optimal taxation – Excess burden of taxes- Trade off between equity and efficiency – Laffer curve – Theory of measurement of debt weight losses – The problem of double taxation.

UNIT IV: Fiscal policy:

Objectives of fiscal policy – Full employment – anti inflation – economic growth – redistribution of income and wealth – interdependence of fiscal and monetary policies – Budgetary deficit and its implications – fiscal policy for stabilization – automatic Vs discretionary stabilization – alternative measures of resource mobilization and their impact on growth – distribution and prices.

UNIT V: Fiscal Federalism

Fiscal federalism in India – Vertical and horizontal imbalance – Assignment of function and sources of revenue – Constitutional provisions – Finance commission and planning commission – Devolution of resources and grants – Theory of grants resource transfer from union to states – Criteria for transfer of resources – Centre State financial relations in India.

Reference:

1. Atkinson, A.B and J.E.Sinlitz (1980), Lectures on public economics, Tata McGraw Hill, New York.
2. Goode, R, (1986), Government Finance in Developing Countries, Tata McGraw Hill, New Delhi.
3. Jha, R (1998), Modern Public Economics, Routledge, London.
4. Menutt, P. (1996), The Economics of Public Choice, Edward Elgar, U.K.

ELECTIVE COURSE I - FINANCIAL ECONOMICS – P13EC5E

Semester : I

Elective Course: I

Instruction Hours/Week: 6

Credit: 4

UNIT I: INTRODUCTION TO FINANCIAL ECONOMICS

Objectives – functions – scope – evolution – Corporate finance – definition and scope – finance function – scope of finance function – classification and description of finance function

UNIT II: TIME VALUE OF MONEY AND ITS CALCULATIONS

Future value of single cash flow, multiple cash flow, annuity – Present value of single cash flow, multiple cash flow, annuity, annuity dues, perpetuities – Techniques of Time value of money – Compounding Technique – Discounting Technique

UNIT III: SOURCES OF LONG TERM FINANCE

Equity shares – Preference shares – Debentures or Bonds – Term loans – Retained earnings

UNIT IV: WORKING CAPITAL MANAGEMENT

Meaning, Types & objects of working capital – Advantages of working capital – sources of working capital – Determinants and estimates of working capital requirements

UNIT V: INVENTORY MANAGEMENT

Meaning and kinds of inventories, need, risk and cost of holding inventories – management of inventories – objectives of inventory management – tools and techniques of inventory management

REFERENCE BOOKS:

www.wikipedia.org and www.google.org

1. Prasanna Chandra, 2001, Financial Management: Theory and Practice
2. DR. R. Ramachandran & Dr. R. Srinivasan, Financial Management Theory, Problems and Solutions, Sriram publications, 1-G Kalyanpuram, Tennur, Tiruchi – 620 017.
3. S. C. Kuchhal, Corporation Finance – Principles and problems, Chaitanya Publishing House, University Road, Allahabad.

CORE COURSE V: MICRO ECONOMIC THEORY II – P13EC6

Semester : II

Core Course: V

Instruction Hours/Week: 6

Credit: 5

UNIT I: DISTRIBUTION

Marginal Productivity theory – Theories of interest, Theories of Rent – Macro theories of distribution – Ricardian, Marxian and Kaldor's.

UNIT II: GENERAL EQUILIBRIUM

Partial and general equilibrium – Two sector model production without consumption – Relationship between relative commodity and factor prices and pricing of factors

UNIT III: WELFARE ECONOMICS

Pigouvian welfare economics – social welfare – function = conditions of Pareto optimality – social indifference curve – Kaldor Hicks welfare criterion – Schitovsky's paradox – Arrow's impossibility theorem.

UNIT IV: ECONOMICS OF UNCERTAINTY

Individual behaviour – Risk takers – Risk averters – Gambling and Insurance – Economics of Insurance.

UNIT V: COMPETITIVE FIRM UNDER UNCERTAINTY

Factor demand under price uncertainty – economic of searcher – Efficient market hypothesis – Market with incomplete information – Market demand, short run, long run long run analysis.

Books for reference:

1. Ramesh Chandra Das (2011), Micro Economics, Theory and Practice, Kunal Books – Publisher & Distributors, New Delhi – 110 002.
2. Koutsayannis A, (1979) Modern Micro Economics
3. Baumol W J (1982) Economic theory and operation analysis
4. H. L. Ahuja (2006) Advanced Economic Theory, S.Chand & Company Ltd, New Delhi – 110 055.
5. G. Stigler (1996) Theory of Price.

CORE COURSE VI: MACRO AND MONETARY ECONOMICS II – P13EC7

Semester : II

Core Course: VI

Instruction Hours/Week: 6

Credit: 5

UNIT I: Measurement of changes in the value of money

Effects on production and employment, effects on redistribution of incomes, Measurement of changes in the value of money, Methods of preparing index numbers, Weighted index numbers, Difficulties in the construction of index numbers, Advantages of Index numbers.

UNIT II: Inflation, Deflation and Reflation

Causative factors of inflation: Demand-pull and Cost-push, Effects of inflation, Measures to control inflation – Deflation: Causes of deflation, Effects of deflation, Control of deflation – Which is Good: Inflation or Deflation – Reflation and Disinflation.

UNIT III: Philips curve and Stagflation

Phillips curve: Lipsey's analysis of Phillips curve, Policy implications, Criticism – Stagflation: Principal causes, measures to control stagflation, Friedman-Phelp's model.

UNIT IV: Monetary Policy

Objectives of Monetary policy – Targets and Indicators of Monetary policy – Expansionary and Restrictive monetary policy – Monetary policy of Reserve bank of India.

UNIT V: Monetary management in an open economy

International capital markets, portfolio diversification, the international monetary system - Monetary policy in India's open economy, financial sector reforms in India - The Narasimham Committee Report.

Basic Reading List

1. Ackley, G(1978), Macro Economics: Theory and Policy, Macmillian, New York.
2. Gupta R.D, Keynesian and Post-Keynesian Economics, Kalyani Pubishers, Ludhiana.
3. Hajela, T. N.,(2009), Money and Banking:Theory with Indian Banking, AneBooks Pvt. Ltd., New Delhi.
4. Jhingan M.L. (2003), Macro Economic Theory, Vrinda publications 9P) Ltd.,Delhi.
5. Rana K.C. and Verma K.N , Macro Economic Analysis, Vishal Publication, Jalandhar.
6. Shapiro, E (1996), Macroeconomic Analysis, Galgotia Publicationm New Delhi.
7. Vaish M.C, Macro Economics Theory,Wishwa Prakashan, New Delhi.

Core Course -VII : STATISTICAL METHODS FOR ECONOMIC ANALYSIS – P13EC8

Semester : II

Core Course: VII

Instruction Hours/Week: 6

Credit: 5

UNIT I: Univariate Analysis

Measures of Central tendency, dispersion - standard deviation, coefficient of variation, Lorenz curve, Gini concentration ratio - Skewness (simple problems).

UNIT II: Regression Analysis

Correlation (Concept only), Regression: Two variable case, Multiple Regression (Three variable case - simple problems) - OLS assumptions - violation of assumptions - heteroscedasticity, autocorrelation and multicollinearity (concepts only) - Interpretation of coefficients - Introduction non-linear regression.

UNIT III: Probability and distribution

Probability theory: Concepts, Binomial, Poisson and Normal distributions.

UNIT IV: Sampling distributions

Sampling distribution, standard error-testing of hypothesis: ² F-ANOVA, testing correlation and regression coefficients.

UNIT V: Index numbers and Time series

Uses, selection number of items, base year price relatives - Fisher's ideal index - Factor reversal test - Time reversal test - Chain index-base shifting - Conversion of current price data into constant price data - price index numbers in India - components of time series - Moving averages - Straight line trend - Deseasonalisation of data - Seasonal Index.

Book for Study

1. Gupta S P, Statistical Methods, Sultan Chand & Co., New Delhi.

References:

1. Speigal, M R (1992), Theory and Problems of Statistics, McGraw Hill Book Co., London.
2. Chou, Y (1975), Statistics Analysis, Holl-Reinhart and Winston, New York.
3. Salvatore, Dominick., (1982), Statistics and Econometrics, McGraw Hill, New Delhi.

CORE COURSE VIII - INTERNATIONAL ECONOMICS – P13EC9

Semester : II

Core Course: VIII

Instruction Hours/Week: 6

Credit: 5

UNIT I- Introduction to International Economics

Introduction - The Traditional Theory of International Trade - Heckscher-Ohlin- Model
- Effects of Tariffs & Quotas - Theory of Factor Movements

UNIT II – WTO and Exchange Rates

FTA and the WTO - The Balance of Payments - Determinants of Exchange Rates - The Exchange-Rate Regime Choice and a Common Currency Area

UNIT III – International Agencies and Currencies

International Debt and Currency Crises - The Role of the IMF and other International Financial Organizations – international Liquidity.

UNIT IV – IMF and India

International Monetary Fund, SDR – Regular facilities, special facilities and concessional facilities – India and IMF – IMF on India's Economic reforms.

UNIT V – Euro Currency and Indian Economy

Euro currency market – general features of the market – loans and deposits – recent developments and future prospects – major international role – Euro currency market and developing countries.

Reference:

1. Charles P.Kindleberger, International Economics
2. MC.Vaish Sudama Singh, International Economics, Oxford and IBH Publishing company PVT, LTD. New Delhi.

3. WTO, the World Trade Organization.
4. IMF Annual Reports
5. Rana and Varma, International Economics.
6. Francies Cherunilam, International Economics
7. ML.Singhan, International Economics.

ELECTIVE COURSE II: - LABOUR ECONOMICS AND INDUSTRIAL RELATIONS – P13EC10E

Semester : II

Elective Course: II

Instruction Hours/Week: 6

Credit: 4

UNIT I : Economics of Labour: Nature, Scope and Significance

Economics of Labour, Origin and growth of labour economics, importance of Labour Economics – Meaning, concept and dimensions of Labour Economics.

UNIT II : Labour as a factor of production

Labour as a factor of production: meaning of labour, Peculiarities of labour – efficiency of labour – Division of labour – Different types of division of labour –advantages and disadvantages of division of labour – limitations – Classical view of labour.

UNIT III : Employment and Manpower planning:

Employment – Problems of unemployment – types – causes and effects – Remedies – Role of employment exchanges in India – Vocational Training – Manpower planning.

UNIT IV : Social security in India:

Social Security – ILO and security. Social security- meaning and importance – Social security measures in India – Employees State Insurance Act 1948 – Employees Provident Funds Act 1952 and Public Provident Funds Act 1968 – Subsequent development.

UNIT V : Trade unions and collective Bargaining

Meaning, objectives, functions of trade union, development of trade unions in India – Industrial relations – Industrial disputes – workers participation in management – Industrial peace and collective bargaining– The present state of industrial relation in India.

REFERENCES:

1. Helfgott, Labour Economics, (New York: Random House 1974)
2. Kamik, V.B., Indian Trade Union: A Survey (Mumbai: Allied Publishers Pvt. Ltd. 1966)
3. McConnell, Capbell R., and Stanley.L.Brue, Contemporary Labour Economucs (Singapore, McGrew-Hill Book Co 1989)
4. Reynolds, Lloyd., Labour Economics and Labour Welfare (New Delhi: Prentice –Hall of India Pvt. LTd. 1978)

CORE COURSE IX - RESEARCH METHODOLOGY – P13EC11

Semester : III

Core Course : IX

Instruction Hours/Week: 6

Credit: 5

UNIT – I

Science – its meaning and characteristics – The meaning of ‘Research’ – Specific features of research in Social Sciences as opposed to Physical and Natural Sciences – Objectivity in research – Basic categories in scientific method – Facts – Concepts – Causality – Uncertainty – Probability.

UNIT - II

Methods of Research – Deductive and inductive Reasoning – Steps of Scientific Method – Historical Method – Case study – Scaling Techniques – Sample surveys – Various sampling methods – Importance of proper sampling design.

UNIT – III

Steps in Research – Formulation of a Research problem – Guiding principles in the choice of a research topic – Role of Review of Literature – Formulation of Research Design – Model building – Hypothesis: concept, definition, formulation and testing.

UNIT – IV

Secondary data – some important sources: NSSO, CSO, Economic Survey, Season & Crop Report, Agricultural Census, Livestock Census, Annual Survey of Industries, RBI Reports, Primary Data collection – Tools – observation, Schedule, questionnaire– Principles underlying construction of a questionnaire – Preparation of master table – Data processing – Analytical Tables.

UNIT – V

Report writing – Structure and General format – Style – Use of footnotes – citations – Presentation of tables, diagrams, charts and maps – Bibliography.

Reference:

1. Ghose B.N. Scientific Method and Social Research, New Delhi, Sterling Publishers, 1982.
2. Goode, W.J. & Hatt, P.K. Methods in Social Research, New York, McGraw Hill, 1952.
3. C.T. Kurien(ED), A Guide to Research in Economics (Sangam Publishers).
4. Wilson Gee, Social Science Research Methods, (N.Y. Appleton Century Croft, 1950).
5. Pauline. V. Young, Scientific Social Surveys and Research.
6. Karl Popper, The Logic of Scientific Discovery, (Lond. Hutchinson, 1934).
7. T.S. Kuhn, The Structure of Scientific Revolutions,(Chicago, 1962).

CORE COURSE X – INTERNATIONAL BUSINESS – P13EC12

Semester : III

Core Course : X

Instruction Hours/Week: 6

Credit: 5

UNIT I: INTERNATIONAL BUSINESS: AN OVERVIEW

Introduction- Definition of International Business- Trade and Financial Scenario; changes at macro and micro level.

UNIT II : INTERNATIONAL BUSINESS THEORIES:

Introduction- international trade theory- The basis for trade- Sources of comparative advantage- Absolute advantage- comparative advantage- Factor endowments approach- Product Life Cycle Theory- Leontief Paradox.

UNIT III: ENHANCING GLOBAL COMPETITION:

Introduction- Competitiveness- Boosting Export Competitiveness- Transnational Corporation Strategic Role in world Trade- the Role of FDI in building Export competitiveness- Policy implications- Growing importance of TNS social responsibility.

UNIT IV: INTERNATIONAL MONETARY & FINANCIAL SYSTEM:

Introduction- IMF- its Functions- recent structural changes in the IMF, quotas, conditionality; Special Drawing Rights- Strengthening the International Financial Institutions- New arrangements.

UNIT V: GLOBAL ENVIRONMENT:

Introduction- protecting the environment- The impact of FDI on the Environment in the host developing countries- Environmental Management & Clean Technology- The International dimension.

REFERENCES:

1. V.K.Bhalla, S.Shiva Ramu, "International Business Environment & Management" Anmol Publications Pvt.Ltd.
2. K.C.Rana, K.N.Verma, "International Economics" Vishal Publishing Company.

CORE COURSE XI - INDUSTRIAL ECONOMICS – P13EC13

Semester : III

Core Course: XI

Instruction Hours/Week: 6

Credit: 5

UNIT I: Patterns and Structure

Process and pattern of industrialisation – Industrial structure and change – Alternate patterns – Hoffman’s Hypothesis of Market Economies – Simon Kuznets’ Interpretation of secular changes in industrial development – Industrialisation in Planned Economies – Key Role of Capital Goods Sector – HB Chenery’s pattern of industrial change.

UNIT II: Market Structure

Sellers’ concentration; Production differentiation; Entry conditions; Economies of scale; Market structure and profitability; Market structure and innovation; Theories of industrial location – Weber, Losch and Sargent Florence; Factors affecting location.

UNIT III: Industrial Finance

Owned, external and other components of funds; Role, nature, volume and types of institutional finance – IDBI, IFCI, SFCs, SIDC, commercial banks, etc.; Financial statement – Balance Sheet, Profit and loss account; assessment of financial soundness, ratio analysis.

UNIT IV: Industrial Labour

Structure of industrial labour; employment dimensions of Indian industry; industrial legislation; industrial relations; Exit policy and Social security; Wages and problems of bonus – labour market reforms.

UNIT V: Project Planning and Appraisal

Cost-benefit analysis – Net Present Value (NPV) and internal rate of return (IRR) criteria –balancing private and social returns.

References:

1. Barthwal, R.R. (1985), Industrial Economics, Wiley Eastern Ltd., New Delhi.
2. Cherunilam, F. (1994), Industrial Economics : Indian Perspective (3rd Edition),Himalaya Publishing House, Mumbai.
3. Divine, P.J. and R.M. Jones et.al. (1976), An Introduction to Industrial Economics,George Allen and Unwin Ltd., London.
4. Hay, D. and D.J. Morris (1979), Industrial Economics : Theory and Evidence, Oxford University Press, New Delhi.
5. Kuchhal, S.C. (1980), Industrial Economy of India (5th Edition), Chaitanya Publishing House, Allahabad.
6. Singh, A. and A.N. Sadhu (1988), Industrial Economics, Himalaya Publishing House, Bombay.
7. Mamoria and Mamoria (2000), Dynamics of Industrial Relations in India (15th Edition), Himalaya Pub. House, Mumbai.

**ELECTIVE COURSE III – COMPUTER APPLICATIONS IN ECONOMICS
(THEORY ONLY) - P13EC14E**

Semester : III

Elective Course: III

Instruction Hours/Week: 6

Credit: 4

UNIT I: Introduction to Computers - Evolution, Generations and classification of computers – Hardware and Software – CPU and its functions – Input and Output devices – Application of computers in Economics and Business.

UNIT II: Operating Systems - Simple DOS commands – Fundamentals of Windows Operating System.

UNIT III: Word Processing - Word basics – formatting text and document – working with headers, footers and footnotes – Tabs, tables and sorting – working with graphics – Templates and wizards – creating macros and menus – mail merge.

UNIT IV: Spreadsheets and Statistical Packages - Excel basic – Arranging worksheets – functions – chart and its features – graphics - command macros – worksheet as database – SPSS and its Application: – Correlation, Linear regression, T test: One Sample, paired – ANOVA.

UNIT V: World Wide Web - Internet basics – Browsing, Internet using search engines – opening E-mail ID, sending and checking E-mail – downloading text from Internet.

Basic Reading List

1. Sanders, D.H. (1988) Computers Today, McGraw Hill (3 rd Edition) New York
2. Sinha, (1992), Computer Fundamentals, BPB Publications, New Delhi
3. Rajaraman, V. (1996), Fundamentals of Computers, (Prentice Hall of India, New Delhi)
4. Lipschutz, M.M. and S. Lipschultz (1982), Theory and Problems of Data Processing, Schaums Outline Series, McGraw Hill, New Delhi.
5. Leon and Leon, Internet Basics
6. www.spss.com and SPSS User Guide.

ELECTIVE COURSE IV - PROJECT APPRAISAL – P13EC15E

Semester : III

Elective Course: IV

Instruction Hours/Week: 6

Credit: 4

UNIT I: INTRODUCTION

CAPITAL EXPENDITURE – Importance and difficulties – Phases of capital budgeting – objectives – Scouting for project ideas – Preliminary screening

UNIT II: ASPECTS OF APPRAISAL

Economic aspects – Technical – Organizational – Managerial – Operational – Financial Aspects

UNIT III: APPRAISAL CRITERIA

NON-DISCOUNTING CRITERIA – Urgency – Payback Period – Accounting Rate of Return – Debt Service Coverage Ratio.

DISCOUNTING CRITERIA – Net Present Value – Benefit Cost Ratio – Internal Rate of Return – Annual Capital Charge

UNIT IV: RISK ANALYSIS

Types and Measures of risk – Sensitivity Analysis – Scenario Analysis – Decision Tree Analysis

UNIT V: PROJECT MANAGEMENT

Forms of project organization – Line and Staff organization – Divisional organization – Matrix organization – Project Planning – Project Control

REFERENCE BOOKS;

1. Prasanna Chandra, (1988) Project preparation, Appraisal, Budgeting and Implementation, 3rd edition – Tata Mcgraw Hill Publishing Co-Ltd, New Delhi.
2. Vasant Desai (1999), Project Management, Himalaya Publishing House, Mumbai.
3. Bhavesh M Patel, Project Management.

CORE COURSE XII : ECONOMICS OF DEVELOPMENT – P13EC16

Semester : IV

Core Course: XII

Instruction Hours/Week: 6

Credit: 5

UNIT I: Economic Growth and Development

Introduction: Economic Development and Economic Growth – Economic and Non – Economic Factors – Meaning: Characteristics of Modern Economic Growth, Development Economics in Retrospect.

UNIT II: Some Theories of Economic Development

Adam Smith’s Theory – Meade, Kaldor, Harrod – Domar Models of Economic Growth.

UNIT III: Technology

The process of Technology – Invention and Innovation – Demand – Increasing and cost reducing innovation – Technical change in Developed Countries – Dissemination of Technology.

UNIT IV: Domestic Measures for Economic Development

Meaning and Importance of Human Capital Formation – Problems of Human Capital Formation – Manpower Requirements – Role of Entrepreneur – Factors Impeding the Growth of Entrepreneurship – Promotion of Entrepreneurship.

UNIT V: International Measures for Economic Development

Foreign Direct Investment – Foreign Institutional Investors – MNCs in India – Merits and Demerits of MNCs.

Books for reference:

1. M.L.Jhingan, The Economics of Development and Planning –, Konark Publication Pvt. Ltd.
2. Kindleberger, Economic Development – International Student Edition McGraw Hill Publishing Co-Ltd, New Delhi.
3. V.K.Bhalla S.Shiva Ramu, International Business Environment and Management, Anmal Publications Pvt. Ltd.

CORE COURSE XIII – ENVIRONMENTAL ECONOMICS – P13EC17

Semester : IV

Core Course: XIII

Instruction Hours/Week: 6

Credit: 5

UNIT I: Concepts

Environment – Eco-system – Nexus between Economics and Environment – The principle of material balance – Private versus Social Cost – Entropy – Ecological balance – Sustainable development – Externalities.

UNIT II: Environmental Issues

Environmental quality – Non-marketed goods – Regulatory – Command and Control Method – Environmentalism – Trade off between Environmental Protection and Economic Growth – Institutional Approach to Environmental Problems – Environmental Education.

UNIT III: Measurement of Environmental Values

User values: Option values and non-use values; Valuation methods – Methods based on observed market behaviour; Hedonic property values and household production models (travel cost methods and household health production function), Methods based on response to hypothetical markets contingent valuation methods.

UNIT IV: Environment and Society

Pollution and Environment – Impact of population growth (Trends, Sex ratio, Rural and Urban) on environment – Urbanisation and environment – Poverty and Environment – Culture and Environment – People Participation in Environmental movement.

UNIT V: Policy

Ministry of Environment and Forest – Water Pollution and Prevention Control Act 1974 – Air Pollution and Prevention Control Act 1981 – Comprehensive Environment Bill 1986 – Policy thrust – WTO and Environment

Reference:

1. Agarwal S.K. (1997) "Environmental Issues and Themes", APH Publishing Corporation, Ansari Road, New Delhi
2. Pravin Sheth (1997), "Environmentalism Policies, Ecology and Development", Rawat Publications, Jaipur and New Delhi
3. Pashupathi Nath and Siddha Nath (1990), "Environmental Pollution Conservation and Planning" Chugu Publication, Alahabad, India.
4. Bromley, D.W. (Ed.) (1995)"Handbook of Environmental Economics" Cambridge University Press Cambridge
5. Fisher, AC (1981), "Resource and Environmental Economics" Cambridge University Press Cambridge
6. Hanley, N.J.F., Shorgen and B. White (197), "Environmental Economics in Theory and Practice", Macmillan.
7. Hussen, A.M. (1999), "Principles of Environmental Economics", Routledge, London.
8. Kolstad, C.D. (1999), "Environmental Economics", Oxford University Press, New Delhi
9. Sankar,U. (Ed.) (2001), "Environmental Economics", Oxford University Press, New Delhi
10. Rabindra N. Battacharya (2001), "Environmental Economics", (Ed.), Oxford University Press, New Delhi.
11. Google.com. and Wikipedia.com.

ELECTIVE COURSE – IV: MANAGEMENT INFORMATION SYSTEM - P13EC18E

Semester : IV

Elective Course: IV

Instruction Hours/Week: 6

Credit: 4

UNIT I: MANAGEMENT INFORMATION SYSTEMS - A FRAME WORK

MIS Functions – Characteristics of MIS – Benefits of MIS – Limitations of MIS – Problems in implementing MIS - MIS Department in an organization – Role of Top Management – Components of MIS

UNIT II: STRUCTURE AND CLASSIFICATION OF MIS

STRUCTURE OF MIS – Physical components – Information system processing functions – Decision support – Levels of management activities – Organisational functions
CLASSIFICATION OF MIS – Operations support systems – Management support systems – General support systems

UNIT III: DATABASE MANAGEMENT SYSTEM

Introduction – database – database management system – difference between file approach and database approach – advantages of using DBMS – Fundamental concepts of DBMS – database languages and interfaces – database trends – data warehousing – data mining

UNIT IV: DECISION SUPPORT SYSTEMS AND EXPERT SYSTEMS

Introduction – DSS overview – Definition of DSS – EDP, MIS and DSS – Artificial Intelligence – Robotics

UNIT V: IS SECURITY AND CONTROL

Introduction - The 4R of information security and risks – Threats and vulnerability management – Security controls and Identity Management – Physical security

REFERENCE BOOKS:

1. NIRMALYA BAGCHI (2010 & 11), MANAGEMENT INFORMATION SYSTEMS, Vikas Publishing House Pvt. Ltd.
2. GOYAL D P, (2010), MANAGEMENT INFORMATION SYSTEMS – Managerial Perspectives, Macmillan Publishers India Ltd.

PROJECT WORK - P13ECP19

Semester : IV
Instruction Hours/Week: 12

Project
Credit: 5

PROJECT WORK

(Dissertation 75 marks & Viva Voice – 25 Marks)
