

B.A. (HONS) ECONOMICS, SEMESTER PROGRAMME - 2012

Semester-I	Semester-II
<ul style="list-style-type: none"> • Micro Economics-I • Mathematical Methods for Economics- I 	<ul style="list-style-type: none"> • Micro Economics-II • Mathematical Methods for Economics-II
Semester-III	Semester-IV
<ul style="list-style-type: none"> • Macro Economics-I • Statistical Methods -I • Indian Economy 	<ul style="list-style-type: none"> • Macro Economics-II • Statistical Methods-II • Development Economics
Semester-V	Semester-VI
<ul style="list-style-type: none"> • Money and Banking • Econometrics - I • International Trade <p>Optional Papers:</p> <ul style="list-style-type: none"> • India and the World Economy • Econometrics - II • Regional Economics • International Finance • Economics of Education • Health Economics 	<ul style="list-style-type: none"> • History of Economic Thought • Public Economics • Environmental Economics <p>Optional Papers:</p> <ul style="list-style-type: none"> • Agriculture Economics • Industrial Economics • Game Theory Applications • Financial Economics • Computer Applications

Each paper is of 4 credits. The students have to take a total of 20 papers for a total of 80 credits. From the optional papers in Semesters V and VI, the students have to opt 4 papers, 2 in each semester.

The Honours students have to take any one subsidiary subject from the following:
Mathematics, Geography, Political Science, Sociology and History.

The students will take a total of 6 papers from any one of the Subsidiary subjects for a total of 24 credits.

The distribution of the subsidiary papers will be one each in Semesters I and II, and 2 papers each in Semesters III and IV.

Further there will be 8 compulsory papers of 2 credit each for a total of 16 credits.

Thus, the total credits in the programme will be 120 credits.

MICROECONOMICS-I

Unit-1: Introduction

Nature and scope of economics, Methodology in Economics, Theory of consumer behavior, Cardinal approach and its critique, Indifference curve approach, Consumer's equilibrium, Income, Substitution and Price effects (Hicks and Slutsky, approaches), Giffen goods, Elasticity of demand and its measurement, Consumer's surplus-Marshallian and Hicksian approaches.

Unit-2: Theory of Production and Costs

Production Function, law of variable proportions, Isoquants, factor substitution, Equilibrium of the firm with respect to input use, Returns to scale, Economies and Diseconomies of scale, Expansion path, Different concepts of cost and their inter-relationship, Short run and long run cost curves, Empirical evidence on costs.

Unit-3: Market Structure

Perfect and imperfect markets, Equilibrium of the firm and industry under perfect competition, Role of time element in the determination of value, supply curve under perfect competition, Equilibrium of the firm under monopoly, Discriminating monopoly, Conditions of equilibrium under price discrimination, Dumping.

References:

1. Varian H.R: Intermediate Microeconomics, 7th Edition

2. Pindyck, Rubinfeld and Mehta: Microeconomics, 6th Edition
3. Ferguson and Gould: Micro economics, 6th Edition
5. Gravelle and Rees- Microeconomics; Pearson Education, 2nd Edition
6. Nicholson, Microeconomics

MATHEMATICAL METHODS FOR ECONOMICS- I

Unit - 1: Basic concepts, Functions and Graphs

Sets and set operations, Ordered pairs, the real numbers, natural numbers, integers, rational and irrational numbers; absolute value and intervals; inequalities.

The general concept of function, types of function (linear, quadratic, power, exponential, inverse); graphs of functions; Applications in Economics

Unit-2: Limits, Continuity and Single variable Differential Calculus

Limits, continuity and differentiability, rules of differentiation (simple differentiation, sums, products, and quotients); Second and higher order derivatives, power rule, chain rule, implicit differentiation; Linear approximation and differentials; Quadratic approximations, Elasticities the Intermediate-value Theorem; the Extreme-value Theorem; The Mean-value Theorem; Indeterminate forms and L'Hopital's rule; Applications in Economics

Unit-3: Single variable optimization and Integral Calculus

Stationary points of a function, Maxima and Minima(local and global); Convexity and Concavity of functions; Points of inflection; Optimization of economic functions Rules of integration, integration by parts, integration by substitution, indefinite integral, Definite Integral, Proper and Improper integral; Areas under curves and economic application of integration.

References:

1. Knut Sydsaeter and Peter J. Hammond (2005), *Mathematics for Economic Analysis*. Pearson Educational Asia: Delhi, 4th Indian reprint

2. Chiang, A. C. & Kevin Wainwright (2005) (Fourth Edition): *Fundamental Methods of Mathematical Economics*, McGraw-Hill.
3. Allen, R.G.D.(1974), *Mathematical Analysis for Economists*, McMillan press, London
4. Chiang, A. C. (1984), *Fundamental Methods of Mathematical Economics, 3rd Ed*, McGraw-Hill.
5. Hoy,M., J. Livernois, C. McKenna, R. Rees and T. Stengos(2001), *Mathematics for Economics*, 2nd Edition Prentice Hall, India
6. Dowling, Edward T. (1992), *Schaum's Outline of Theory and Problems of Introduction to Mathematical Economics*, 3rd Edition, McGraw Hill

MICROECONOMICS-II

Unit-1: Market Structure-II

Monopolistic Competition-Equilibrium of firm under monopolistic competition (selling cost excluded), Group equilibrium, Excess capacity, Oligopoly-Cournot solution, Paul Sweezy's kinked demand curve solution.

Unit-2: Factor Pricing

Marginal productivity theory of distribution, Ricardian & Modern Theories of rent, Quasi-rent, Wage determination under perfect and imperfect competition, wages and collective bargaining, Theories of interest-Classical, Neoclassical and Keynesian theories of interest, Theories of profit-Dynamic theory, Risk and uncertainty theory and Schumpeterian theory of profit.

Unit-3: Welfare Economics

Problems of measuring welfare, Marshallian and Pigovian approaches, Pareto's welfare criteria, Concept of Social welfare function.

References:

1. Chaudhary, Kalyanjit, Roy Microeconomics.
2. Koutsyansis, A. Modern Microeconomics, Macmillan.
3. Left witch, price Theory and Resource Allocation .
4. Lipsey, R.G. An Introduction to Positive Economics.
5. Ray, N.C. An Introduction to Microeconomics, Macmillan.
6. Samuelon, P.A. and W.D. Noidhaus, Economics.
7. Stonier and Hague A Text Book of Economic Theory.
8. Varian, Hal, Intermediate Microeconomics.
9. Ferguson and Gould: Microeconomics, 6th Edition

MATHEMATICAL METHODS FOR ECONOMICS- II

Unit - 1: Linear Algebra

System of linear equations, vectors, vector operations, linear combinations of vectors, length of vectors and orthogonality, Matrices and its types, matrix operations(row and column), Echelon and Reduced echelon forms, determinants and its properties, singularity of a matrix, inverse of a matrix, linear independence and rank of a matrix, solution of a system of linear equations (by Cramer's Rule, Matrix Inversion); Solution of Homogeneous Equation System; Leontief Input-Output models (Open and Closed), Applications in Economics

Unit - 2: Calculus of Multivariate Functions

Partial derivatives (two variables and many variables) and its economic relevance, Total derivatives, Derivatives of functions using chain rule, Derivative of functions defined implicitly, Homogeneous and Homothetic functions, Multivariable optimization, local and global extreme, Stationary points of a function, first and second order condition using Hessian, Point of Inflection, Saddle point, Constraint Optimization (using Lagrangean

multiplier), sufficient condition (using Bordered Hessian), Optimization of economic functions, Applications in Economics

Unit -3: Dynamic Analysis

Continuous time: First order linear differential equations (homogeneous and non homogeneous case) with constant coefficient and constant term; with variable coefficient and variable term; Dynamics of market price; Exact differential equations. Discrete Time: First order Difference equations, the stability analysis of the equilibrium (oscillatory and non-oscillatory, divergent and convergent time paths); The Cobweb model, Applications in Economics

References:

1. Knut Sydsaeter and Peter J. Hammond (2005), *Mathematics for Economic Analysis*. Pearson Educational Asia: Delhi, 4th Indian reprint
2. Chiang, A. C. & Kevin Wainwright (2005) Fourth Edition): *Fundamental Methods of Mathematical Economics*, McGraw-Hill.
3. Allen, R.G.D.(1974), *Mathematical Analysis for Economists*, McMillan Press, London
4. Chiang. A.C. (1984), *Fundamental Methods of Mathematical Economics*, 3rd ed. McGraw-Hill
5. Hoy.,M., J. Livernois, C. McKenna, R.Rees and T. Stengos: *Mathematics for Economics*, 2nd Edition Prentice Hall, India (2001)
6. Dowling, Edward T. (1992), *Schaum's Outline of Theory and Problems of Introduction to Mathematics*, 3rd Edition, McGraw-Hill

MACROECONOMICS-I

Unit-I: National Income Analysis

Concepts of National Income-GNP and NNP at market price and factor cost, national product and Domestic product, Measurement of National Income-output, Income & Expenditure approaches and Difficulties of Measurement, National Income Identities with Government and Foreign Trade.

Unit-2: Classical Theory of Output & Employment

Says law of markets and quantity theory of money, classical model without saving in labour supply. Change in labor demand, Rigid money wage, Monetary policy and full employment, Classical theory with saving and investment, Criticism and evaluation.

Unit-3: Keynesian Theory of Income and Employment

The Keynesian approach to the determination of price, Output and Employment – The complete Keynesian model. Consumption function, Equality savings and investment, Concept of multiplier, Types of multiplier, Investment multiplier, Government expenditure multiplier, Income determination involving government expenditure and tax multiplier, Leakages of multiplier.

References:

1. Ackley, G. Macro-Economic Theory, Latest Edition.
2. Allen, R.G.D. Macro-Economic Theory, Latest Edition.
3. Beckerman, Wilfred, an Introduction to National Income Analysis.
4. Dillard, Dudley Economics of John Maynard Keynes.
5. William Branson: Macro Economic Theory and Policy
6. Shapiro, E. Macro-Economic Analysis.

STATISTICAL METHODS - I

Unit-1: Basic Concepts and Descriptive Methods

Definition and Role of Statistics; Graphical Presentation of Data – Straight Lines, Curves and Semi-logarithmic Graphs – Examples from Economics and Business Measures of location – Median, Mode, Mean (AM, GM, HM), simple and weighted averages, group averages, moving averages Measures of dispersion – Range, Variance and Standard Deviation, Mean Deviation, Quartile Deviation, Computation of S.D. from grouped data, simple and weighted averages, group averages, moving averages Measures of skewness and kurtosis; Measures of economic inequality

Unit-2: Probability and Probability distributions

Random experiment, sample space and events; permutations and combinations; classical, empirical and axiomatic definitions of probability; addition and multiplication theorems; conditional probability, independent events and Baye's rule
Random variable and probability function (pdf, pmf, cdf); mathematical expectation - mean and variance of a random variable Binomial, Poisson and Normal distributions

Unit-3: Index Numbers and Time Series Analysis

Index Numbers: Concept, use and examples; Laspeyres, Paasche's and Fisher's index numbers; time reversal, factor reversal and circular tests; chain base index; problems in constructing index numbers; splicing, base shifting; use of index numbers for deflating other series. Time Series Analysis: Concept, use and examples; Components of time series - secular trend, seasonal, cyclical and irregular variations; Methods of semi-averages, moving averages and least squares.

References:

1. Nagar, A.L. and R.K. Das (1983), Basic Statistics, Oxford University Press, New Delhi
2. Gupta, S. P. (2005), Statistical Methods, S. Chand & Sons, New Delhi
3. Freund, John E. (1979), Modern Elementary Statistics, Prentice Hall of India, New Delhi.
4. Speigal, M.R. (1992), Theory and Problems of Statistics, McGraw Hill Book, London.
5. Thukral, J. K. (2010), Business Statistics, Taxmann Publications, New Delhi
6. P.H. Karmel and M. Polasek (1978), *Applied Statistics for Economists*, 4th edition, Pitman, Australia
7. Allen Webster (1997), *Applied Statistics for Business and Economics: an Essential Version*, 3rd edition, McGraw-Hill
8. Lind, Douglas A., William G. Marchal, and Samuel A. Wathan(2006), *Business Statistics for Business & Economics*, 5th ed. Boston: McGraw-Hill Irwin.

Other Books

1. Allen, R.G.D. (1949), *Statistics for Economists*, Hutchinson's University Library, London, UK.

2. Croxton, F.E., D.J. Cowden and S. Klein (1973), Applied General Statistics, Prentice Hall, New Delhi.
3. Gupta, S.C. and V.K. Kapoor (1993), Fundamentals of Applied Statistics, S. Chand and Sons, New Delhi.
4. Freund John E. and Ronald E. Walpole (1987), Mathematical Statistics, Prentice-Hall of India, New Delhi.

HISTORY OF ECONOMIC THOUGHT

Objectives: The main objectives of this course are that by the end of the course, students are expected to:

- Develop an insight and interest in situations and processes in which the subject matter has developed over time.
- Develop a chronological understanding of the development of Economic Thought
Relate the developments in different schools of thought with contemporary issues.

Unit -1: Pre Classical and the Classical School

Mercantilism: Main Principles, Physiocracy: Natural order, Agriculture and Product Net , Adam Smith – Division of Labour, theory of value, doctrine of laissez faire, David Ricardo – Theory of Value, Theory of Distribution, Malthus – Theory of Gluts, Theory of Population, John Stuart Mill - Principles of Political Economy

Unit-2: The Marxian Challenge and Marginal Revolution

Karl Marx - A Contribution to the Critique of Political Economy, William Stanley Jevons - The Theory of Political Economy, Alfred Marshall - Principles of Economics, Eugen von Bohm-Bawerk - The Positive Theory of Capital

Unit 3: Contemporary School of Economic Thought

Irving Fisher - The Purchasing Power of Money and its Determination and Relation to Credit Interest and Crises, John Maynard Keynes – Treatise on Money and The

General Theory of Employment, Interest and Money, Milton Friedman – Resatement of the Quantity Theory of Money, George Akerlof – Information Asymmetry

Select References:

1. Hunt, E.K. and Lautzenheiser, M. (2011), *History of Economic Thought: A Critical Perspective*, M.E. Sharpe.
2. Medema, S.G. and Samuels, W.J. (2003), *The History of Economic Thought: A Reader*, Routledge.

Detailed Readings:

1. Ekelund, R.B. and Hebert, R.F. (1975), *A History of Economic Theory and Method*, McGraw-Hill.
2. Hajela, T.N. (2008), *History of Economic Thought*, Ane Books Pvt. Ltd.
3. Haney, L.H. (1922), *History of Economic Thought: A Critical Account of the Origin and Development of the Economic Theories of the Leading Thinkers in the Leading Nations*, Macmillan.
4. Landers, H. and Colander, D.C. (2002), *History of Economic Thought*, Houghton Mifflin.
5. Robbins, L. (2000), *A History of Economic Thought: The LSE Lectures*, Princeton University Press.
6. Roncaglia, A. (2005), *The Wealth of Ideas: A History of Economic Thought*, Cambridge University Press.
7. Spiegel, H.W. (1991), *The Growth of Economic Thought*, Duke University Press.

MACROECONOMICS-II

Unit-1: Theories of Consumption & Investment

General theories of spending behavior, Absolute income hypothesis, Relative income hypothesis, Permanent income hypothesis, Life cycle hypothesis, Motivation for investment, Marginal efficiency of capital, Supply price, Expected income streams, Marginal efficiency of capital and rate of interest, Principle of acceleration.

Unit-2: Money and Interest

Keynesian Theory of Interest, determination of rate of Interest, Changes in the Levels of Income, Speculative Demand and Money Supply and their effect on equilibrium rate of Interest, Liquidity Trap and Policy Implications, Simple IS-LM Approach to the Determination of the Equilibrium rate of Interest, Elasticity of LM Schedule and Shifts in LM curve with changes in Money Supply and Money Demand, Interest Elasticity of IS schedule and Equilibrium.

Unit-3: Theory of Inflation and Business Cycle

Types and theories of inflation: Demand pull I cost push inflation, Wage push inflation, profit push inflation. The Philips curve trade off between inflation and unemployment, Stagnation, Concept and Phases of trade cycle, Innovation theory-criticism, Keynesian and monetary theory.

References:

1. Dorndush & Fisher, Macro Economic Fiscal Policy.
2. Hansen, A. H. Monetary Theory and Fiscal Policy.
3. MC Dougall & Deinberg, Macro Economics
4. Shapiro, E. Macro-Economic Analysis.
5. Studenski, Paul, Income and Nation.
6. Vaish, M.C. Macroeconomic Theory, Vikas Publishing House Pvt. Ltd.
7. William Branson: Macro Economic Theory and Policy

STATISTICAL METHODS - II

Unit-I: Uni-variate and Bi-variate Analysis

Moments and moment generating function (m.g.f.), calculation of mean and variance of binomial, Poisson and normal variables by m.g.f. method , Multivariate Statistics - joint, marginal and conditional distribution; Product moment – covariance, correlation, rank correlation , Simple linear regression; method of least squares; linear and exponential trend

Unit-2: Introduction to Sampling Distributions

Population versus sample, Methods of sampling, simple random sample, sampling distribution of sample mean for normal and non-normal populations, Chebyshev's inequality, law of large numbers, optimum size of sample, central limit theorem

Definition of z, chi-square, t and F statistics

Unit-3: Introduction to Statistical Inference

Properties of point estimator - unbiasedness, relative efficiency and consistency, Testing of Hypothesis - type I and type II errors, level of significance, power of a test, Use of z, chi-square, t and F statistics - large sample and small sample tests for mean, one tail and two tail tests for difference of means, Chi-square test for (i) goodness of fit and (ii) independence of two attributes, F-test for ratio of two variances, one-way analysis of variance, confidence intervals for mean and variance

References

1. Freund John E. and Ronald E. Walpole (1987), *Mathematical Statistics*, Prentice-Hall of India, New Delhi.
2. Nagar, A.L. and R.K. Das (1983), *Basic Statistics*, Oxford University Press, New Delhi
3. Kapur, J.N. and Saxena, H.C. (1988), *Elements of Mathematical Statistics*, S. Chand & Sons, New Delhi
4. Speigal, M.R. (1992), *Theory and Problems of Statistics*, McGraw Hill Book, London.
5. P.H. Karmel and M. Polasek (1978), *Applied Statistics for Economists*, 4th edition, Pitman, Australia
6. Lind, Douglas A., William G. Marchal, and Samuel A. Wathan. *Business Statistics for Business & Economics*, 5th ed. Boston: McGraw-Hill Irwin. 2006

Other Books

1. Allen, R.G.D. (1949), *Statistics for Economists*, Hutchinson's University Library, London, UK.
2. Croxton, F.E., D.J. Cowden and S. Klein (1973), *Applied General Statistics*, Prentice Hall, New Delhi.
3. Gupta, S.C. and Kapoor, V.K. (1988), *Elements of Mathematical Statistics*, S. Chand & Sons, New Delhi

DEVELOPMENT ECONOMICS

Preamble: This paper will attempt to train students to understand the underlying substantive issues of economic transformation in a historical context. Both economic and non-economic perspectives and dimensions will form the backdrop of this paper. It is expected to help a student to master the basic requirements and capabilities for doing Masters in Growth and Development.

Unit-1: Growth and Development

Growth and Development--Meaning, Evolution and Approaches, Determinants' of Growth, Indicators, Linkages. Human Development-- Approach and Indicators. Sustainable Development-Concept, Operational Rules and Indicators. Growth Models- Classical, Neo-Classical, Harrod-Domar.

Unit-2: Under-Development Determinants and Theories

Under-Development Meaning, Determinants and Indicators, Partial Theories of Growth and Development-Vicious Circle of Poverty, Circular Causation, Unlimited Supply of Labour, Big Push, Balanced Growth, Critical Minimum Effort Thesis, Low Income Equilibrium Trap, Dualism-Technical, Behavioral and Social. Characteristics of Developing Countries.

Unit-3: Determinants of Development

State and Markets; Capital-Human, Natural and Social and Manmade., Agriculture Industry and Services;

Physical Infrastructure, Policies, Planning and Development Administration, Research and Development and Technology, Non-Economic Factors.

References:

1. Adelman, I. (1961), Theories of Economic Growth and Development, Stanford University, Stanford.
2. Aghion, P. and Peter Howit (2011), Economics of Growth, PHI Learning Pvt. Ltd., New Delhi.
3. Behrman, S. and T. N. Srinivasan (1995), Handbook of Development Economics, Vol. 1 to 3, Elsevire, Amsterdam.
4. Chari, Sharad and Staurt Corbridge (2008), The Development Reader, Routledge London.
5. Ghatak, S. (1986), An Introduction to Development Economics, Allen and Unwin, London.
6. Hayami, Y. (1997), Development Economics, Oxford University Press, New York.
7. Higgins, B. (1959), Economic Development, Norton, New York.
8. Kindleberger, C. P. (1977), economic Development, 3rd edi., McGraw Hill, New York.
9. Meier, G. M. (1995), Leading Issues in Economic development, Oxford University Press, New Delhi.
10. Myint, Hla (1971), Economic theory and under developed countries, Oxford University Press, New York.
11. Ray, Debraj (1988), Development Economics OUP, New Delhi.
12. Seers Dudley, (1969), The Meaning of Development, International Development Review, Vol. 11, No. 4. Pp.2-6
13. Sen , A. K. (1995), The Concept of Development, In Handbook of Development Economics, (eds.)Behrman, S. and T. N. Srinivasan Vol. 1 to 3, Elsevire, Amsterdam.
14. Sen , A. K. (), Development Which Way Now, In: Resources Values and Development, OUP, New Delhi.
15. Todaro, M. P. and Stephan C. Smith (2011), Economic Development, 5th edi. Pearson Education in South Asia.
16. Thirwal, A. P. (1999), Growth and development, 3rd edi. Macmillan, London.

MONEY AND BANKING

Objective:

The paper is designed to develop the competence of the student to accustom with the evolution and the role of money in modern economies. The present banking structure in inclusive banking strategy and the role envisaged by a central will be discussed.

Unit- 1: Money and Evolution

Money an overview, Theories of Demand for Money -- Various approaches- Fisher, Cambridge, Keynes, Friedman , Measures of Money, Money Multiplier analysis

Unit-2: Financial Markets

Banking System, Central Bank's – Role, Functions, Credit Control Methods, Monetary Policy, Monetary policy in India, Financial sector reforms in India

Unit- 3: Commercial Banks

Commercial Banking- functions, Credit creation, Social banking, Role of Private Banks and a comparison, foreign banks Role

References:

1. Chandler, L.V. The Economics of Money and Banking, S. Chand & Company Ltd., New Delhi
2. Chandler, L.V., The Monetary and Financial System
- 3.M.K. Lewis (2000), Monetary Economics, OUP
4. M.R. Baye, D.W. Jansen (1996), Money Banking and Financial Markets, AITBS, (Indian Edition)
- 5.Maurice Levi (1999), International Finance, Tata McGraw Hill
6. L.M. Bhole (1999), Financial Institutions and Markets, Tata McGraw Hill
- 7.R.B.I. Bulletin, Annual Report; Report on Currency and Finance
- 8.R.B.I. - Report of the Committee on the Financial System (Narasimham Committee Report I)
- 9.R.B.I. - Report of the Committee on Banking Sector Reforms (Narasimham Committee Report II) Summary in RBI Bulletin, July, 1998.
- 10.R.B.I - Report of the Working Group: Money Supply Analytics and Methodology

of

Compilation, 1998.

11. S.B.Gupta, Monetary Economics

12. Y.V. Reddy (2000), Monetary and Financial Sector Reforms in India UBSPD, New Delhi

ECONOMETRICS - I

Unit- 1: Simple Linear Regression Analysis

Introduction to Econometrics, Two- variable regression analysis - Population Regression Function and Sample Regression Function, Significance of Stochastic Disturbance Term, Problem of Estimation of Two variable regression model – CLRM assumptions, Method of OLS estimation, Goodness of Fit, Desirable properties of OLS estimators- Gauss Markov Theorem, Interval Estimation and Hypothesis Testing, Extension of Two Variable Regression Model.

Unit- 2: Multiple Regression Analysis

Multiple Regression Equation, OLS estimation of Partial Regression Coefficients, Multiple Coefficient of Determination (R^2) and Adjusted R^2 , Multiple and Partial Correlation Coefficients, Problem of Inferences and Hypothesis Testing.

Unit- 3: Problems in OLS Estimation

Problems in OLS Methods: Analysis of Residuals – Heteroscedasticity and Autocorrelation Problems – Consequences of applying OLS under Heteroscedasticity and Autocorrelation – tests and remedial measures for removal of heteroscedasticity and autocorrelation Multicollinearity- consequences, tests and remedial measures.

References:

- 1.Green W H (2003), Econometric Analysis, Prentice Hall, Pearson Education, New Delhi
- 2.Gujrati, D 2007. : Basic Econometrics, McGraw Hill , 4th edition, New Delhi

3. Gujarati D (1992).:Essential Econometrics McGraw Hill, Singapore
4. Johnston, J. and Dinardo(1997), Econometric Methods, 4th Edition. McGraw Hill, New York.
5. Jhonston J (1985) Econometric Methods, McGraw Hill, New York
6. Koutsoyiannis A 1977, Theory of Econometrics, The Macmillan Press Ltd, Hampshire
7. Kmenta J (1997), Elements of Econometrics, Michigan Press New York
8. Maddala , Introduction to Econometrics, 3rd Edition. John Wiley, 2001.

INTERNATIONAL TRADE

Unit 1: Introduction

Need for separate Theory of International Trade. Concepts of Opportunity Cost, Production possibility Curve, Offer Curves, Terms of Trade, Pure Theory of International Trade: Ricardian Theory of Comparative Advantage, Heckscher-Ohlin Trade Theory.

Unite 2: Trade Policy

Gains from Free Trade, Protectionism versus Free Trade, Tariff Quota and Import-substitution and Export Promotion, Prebisch-Singer Hypothesis GATT/WTO UNCTAD

Unit 3: International Monetary System

Balance of payments and its components, Exchange Rate Determination, System of Fixed and Floating Exchange Rates, Disequilibrium in the Balance of Payments, Adjustment Mechanism, IMF

Brottonrood Monetary System, World Bank (IBRD)

References:

1. Ellsworth, P.T. (1969) International Economics
2. Haberler G (1935) The Theory of International Trade
3. Kindleberger. C.P. (1976) International Economics
4. Bo-Sodersten S Goeffrey Reed (1994) International Economics III Edition.

5. Salvatore. D (1983) International Economics

INDIAN ECONOMY

Objectives: The main objectives of this course are that by the end of the course, students are expected to:

- have an in-depth understanding of the subject matter and development of Indian economy since independence
- critically examine the government policies adopted during the Five Year Plans
- Evaluate the pre and post reforms progress of India.

Unit- 1: Concept of Developed and Developing Economies

Characteristics of a developing economy – basic features of Indian economy at the time of independence

Population and Economic Development - Demographic trends of India – Occupational Structure - Population policy, Employment in organised and unorganised sectors , Issues in Indian Planning – Objectives and critical evaluation of each plan. Centre-State relationship

Unit-2: Perspective of India's Agricultural and Industrial Economy

Importance of Agriculture in Indian economy – trends in agriculture production and productivity, Green Revolution and Food Security, Agriculture Price Policy, Sources of Agricultural Finance and Sustainable Agricultural Growth, Industrial Policy – pre and post 1991 and trends in India's industrial growth and productivity, Small vs. large industry, public vs. private sector industries, disinvestment strategies, Policy issues and future prospects: infrastructure, technology and regional imbalances

Unit-3: Contemporary Issues

Macro-economic stabilisation – fiscal and monetary policies, Globalisation and its impact on the Indian economy with special reference to global financial crisis, 2007-08, India and the World Economics, India's foreign trade and investment policies,

References:

1. Bansil, P.C, *Agricultural Problems of India*, Vikas Publishing House Pvt. Ltd.
2. Datt, R. and Sundharam, K.P.M, *Indian Economy*, S. Chand & Company Ltd, New Delhi.
3. Kapila, U. (2008-09), *Indian Economy Since Independence*, Academic Foundation, New Delhi.
4. Mookherjee, D. (1997), *Indian Industry: Policies and Performance*, Oxford University Press,

Detailed Readings:

1. Acharya, S. (2002), *India: Crisis, Reforms and Growth in the Nineties*, Working Paper No. 139, Centre for Research on Economic Development and Policy Reform, Stanford University.
2. Ahluwalia, I.J. and Little, I.M.D. (Eds.) (1999), *India's Economic Reforms and Development (Essays in Honour of Manmohan Singh)*, Oxford University Press, New Delhi.
3. Basu, S.C. and Gulati, A. (2005), *Economic Reforms and Food Security: The Impact of Trade and Technology in South Asia*, Routledge.
4. Bhagwati, J.N.(1993), *India in Transition: Freeing the Economy*, Clarendon Oxford.
5. Bhalla, G.S. and Singh, G. (2001), *Indian Agriculture: Four Decades of Development*, Sage Publications.
6. Glinskaya, E. and Lokshin, M. (2005), *Wage Differentials Between The Public And Private Sectors in India*, The World Bank.
7. Mattoo, A. and Stern, R.M. (2003), *India and the WTO*, World Bank Publication.
8. Mohan, T.T.R. (2005), *Privatisation in India: Challenging Economic Orthodoxy*, Routledge.
9. Rao, C.H.H. (2005), *Agriculture, Food Security, Poverty and Environment: Essays on post-reforms India*, Oxford University Press.
10. Sengupta, D., Chakraborty, D. and Banerjee, P. (2006), *Beyond the Transition of WTO: An Indian Perspective on Emerging Issues*, Academic Foundation.

PUBLIC ECONOMICS

Objective:

Public finance (also known as public economics) analyzes the impact of public policy on the allocation of resources and the distribution of income in the economy. In this course, you will learn how to use the tools of microeconomics and empirical analysis to analyze the economic effects of public expenditures and taxation.

Unit-1: Meaning and Scope of Public finance

Public finance – Meaning and Scope – Public and Private Finance – Principles of Maximum Social Advantage – Public Goods, Private Goods

Unit-2: Public Revenue

Sources of public revenue Taxes -Classification of Taxes - Canons of Taxation, Principles of Taxation. Ability, Benefit and cost of service- Impact, Incidence and shifting of Tax Burden — Effects of Taxation – Major Taxes in India. Value Added Tax in India The concept of goods and service tax (GST)

Unit- 3: Public Expenditure and Public Debt

Public Expenditure Meaning and Importance – Reasons for the Growth of Public Expenditure 25– Wagner’s Hypothesis, Peacock - Wiseman Hypothesis, Canon’s of Public Expenditure – Effects of Public Expenditure. Public Debt: Meaning, Types of Public Debt, Debt Redemption.

References:

1. R.A Musgrave and PB Musgrave – Public finance – Tata Macgrail
2. Govinda Rao and Singh - Political Economy of Federalism in India – Oxford.
3. Shankar Acharya – Thirty Years of Tax Reforms in India (Article) EPW – 14-05-1995.
4. Bhatia HL – Public Finance – Vikas Publishing.

ENVIRONMENTAL ECONOMICS

Preamble: The Course is designed to gradually develop the capability of a student so

that he/she masters the significance and scope of environmental economics as a separate subdiscipline of teaching, research and policy. The paper focuses on: Elements of Environmental Economics, Environment-Economy Linkages and Working of these Linkages. Basic Understanding of Micro-economics, Public Economics, Quantitative Techniques and Natural Sciences is a desirable input for efficient learning

Unit-1: Basic Environmental Issues

Environmental Economics- Meaning, Definition, Nature, Scope and Limitations, Difference between Environmental Economics and Resource Economics., Economy-Environment Linkages. Elementary Ecology- Definition, Types and Functions of Ecosystem; Laws of Thermodynamics; Basic Concept of Capital Theory, Externality-Positive and Negative, Public Goods and Criterion for Public Goods; Market Failure; Sustainable Development: Concepts; Indicators of Sustainable Development. Environmental Degradation-Types, Causes and Consequences.

Unit-2: Economics of Natural Resources

Renewable and Non-Renewable Natural Resources: Forest Resources, Water Resources, Mineral Resources, Land Resources, Energy Resources; Common Property Resources (CPRs), Destruction of CPRs and Its Impact on Human Welfare.

Unit-3: Economics of Environmental Regulation

Evolution of Environmental Regulation; Environmental Legislations/ Policies in India; Instruments for Pollution Control: Command and Control Policy vs. Market Based Instruments: Taxes vs. Permits; Direct and Indirect Instruments of Pollution Control; Pollution Control System and Policy Measures in Indian Context

References:

1. Bhattacharya, Rabindra N. (2001), “Environmental Economics-An Indian Perspective”, Oxford University Press, New Delhi
2. Boumal, W.J. and W.E. Oates (1988), “The Theory of Environmental Policy”, 2nd Edition, Cambridge University Press, UK

3. Hanley, N.J.F. Shogren and B. White (1997), “Environmental Economics in Theory and Practice”, OUP, Delhi.
4. Kolstad, Charles D. (2000), “Environmental Economics”, Oxford University Press, New York
5. Sankar, U (2001), “Environmental Economics”, Oxford University Press, New Delhi
6. Sengupta, R. (...), “Ecology and Economics: An Approach to Sustainable Development”, Oxford University Press, New Delhi
7. Tietenberg, T. (1994), “ Environmental Economics and Policy”, Harper Collins, New York (T);
8. Tietenberg, T. (2003), Environment and Natural Resource Economics, 6th Edi. Pearson Education Inc. New Delhi.
9. Pearce D. W. and R. Kerry Turner, (1990), “Economics of Natural Resources and Environment, Baltimore, Maryland USA: The Johns Hopkins University Press

OPTIONAL PAPERS

INDIA AND THE WORLD ECONOMY

UNIT-I

The changing structure of Indian Economy before and after 1991

India’s External Sector – Commodity and Regional Composition of exports and imports, Major trading partners (US, EU, West Asia) -

Balance of Payments before and after 1991 - Implications

UNIT-II

ALTERNATIVE PATHS AMONG DEVELOPING ECONOMIES

China – a model of Socialist Market Economy

Revolution and Reforms in the Mexican Economy

North & South Korea: The lingering Shadow of the Cold War

Iran: The Struggle for a New Traditional Islamic Economy

North & South Korea: The lingering Shadow of the Cold War

UNIT-III

The evolving trends of world economy – the shift of the centre of gravity from West to East and from North to South

Indian Economy and the Globalizing World – Regional Cooperation and World Economic Integration – SAARC, BRICS, ASEAN

Relevance of Global Economic Governance – World Bank, IMF, WTO

READINGS:

1. Papoala, T. S. EMERGING STRUCTURE OF INDIAN ECONOMY - Implications of Growing Inter-sectoral Imbalances (isid.org.in/pdf/presAdd_IEA05.PDF)
2. Basu, K. (2004) (ed.), India's Emerging Economy: Performance and Prospects in the 1990s and Beyond.
3. Basu, K. (2008) (ed.), The Oxford Companion to Economics in India
4. Huang, Yasheng and Tarun Khanna (2003) "Can India Overtake China?," Foreign Policy, July-August.
5. Jorgenson, Dale and Khuong Vu (2005) "Information Technology and the World Economy," Scandinavian Journal of Economics 107 (4), forthcoming.
6. Srinivasan, T.N. (2005b) "Information Technology Enabled Services and India's Growth Prospects," in Lael Brainard and Susan Collins (Ed.) Offshoring White Collar Work: Issues and Implications, Washington D.C., Brookings Institution Press, forthcoming.
7. Virmani, Arvind (2002) "Sources of India's Economic Growth," Working Paper 131, New Delhi, Indian Council for Research on International Economic Relations (ICRIER).
8. IMF (2005), World Economic Outlook, Washington D.C., International Monetary Fund.
9. World Bank (2005) World Development Indicators, Washington D.C., World Bank.
10. G. Balachandran, India and the World Economy 1850-1950, OUP 2003

11. Chakravarty, S., *Development Planning: The Indian Experience*, Clarendon Press, Oxford, 1987.
12. Brahmananda, P.R. and Panchmukhi, V.R. (Eds.), *The Development Process of the Indian Economy*, Himalaya Publishing House, Bombay, 1987.
13. AK Bagchi, 'De- Industrialization in India in the Nineteenth Century: Some Theoretical Implications', *Journal of Development Studies*, 12:2 (1976), 135-64
14. Acharya, S. 2009. *India and Global Crisis*. Academic Foundation, New Delhi.

WEB READINGS:

<http://www.econ.yale.edu/~srinivas/IntegratingIndia.pdf>

www.cacci.org.tw/Journal/2004%20Vol%202/CountryReport-India.pdf

www.thehindu.com/multimedia/archive/00952/Chapter_14_952322a.pdf

ECONOMETRICS - II

Unit- 1: Simple and Multiple Regression Analysis

Review of Simple and Multiple Regression Analysis, Dummy Variable Regression Model – Alternatives to Chow test, Interaction Effects, Technical Aspects of Dummy Variable Techniques, Violation of CLRM Assumptions and Model Specification Problems – Model Selection Criteria, Specification Errors: Consequences and Tests, Test for Regression Model, Coefficient of Determination, F-test, Applications to Application to Consumption studies and Production functions

Unit- 2: Dynamic Econometric Model

Distributed Lag Model (DLM) – Ad hoc Estimation, Koyck and Almon Approaches to DLM, Adaptive Expectation Model, Partial Adjustment Model, Auto Regressive Model, Method of Instrumental Variables, Detecting and Correcting Autocorrelation in Autoregressive Model

Unit- 3: Simultaneous Equation Model

Simultaneous Equation Bias, Identification Problem, Rules for Identification – Order and Rank Conditions, Indirect Least Square Methods, Two State Least Square (2SLS) Method, Application to Macro Models (Examples)

References:

1. D. Gujarati, Basic Econometrics, 4th Edition, McGraw-Hill/Irwin
2. Stock and Watson, Introduction to Econometrics, Pearson Publication
3. Cramer J.S., Empirical Econometrics.
4. Deaton A.S. and J. Muellbauer, Economics and Consumer Behaviour.
5. Klein L.R., Introduction to Econometrics
6. Wallis K.F., Topics in Applied Econometrics.

REGIONAL ECONOMICS

Objective:

To acclimatize to the student with the problems of regional economies and methods of analyzing them. The roles and natural resources, demographic base, location of industries and factors determining regional growth and development will be considered.

Unit – 1: Definition and Scope of Regional Economics

Regional Economics - Scope, Definition, Concerns of Regional Development, - Location Theories- -Weber- Christalieu Losch Theory of Location and interdependence.

Unit – 2: Region – definition

Identification of Backward regions: Determinants of Regional Development: Natural Endowments Human Resources-Capital-Technology-Economic and Social

infrastructure; Factor and commodity mobility and Regional development; Convergence Theory.

Unit – 3: Regional Planning under alternative economic system

Historical perspectives of Indian development: Regional Development Models: Practice of Regional Planning in India, USA, Germany, Canada

References:

1. Harry N Richardson: regional Economics.
2. Hugu O. Nourse: Regional Economics,
3. Walter Isard: introduction to Regional Science.
4. Friedman & Alonse (Ed): regional Development.
5. Amitabh Kundu et al.: input-Output frame-work and Economic Analysis
6. B. Sarah, C.O.A.R. & J.B. Cuillingworth: Regional and Urban Studies,
7. Mark Wright: industrial Location & Regional Analysis.
8. David M. Smith: industrial Location.
9. David Mekee, Robert A. Dean (Ed) William H. Healey: Regional Economics Theory and Policy.
10. Richardson: Regional Economics
11. Friedman and Alan (Ed): Regional Development Policy.
12. Seibert: Regional Economic Growth.
13. Fu-Chen Lo Kamal Salih (Ed): Growth pole strategy and Regional Development Policy.
14. Peter Hall: Urban and regional Planning.
15. O.E.C.D.: Regional Problems and Policies in O.E.CD Countries. Vol. I & II.

INTERNATIONAL FINANCE

Unit – I: The International Monetary System

Alternative Exchange Rate System., A Brief History of the International Monetary System

The European Monetary System and Monetary Union, Exchange Rate Policies in Emerging Markets

Unit – 2: The Foreign Exchange Market

Organization of the Foreign Exchange Market, Importance of Foreign Exchange Market Trading

Foreign Exchange Market Products and Activities, Parity conditions in International Finance

- i) Arbitrage and the Law of One price
- ii) Purchasing Power Parity
- iii) The Fisher Effect
- iv) The International Fisher Effect
- v) Interest Rate Parity Theorem

Unit -3: International Financing and Investment Decisions

Overview of the International Financial Market, National Capital Markets and International Financial Centres, The Euro-currency Market and International Banks, The Euro-bonds, International Equities

References:

1. Brian Tew : The Evolution of International Monetary System, Hutchinson, 1985
2. Alan C Shapiro: Multinational Financial Management, Seventh Edition, John Wiley & Sons, 2003
3. Richard M Levich: International Financial Markets, McGraw Hill International Edition, 2001
4. A.V. Rajwade: Foreign Exchange, International Finance and Risk Management, Academy of Business Studies, 1996

ECONOMICS OF EDUCATION

Objectives: The main objectives of this course are that by the end of the course, students are expected to:

- Appreciate the importance of education at individual and societal level
- Have an insight into the education-economic development linkages
- Have a clear understanding with regards to India's education system and related concerns

Unit- I: Economics of Education

Meaning and Scope of Economics of Education, Education - Human Resource Development – Economic Development Linkages

Unit -2: Education Planning and Finance

Education planning techniques, Cost – Benefit Analysis, Theories of Public Expenditure, Resource Mobilisation and Utilisation, Effects of Education on levels of earnings and value based education

Unit -3: Education in India

Indian perspective to education, Sarva Shiksha Abhiyan, Right to Education and Legislations relating to Right to Education with special reference to Constitutional provisions/Preamble. Higher Education in India: Issues, Concerns and New Directions

References:

1. Belfield, C.R. (2000), *Economic Principles for Education: Theory and Evidence*, Edward Elgar Publishing.
2. Deka, B. (2000), *Higher Education in India: Development and Problems*, Atlantic Publishers & Dist.
3. Jha, P., Das, S., Mohanty, S.S. and Jha, N.K. (2008), *Public Provisioning of Elementary Education in India*, Sage Publications India Pvt. Ltd.

Detailed Readings:

1. Agarwal, A.K. (2005), *Development of Educational Systems in India*, Anmol Publications Pvt. Ltd.
2. Checchi, D. (2006), *The Economics of Education: Human Capital, Family Background and Inequality*, Cambridge University Press.

3. Gupta, N.L. (2000), *Human Values in Education*, Concept Publishing Company.
4. Harris, I.M. and Morrison, M.L., *Peace Education*, McFarland, 2003.
5. *Higher Education in India: Issues, Concerns and New Directions* (December 2003). Recommendations of UGC golden jubilee Seminars-2003, held at eleven universities in India.
6. Kashyap, S.C. (2006), *The Constitution of India*, Universal Law Publishing.
7. Kumar, B. and Hansara, B.S. (2000), *Extension Education for Human Resource Development*, Concept Publishing Company, 2000.
8. Pathak, R.P. (2007), *Education in the Emerging India*, Atlantic Publishers & Dist.
9. Sharma, R.N. and Sharma, R.K. (2004), *Problems of Education in India*, Atlantic Publishers & Dist.

World Development Report 1980, World Bank Publications

HEALTH ECONOMICS

Unit – I: Introduction to Health Economics

Defining Health Economics. Importance of Health Economics – Essential Features. Concepts: Health Health Care, Birth Rate, Fertility Rate, Death Rate, IMR, CMR, MMR, Morbidity Rate (Acute and Chronic), Disability Adjusted Life Year (DALY), Quality Adjusted Life Year (QUALY), Sex Ratio.

Unit- 2: Demand and Supply of Health Care

Demand for Health Care – Case of Health Care Accessibility – Socio Economic and Cultural Features, Determining Health Status – Supply of Health, Health Care Delivery System – Pricing of Health Care.

Unit- 3: Health Financing & Policy

Health Expenditure – Public & Private – Direct & Indirect – Health Insurance – Concept of User Cost – Health Policy of WHO, National Health Policy – NRHM, Health as a State Subject.

References:

1. V. Raman Kutty (2007), A Premier of health System Economics, Allied Publications, New Delhi
2. J.W. Hinderson (2009) Health economics and Policy, Thomson Learning

AGRICULTURAL ECONOMICS

Unit- 1: Introduction

Definition and scope of Agricultural Economics, Unique features of Agriculture, Role of Agriculture in Economic Development-Kuznet formulation, linkage between Agriculture and Non Agricultural sectors.

Unit -2: Agricultural Marketing and Price Policy

Agricultural Marketing, Efficiency criteria of Agricultural Marketing, causes for the inefficiency of Indian Agricultural Marketing, Agricultural Price Policy and Evaluation, Public Distribution system in India-issues and challenges Food Corporation of India, Agricultural Cost and Price Commission.

Unit- 3 : Issues in India's Agricultural Development

Land Tenure system on the eve of independence, land reforms measures-Achievements, problems and policy- The new agricultural technology and Green Revolution-Rationale, Progress Problems and Prospects. Agricultural credit-Problems and sources, WTO and Indian Agriculture.

References:

1. GS Bhalla, Agricultural Development since Independence
2. TW Schultz, Transformation of Traditional Agriculture
3. Mellor, Agricultural Development
4. R.N. Soni, Leading Issues in Agricultural Economics
5. Sadhu and Singh, Agricultural Problems in India
6. Indian Journal of Agricultural Economics Relevant issues

INDUSTRIAL ECONOMICS

Unit- 1: The Concept of a Firm

Economic Theory of Firm, Organisational form, Individual Ownership, Partnership and joint stock companies, Choice of organisational form, Public sector enterprises- Objectives and Role , Privatisation of Public Sector Undertakings in India.

Unit- 2: Industrial Productivity

Productivity and its measurement, Factors influencing industrial productivity, Productivity Movements in India, National Productivity Council, Size of Firm, optimum firm, Factors influencing optimum size.

Unit- 3: Industrial Pricing and Market Structure

Pricing under imperfect competition, the concept of workable competition on. Small Scale Vs Large Scale industries, Regional variations in Industrial development in India

References:

1. -R.R. Barthwal, Industrial Economics, New Age International Publisher
2. Donald A Hay and D.J Morris, Industrial Economics: Theory and Evidence-, Oxford University Press.
3. SSM Desai and Nimal Bhalerao, Industrial Economy of India: Himalaya Publishing House
4. K.V. Sivaya and VBM Das, Indian Industrial Economy:, S Chand Company
5. PK Dhar, Indian Economy- Kalyani Publisher

GAME THEORY APPLICATIONS

Unit -1: Static Games of Complete Information

Concepts: What is a Games of Strategy? How to think about strategy? Decision versus Game, Some terminology and Background Assumptions, Static versus Simultaneous Move Game, Games of Complete and Incomplete Information, Use of Game Theory, Simultaneous Move Games with Pure Strategies (Discrete Strategies) – Normal Form of Representation of Games, Solution Concepts: Dominant Strategy - Prisoners

Dilemma Game, Iterated Dominance , Nash Equilibrium, Mini-max Methods for Zero Sum Games, Matching of Pennies – no Equilibrium in Pure Strategies, Multiple Equilibrium in Pure Strategies - Battle Sexes Game, Coordination Games, Chicken Games, Focal Point, Economic Applications – Best Response Functions – Cournot Equilibrium.

Mixed strategy Equilibrium – Expected Utility, Best Response Analysis, Case of Domination by a Mixed Strategy

Unit -2: Dynamic Games of Complete Information

Extensive Form of a Game with Perfect Information - Information Sets, strategies and Outcomes, Nash Equilibrium, Backward Induction and Sub-game Perfect Equilibrium in finite Horizon Game

Extensive Game with Imperfect Information

Repeated Games and Sub-game Perfection –Finitely Repeated and Infinite Repeated Games

Games with Incomplete Information

Unit – 3: Information

Categories of Asymmetric Information Models – Adverse Selection, Moral Hazards, Mechanism Design in Adverse Selection and in Moral Hazards, Signaling and Screening

Principal Agent Problem - Production Game – Full Information, Sequential Move, Fixed Wage, Output based Wage under Certainty, Output based Wage under Uncertainty.

Moral Hazard –Incentive Compatibility Constraint and Participation Constraint, Monopoly Solution, Moral Hazard in Insurance Markets

Adverse Selection – The Market for Lemons, Production Game

Educational Signaling.

References:

1. Martin J Osborne, ‘Introduction to Game Theory,’ Indian Edition, Oxford University Press
2. Avinash Dixit, Susan Skeath, David H. Reiley : Games of Strategy, 2010, 3rd Edition, VV Norton & Company.
3. Hall R. Varian, ‘Microeconomic Analysis, Third Edition, Viva Books, 2009, India.

4. Walter Nicholson, Intermediate Microeconomic Theory: Basic Principles and Extensions, 9th Edition
5. Bernheim and Whinstone, Microeconomics / Edition 1, McGraw-Hill Companies.

FINANCIAL ECONOMICS

Unit- 1: Basics of Financial Markets

Indian Financial Markets, Operations and Regulations of Financial Markets, Market Efficiency, Diversification and Behavioural Finance

Unit- 2: Fundamental Analysis of Stocks

Fundamental Analysis and Stock Valuation, Investment Analysis, Risk and Return, Modern Portfolio Theory, Capital Asset Pricing Model, Single and Multi Factor Models

Unit- 3: Bond Market Analysis (Financial Income Analysis)

Allocating Resources over time: Compounding, Present Value and Discounting, Structure of Interest Rates, Bond Valuation and Yield Curves, Corporate Bonds, RBI Operations

References:

1. Bodie, Robert c Merton and David Cleaton (2009), Financial Economics, Pearson
2. Elton, Gruber Brown, Goetzmann (2007), Modern Portfolio Theory and Investment Analysis
3. Prasanna Chandra (2010), International Analysis and portfolio Management, Tata McGraw Hill

COMPUTER APPLICATIONS

Unit- 1: Computer Fundamentals and Data

Basics in Computer - Computer hardwares and softwares, Disk operating systems, Operating system – Windows, and Introduction to MS Office – Word and Excel, Different Types of Data – Time series, cross-section and Pooled, Data Entry, Tabulation and Graphical Representation in Excel, Data Imports and Exports from/to

application software Eviews/SPSS, Data tabulation and graphical representation in Eviews/SPSS

Unit- 2: Data Analysis in Eviews/SPSS

Moments - Mean, Median and Mode, Measures of Dispersion and Skewness, Correlation and Simple Regression, Multiple Regression Analysis

Unit- 3: Introduction to Time Series Analysis in Eviews/SPSS

Stochastic Processes, Autocorrelation Functions and Correlogram, Stationarity: Unit-Root Test, Timeseries Regression Analysis – Spurious Regression, Random Walk Model and Introduction to Cointegration Analysis

References

1. Rajaraman, V. (1996), Fundamentals of Computers, Prentice Hall of India, New Delhi.
2. Kerns (1993), Essentials of Microsoft Windows, Word and Excel; Prentice Hall of India, New Delhi.
3. Allen, R.G.D., Statistics for Economics
4. D. Gujarati (2002), Basic Econometrics, 4th Edition, McGraw-Hill/Irwin
5. Enders, W. (2003), Applied Econometric Time Series“, 2nd edition, 2003
6. Eviews Manuals
7. SPSS Manuals