

**CHRIST UNIVERSITY
HOSUR ROAD, BANGALORE-29**



DEPARTMENT OF ECONOMICS

**B A (TRIPLE MAIN COURSE)
2013-2014**

ECONOMICS

Offered as one of the Core Subjects in a triple main combination with Psychology, Sociology, Political Science and History (BA-PSEco, EPS and HEP).

COURSE OBJECTIVE

The undergraduate economics courses provide a sound theoretical basis in economic theory supplemented by practical applications of theories. The first four semesters are devoted to give a firm background in micro economics, macro economics, development economics and international economics. In the fifth and sixth semesters the students take two compulsory courses namely Indian economy since independence and financial economics. They have elective courses in the final year encompassing two options each semester. The elective courses offered by the department are mathematical methods for economics or health economics in the fifth semester and statistical methods for economics or environmental economics in the sixth semester.

COURSE STRUCTURE

I SEMESTER

Course code	Title	Hrs/wk	Marks	Credits
ECO 131	Principles of Microeconomics	5	100	4

II SEMESTER

Course code	Title	Hrs/wk	Marks	Credits
ECO 231	Principles of Macroeconomics	5	100	4

III SEMESTER

Course code	Title	Hrs/wk	Marks	Credits
ECO 331	Development Economics	5	100	4

IV SEMESTER

Course code	Title	Hrs/wk	Marks	Credits
ECO 431	International Economics	5	100	4

V SEMESTER

Course code	Title	Hrs/wk	Marks	Credits
ECO 531	Indian Economy (Compulsory Paper)	4	100	3
ECO 542A ECO 542B	ELECTIVE 1. Health Economics 2. Mathematical Methods for Economics	4	100	3

VI SEMESTER

Course code	Title	Hrs/wk	Marks	Credits
ECO 631	Financial Economics	4	100	3
ECO 642A ECO 642B	ELECTIVE 1. Environmental Economics 2. Statistical Methods for Economics	4	100	3

SEMESTER I

PRINCIPLES OF MICRO ECONOMICS 2013-14 ECO 131

Objectives:

75 Hrs

Develop the conceptual foundations and analytical methods used in micro economics; Familiarize the students with the basics of consumer behaviour, behaviour of firms and market equilibrium; Analyse the market structures of perfect competition, oligopoly and monopolies; Introduce the game theory and welfare economics.

UNIT 1: Micro Economics and the Theory of Consumption

16 Hrs

Ten principles of economics: How people make decisions, how people interact and how the economy as a whole works- Role of observations and theory in economics- Role of assumptions- Role of Economic models- Wants and resources; Problem of choice, Production Possibility Frontier; Opportunity costs.

UNIT 2: Demand and supply

14 Hrs

Law of demand, Reasons for the downward slope of the demand curve. Exceptions to the law; Changes in demand; Elasticity of Demand- Degrees of price elasticity with diagrams; Factors determining price elasticity, methods of measurement. Income elasticity demand; Cross elasticity demand; Laws of supply, Changes in supply- Consumers, Producers and the Efficiency of the Markets: Consumer's surplus (Marshall), Producer surplus and Market efficiency- Externalities and Market inefficiency- Public goods and common resources.

UNIT 3: Theory of Production and Cost

16 Hrs

Production function; Law of Variable proportions; Laws of returns, Economies of scale; Producer's Equilibrium with the help of iso-quants and iso-cost lines.

Cost function - Important cost concepts. Short run and long run cost analysis (traditional theory) Modern theory of cost- Long run and short run- Revenue analysis -AR and MR.

UNIT 4: Product Pricing and Factor Pricing

19 Hrs

Market structure. Perfect competition, Price and output determination. Role of time element in market price determination. Monopoly- Price output determination, Price discrimination Monopolistic Competition. Price and Output determination. Selling costs. Product differentiation. Wastes in monopolistic competition. Oligopoly Price determination (collusive pricing, price leadership), Features of Duopoly and Monopsony.

Unit 5: Theory of Consumer Choice and New Frontiers in Microeconomics

10 Hrs

Cardinal utility analysis; Law of diminishing marginal utility; Consumer's surplus (Marshall), Ordinal utility analysis. Indifference curves- Properties, consumer's equilibrium, Price effect, Income Effect and substitution effect. New Frontiers in Microeconomics: Introduction to concepts of Asymmetric Information, Political economy, Behavioral Economics.

Recommended Readings:

1. N. Gregory Mankiw (2012). *Principles of Microeconomics*, 4th Edition, Cengage Learning India.
2. Lipsey, R.G. and K.A. Chrystal (1999), *Principles of Economics* (IX Ed.), Oxford University Press, Oxford
3. Ramsfield, E. (1997), *Micro Economics* (IX edition), W.W Norton and company, New York
4. Ray, N.C. (1975), *An introduction to Microeconomics*, Macmillan company of India Ltd. New Delhi
5. Samuelson, PA and W.D. Hague (1972), *A textbook of Economic Theory*, ELBS Longman group, London.
6. Pindyek and Rubinfeld- *Micro Economics* (Pearson Education)
7. H. L Ahuja, *Principles of Microeconomics*, S Chand, New Delhi

SEMESTER II

PRINCIPLES OF MACROECONOMICS 2013-14 ECO 231

Objectives:

75 Hrs

It aims at providing a systematic introduction to mainstream approaches to the study of macro economics in the current century. It has been designed in such a way that it stimulates awareness on macroeconomic challenges and policy management in progressive nations. It also aims at developing the ability for objective reasoning about macroeconomic issues.

UNIT 1: Measuring a Nation's Income and Cost of Living

09 Hrs

Economy's Income and Expenditure, Measurement of GDP, Components of GDP, Real versus Nominal GDP- The GDP Deflator-The Consumer Price Index- Calculation of CPI- GDP deflator versus the CPI- Correcting economic variables for the effects of inflation- Real and Nominal Interest rates

Unit 2: Goods and Money Market

15 Hrs

Saving and Investment in the National Income Accounts- The Market for Loanable Funds; Policy changes and impact on the market for loanable funds- Meaning and Functions of Money- Banks and Money Supply; Money creation with 100 percent reserve banking and Fractional reserve banking- Central Bank tools of Monetary Control- Classical theory of Inflation- Classical Dichotomy and Monetary Neutrality- Velocity and Quantity equation- Fisher Effect- Costs of Inflation.

UNIT 3: Aggregate Demand, Aggregate Supply & Influence of Monetary and Fiscal Policy on Aggregate Demand

18 Hrs

Three Key Facts about Economic Fluctuations, Short run Economic Fluctuations, Aggregate Demand Curve, Aggregate Supply Curve, Two Causes of Economic Fluctuations, Monetary Policy influence on Aggregate Demand- The Theory of Liquidity Preference- Fiscal Policy influence on Aggregate Demand- The Multiplier Effect- Crowding out effect- Stabilisation Policy; Active Versus Automatic Stabilizers

UNIT 4: Short Run Trade – Off between Inflation and Unemployment

18 Hrs

The Philips Curve, Shifts in Philips Curve: The Role of Expectations, Shifts in Philips Curve and The Role of Supply Shocks, The Cost of Reducing Inflation- Rational Expectations and the possibility of costless disinflation

UNIT 5: Six Debates over Macroeconomic Policy

15 Hrs

Monetary and Fiscal Policy – Pros and Cons, Handling Recession: higher spending vs. tax cuts, Monetary Policy: rule vs. discretion, Central Bank: zero inflation, Balanced Budget Debate, Tax Law Reformation for Savings: debate.

Recommended Readings:

1. N. Gregory Mankiw (2012). Principles of Macroeconomics, 6th Edition, Cengage Learning India.
2. Ackley, G. (1976) Macroeconomics, Theory and Policy, Macmillan Publishing Company, New York.
3. Day. A.C.L. (1960), Outline of Monetary Economics, Oxford University Press, New Delhi.
4. Heijdra, B.J. and F.V. Ploeg (2001). Foundations of Modern Macroeconomics, Oxford University Press, Oxford.
5. Lewis, M.K. and P.D. Mizan (2000), Monetary Economics, Oxford University Press, New Delhi.
6. Shapiro, E. (1996), Macroeconomics Analysis, Galgotia Publications, New Delhi.
7. Dillard, D. (1960), The Economics of John Maynard Keynes, Crosby Lockwood and Sons, London.
8. Hanson, A.H. (1963), A Guide to Keynes, McGraw Hill, New York..
9. Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.
10. Farmer, Roger. (2001), Macroeconomics II Edition ISBN.
11. Stanley Fischer and Rudiger Dornbusch. Macro Economics London. Mac Graw-Hill.

SEMESTER III

DEVELOPMENT ECONOMICS ECO 331

Objectives:

75 Hrs

The course is intended to give an understanding of the theoretical perceptions of economic growth and development together with the forces bringing about them. It also helps to broaden the awareness of the challenges in the developmental process and thus motivate the students towards the thought process of alternative solutions.

UNIT 1: Concepts and theories of Growth and development

12 Hrs

Concepts and measurements of economic development and the characteristics of developing countries; models of growth and development (Harrod–Domar, Neoclassical model and growth accounting, Lewis dual sector, endogenous growth and their variants); gender and development; GNP, PCI, PQLI, HDI, human capabilities.

UNIT 2: Mobilising domestic resources

08 Hrs

Domestic savings, private capital markets and financial intermediation; rural informal capital markets; insurance; tax policy; monetary policy; inflation

UNIT 3: Mobilising foreign resources

08 Hrs

Foreign capital requirements; multi-national corporations; foreign aid and private foreign investment; foreign remittances; external debt

UNIT 4: Planning for development

08 Hrs

Macro planning models, project appraisal and social cost-benefit analysis; decentralised planning

UNIT 5: Human dimensions of development

08 Hrs

Population growth, determinants of fertility; son preference; employment and unemployment; rural-urban migration and the informal sector; international migration; child labour; nutrition and efficiency wages; education and human capital; poverty; inequality and famines.

Unit 6: Agriculture: role in development

08 Hrs

Resource allocation and producer rationality; price responsiveness; land reform and tenural relationships; technical change and Green Revolution; computerisation of land ownership title: transaction cost.

UNIT 7: International Trade

08 Hrs

Role in development; infant industry protection; the terms of trade; export earnings instability.

UNIT 8: Balance of payment and development

08 Hrs

Balance of payment and exchange rates; international financial crises; industrialization by import substitution and export promotion

UNIT 9: The environment and development

06 Hrs

Sustainable development; market failure; common properties

Recommended Readings:

1. Basu, K. Analytical Development Economics: The Less Developed Economy Revisited. (Cambridge: MIT Press, 1997) [ISBN 9780262024235].
2. Murphy, K.M., A. Scheifer and R. Vishny, 'Income Distribution, Market Size and Industrialization', Quarterly Journal of Economics 104(3) 1989, pp. 537–564.
3. Ray, D. Development Economics. (Princeton NJ: Princeton University Press, 1998) [ISBN 9780691017068].
4. Thirlwall, A.P. Growth, and Development with Special Reference to Developing Economies. (Basingstoke: Palgrave Macmillan, 2006) eighth edition [ISBN 9781403996015].
5. Todaro, M.P. and S.C. Smith Economic Development. (London: Pearson, 2006) tenth edition [ISBN 9780321311955].
6. Aghion, P. and S. Durlauf, eds. (2005) Handbook of Economic Growth, Vol. 1A. North Holland [AD, HD75.5 .H35 2005, available at Science Direct].
7. Banerjee, A., R. Benabou, and D. Mookherjee (2006) Understanding Poverty. Oxford University Press. [BBM, HC79.P6 U534 2006]
8. Barro, R. and X. Sala-i-Martin (2004) Economic Growth. Second edition. MIT Press. BSM]
9. Rodrik, D. editor (2003) In Search of Prosperity: Analytic Narratives on Economic Growth Princeton University Press. [HD73 .I52 2003]
10. D. Mookherjee and D. Ray (2001) Readings in the Theory of Economic Development. Blackwell Readings for Contemporary Economics, Blackwell Publishers [HD75 .R423 2001].
11. Hent Diana- Economic theories of Development- An analysis of competing paradigm
12. Meier and Baldwin- Economic Development
13. J. Behrman and T. N. Srinivasan (Eds)- Handbook of Development Economics Elsevier 1995
14. Bardhan Pranab and Christopher Udry- Development Micro Economics. Oxford University press. 2000. New York
15. Nafziger- Economics of Developing countries. Prentice Hall 1997
16. M. L. Jhingan, The Economics of Development and Planning, 38th ed. Vrinda Publications, 2005

SEMESTER IV

INTERNATIONAL ECONOMICS ECO 431

Objectives:

75 Hrs

The objectives of the course are, to provide a framework for consistent reasoning about international flows of goods, factors of production, and financial assets, and their implications for the national economy; to give a sense of the main findings of empirical work in the above areas.

PART 1: THEORY OF INTERNATIONAL TRADE AND PROTECTION

UNIT 1: Introduction and Essentials

06Hrs

Important issues in international trade; History and present state of world trade flows; History of the development of trade theory; The Ricardian model of trade; Empirical evidence and policy results

UNIT 2: Factor Price Equalization and Trade, Gains and Losses from Trade and Empirical Evaluation of Trade Patterns

10 Hrs

Heckscher-Ohlin model of trade; Stolper-Samuelson effects; Rybczynski effects; The “Specific Factors” model of trade; Deviations in the Short Run; International experience; Problems with the Heckscher - Ohlin model; Empirical evidence

UNIT 3: Market Imperfections and Trade, Strategic Trade Policies and Development through Trade Policies

10 Hrs

Imperfect Competition and trade; Externalities and protection in the model; Empirical evaluation of importance; Technology and Externalities; Imperfect Competition and Protection; Import Substitution and Infant Industry argument; Export-oriented development strategies; The East Asian Miracle

UNIT 4: Tariffs and Non-Tariff Barriers to Trade and Government Intervention in Trade

07 Hrs

Economics of Tariffs; Economics of Quotas; Protection and Imperfect Competition; Welfare arguments; Income Distribution; Optimum Tariff

UNIT 5: World Trade Organization, Preferential Trading Arrangements, Custom Unions and Economic Integration

09 Hrs

Preferential Trade Areas; International Institutions; WTO and GATT: History; Anti-dumping; Environmental regulations; Traditional Customs Union Theory-Trade Creation and Trade Diversion; Conditions that maximize the chance that a CU is beneficial

PART 2: INTERNATIONAL MACROECONOMICS

UNIT 6: Introduction to international Macroeconomics, Foreign Exchange Markets and Foreign Exchange Rates

07 Hrs

Distinction between International Trade and International Macroeconomics; Functions of the Foreign Exchange Markets, Foreign Exchange rates, Spot and Forward Rates; Foreign Currency Swaps, Futures and Options.

UNIT 7: Exchange Rate Determination

08 Hrs

Purchasing Power Parity Theory; Monetary Approach to the Balance of Payments and Exchange Rates: under fixed exchange rate system, under flexible exchange rate system exchange rate determination.

UNIT 8: Price Adjustment mechanisms with Flexible and Fixed Exchange Rates

08 Hrs

Adjustment with flexible exchange rates; Effect of Exchange Rate Changes on Domestic prices and the Terms of Trade; Stability of Foreign Exchange Markets: The Stable and Unstable Foreign Exchange Markets.

UNIT 9: The International Monetary System and Macroeconomic Policy Coordination

10 Hrs

The Gold Standard and the Interwar Period, The Evolution of the Bretton Woods System; The IMF; Policy coordination with floating exchange rates; Optimum currency area theory; The single currency and economic integration; The EMU

Recommended Readings:

1. Dominick Salvatore, International Economics, Eighth Edition, Wiley, 2003.
2. Krugman P., Obstfeld M. International Economics: Theory and Policy, Addison Wesley, 2003.
3. Charles Van Marrewijk, International Economics - Theory, Application and Policy, OUP, 2007.
4. Sodersten Bo., Reed G. International Economics, 3rd ed. Macmillan, 1994.
5. Vanags A., International Economics. University of London, Subject Guide, 2001.
6. Krugman P., Pop Internationalism, MIT Press, 1997
7. Ethier W., Modern International economics, 3rd edition. W.W. Norton & Co., 1997.
8. Elsevier Science B.V., Handbook of International Economics, Vol. 3, Amsterdam 1997.
9. Bowen H., Hollander A., Viaene J. Applied international trade analysis. Macmillan, 2012

SEMESTER V

INDIAN ECONOMY (COMPULSORY PAPER) ECO 531

Objectives:

60 Hrs

This paper aims at initiating among the students discussion on some of the key issues of Indian economy with special reference to Karnataka. It also aims at making the students understand the macroeconomic challenges and policy management in India with special emphasis on Karnataka. This paper exposes the students to the quantitative data on various economic aspects and policies in India and Karnataka as well.

UNIT 1: India as a Developing Economy

12 Hrs

India and the global economy; emerging issues of development; economic planning- broad objectives, targets, strategies and the current five year plan in detail; India's human development in global perspective.

UNIT 2: Agriculture, Industry and Service sectors in India

12 Hrs

Growth trends of primary, secondary and tertiary sectors, state wise comparison, comparison with other countries, problems and prospects; public sector in India; External sector, Foreign investment; foreign trade- composition, direction and organization.

UNIT 3: Macroeconomic Policies and Parallel Economy

12 Hrs

Recent economic reforms; changing role of RBI-recent changes in monetary and fiscal policy; internal and external debt and fiscal reforms, federal finance, Finance commissions, black money - estimates, genesis, consequences and remedies and comparison with other countries; outcomes of developmental programs.

UNIT 4: Karnataka Economy- An Overview

12 Hrs

Trends and growth pattern of SGDP and human development in Karnataka, comparison with neighbouring and other leading states in India; sectoral performance, problems and prospects of agriculture, industry and service sectors in Karnataka.

UNIT 5: Economic planning and policies of Karnataka

12 Hrs

State Planning process; planning objectives and strategies, regional disparities; education, health and housing; budgetary trends, credit supply, fiscal policy, SFCs, industrial and agricultural policies; Panchayath raj institutions and decentralized planning for local development, outcomes of developmental programs.

Recommended Readings:

1. Rudder Dutt and K.P.M.Sundaram (2011). *Indian Economy*, 63rd Edition, S. Chand & Company Ltd.
2. S.K.Mishra and V.K.Puri (2010). *Indian Economy*, 28th Revised Edition, Himalaya Publishing House.

3. Jagdish Bhagavathy and Padma Desai- *Planning for Industrialization*
4. Uma Kapila (2008). *Indian Economy since Independence (Ed)*, 19th Edition, Academic Foundation
5. Brahmananda P.R. and V.R.Panchamukhi,(Ed) - *The Development Process of the Indian Economy*.
6. Planning Commission, Government of India- *Five Year Plan Documents*
7. K.N. Agarwal (2009). *Indian Economy:Problems of Development of Planning*, 35th Edition, New Age of International Publishers.
8. Department of Disinvestment, White Paper, 2000.
9. Hand book of Karnataka - Gazetter Department
10. Karnataka Economy- H.R.K , N.T. Somashekar
11. Economic Review- Govt of India publications
12. The India year book
13. Economic Survey
14. *The Economy of Karnataka: An Analysis of Development and Planning*, T.K. Meti.
15. *Planning and development in Karnataka: Targets, allocations, and perspectives*, N. Somashekhara.

ELECTIVES

HEALTH ECONOMICS ECO 542A

Objectives

60 Hrs

To provide students basic knowledge of health economics and health policy issues; To make the students aware of the economy and policy aspects of production, distribution and organization of health care services; To make them aware of the special characteristics of the health care sector.

UNIT 1: Nature and scope

07 Hrs

Nature of health economics; Role of health economics in healthcare decision making and health policy; Good health; The determinants of health; Health function. Role of health sector in the economy

UNIT 2: Health system and the organization of health care

16 Hrs

Measurement of health; The demand for health and the demand for health care. Supplier induced demand. The organization of health services; evaluation of health system; Efficiency, equity and sustainability; Trade- off between efficiency and equity; Health finances in developing countries; Health insurance, community finances, user charges, supply of health services. Markets in the health sector; Market failure in the health sector; Health Maintenance Organization and Managed Care

UNI 3: Costs and costing

08 Hrs

Costs-direct and indirect costs; Types of costs; Cost curves. Costing for evaluation and costing for the budget

UNIT 4: Costs and outcomes

08 Hrs

Cost effectiveness analysis- cost utility analysis-cost-benefit analysis. Issues in cost benefit analysis

UNIT 5: Planning in health care

10 Hrs

Need for planning, process of planning in the health sector-prioritizing health goals- choice of strategy, plan resource mobilization, choice of technology. Manpower planning-stages in technology development

UNIT 6: Quality in health care

11 Hrs

The concept of quality- assessment of quality; Aspects of quality in health care-determinants of quality; Quality control

Recommended Readings:

1. Raman Kutty, V- *A Primer of Health Systems Economics*. Allied Publishers ltd.
2. Charles.E.Phelps- *Health economics*. Addison Wesley.
3. Sherman Folland, Allen Goodman, Miron Stano- *Economics of Health and Health Care* 2006, new York: ,Macmillan
4. Clewar, Ann and David Perkins, 1998. *Economics for Health Care Management*.

**MATHEMATICAL METHODS FOR ECONOMICS
ECO 542B**

Objectives:

60 Hrs

To help students to acquire basic skills in applied mathematics; To develop skills in the field of economic analysis and reasoning; To develop skills in the presentation of data.

UNIT 1:

15 Hrs

Introduction: - The changing scenario in economic science - Advantages and Disadvantages of using mathematics in economics.

Functions: - Meaning - Distinction between a relation and a function - Functional notations: general, exact and specific forms - Explicit and Implicit forms - Inverse from - Types of functions: Linear, quadratic, cubic, exponential and logarithmic functions - Their simple uses in Economics- Market equilibrium: - Effects of taxes and subsidy on equilibrium price and quantity - Simple macro model (Keynesian macro equilibrium model).

Exponential functions as applied in interest compounding:-

Matrices:- Meaning - Types of matrices - Elementary operations on matrices - Inverse matrix - Methods of solving simultaneous equations using matrices - Determinants and their uses in solving simultaneous equations - Cramer's rule.

UNIT 2:

15 Hrs

Differential Calculus: - Meaning - Simple derivative rules (one independent variable) - Application of derivatives in Economics.

Partial Derivatives (Two independent variables) - Rules - Uses of partial derivatives in economics

Elasticity - Definition - Elasticity theorems - Methods of measuring elasticity- Applications of elasticity in Economics: Price elasticity - Substitutes and complements - Income elasticity - Engel's Law - Cost elasticity.

UNIT 3:

15 Hrs

Maxima and Minima of functions (one independent variable): Simple applications from Micro Economics.

Maxima and Minima of functions (two independent variables): Unconstrained and constrained models - Applications of maxima and minima in Economics: Theory of consumption (numerical problems of utility maximization) - Theory of production: production function, Producer's equilibrium: output, revenue and profit maximization and cost minimization problems under perfect competition, monopoly, duopoly and oligopoly markets.

UNIT 4:

10 Hrs

Homogeneous functions: Cobb - Douglas and CES production functions and their properties - Euler's theorem and adding up controversy.

Market Equilibrium: Effects of specific and advalorem taxes on price and output - Effects of subsidies

Walrasian and Marshallian static stability conditions

UNIT 5:**05 Hrs**

Integral Calculus: Simple rules of integration - Infinite and definite integral - Calculation of TR and TC functions from their respective MR and MC. **Consumer's** surplus and Producer's surplus.

Recommended Readings:

1. R. Veerachamy: *"Quantitative Methods for Economists"* New Age International Publishers.
2. Chiang, A. C: *"Fundamental Methods of Mathematical Economics"*
3. Allen, R.G.D: *"Mathematical Analysis for Economists"*
4. Yamane: *"Mathematics for Economists - An Elementary Survey"*

SEMESTER VI

FINANCIAL ECONOMICS (COMPULSORY PAPER) ECO 631

Objectives:

60 Hrs

This course introduces students to the conceptual and practical operations of the financial markets, institutions and instruments network in Indian context. The course is intended to provide an in-depth understanding of the operational issues of capital and money market network along with its regulatory framework.

UNIT 1: Introduction to Financial Economics

12 Hrs

Role of financial intermediation – financial markets – money vs. capital markets – primary vs. secondary markets – instruments in the money market – instruments in the capital markets – financial institutions.

UNIT 2: Financial Regulations

7 Hrs

Money market regulations and credit policy of RBI – capital market regulations of SEBI – legal norms in security trading

UNIT 3: Equity Market

12 Hrs

Private vs. Public placement- IPO and Book building process – stock quotations – stock indexes – stock market performance.

UNIT 4: Stock Evaluation

12 Hrs

Stock evaluation methods – fundamental vs. technical analysis – Efficient Market Hypothesis – Capital Asset Pricing Model – factors affecting stock prices – economic factors – market related factors – firm specific factors – indicators of future stock prices.

UNIT 5: Stock Risk:

07 Hrs

Measures of risk – Beta of the stock – Risk and return framework and investment decisions – methods of determining maximum expected loss

UNIT 6: Derivative Security Market:

07 Hrs

Financial future market – valuation of financial futures – option market – speculation with option market – hedging – arbitrage and foreign exchange futures market.

UNIT 7: Financial sector reforms

03 Hrs

Concept of capital account convertibility – lessons from other countries – Indian preparedness to full convertibility.

Recommended Readings:

1. Boddie, K.M., and Ryan, 2003, Investments, McGraw-Hill.

2. Copeland, T.E. and J.F. Weston, 1988, *Financial Theory and Corporate Policy*, Addison Wesley.
3. Hull, J.M, 2003, *Futures, Options and other Derivatives*, Prentice Hall.
4. Ross, S.A., Randolph W Westerfield, Bradford D Jordan, and Gordon S Roberts, 2005, *Fundamentals of Corporate Finance*, McGraw-Hill.
5. Robert C Radcliffe, *Investment Concepts, Analysis and Strategies*.
6. Machiraju H R, *Indian Financial System*, Vikas Publishing House
7. L.M. Bhole, *Financial Institutions and Markets*.
8. Donald E Fisher, Roland J Jordan, *Security Analysis and Portfolio management*, Eastern Economy Edition.
9. Douglas Heath and Jannis K Ziama, *Contemporary investment: Security and (Portfolio Analysis, The Dryden Press)*
10. William F Sharpe and Gordon J Alexander, *Investments*, Prentice Hall, India
11. J.L. Farrell, *Portfolio management* McGraw-Hill
12. Reghu Palat, *Fundamental Analysis*.
13. Jay Shanken, *the Arbitrage pricing Theory: is it testable?* Journal of Finance; 37:5

Journals:

1. Journal of Finance,
2. Journal of Financial Economics,
3. Econometrica
4. Review of Financial Studies.

LECTIVES

ENVIRONMENTAL ECONOMICS ECO 642A

Objectives:

60 Hrs

To enhance the skills of the students in the application of the economic principles in solving environmental problems; To make the students understand environmental problems and policy management.

UNIT 1: Introduction to environmental economics

13 Hrs

Definition. Nature and scope. Ecology and resource economics. Nexus between economics and environment. Environment and economic development. Sustainable development. Private versus social costs. Externalities.

UNIT 2: Environmental resources and problems in India

16 Hrs

Energy- renewable and non- renewable energy sources- access to Common Property Resources(CPR). Pollution. (1) domestic, solid waste, health, sanitation and safe drinking water.(2) industry, air pollution, water pollution, soil pollution, noise pollution.(3)agricultural-soil erosion, deforestation and (4) auto mobile pollution.

UNIT 3: Environmental quality

9 Hrs

Non marketed goods; Trade- off between environmental protection and economic growth. Environmental education; Environmental's Kuznet s curve.

UNIT 4: Environment and society

12 Hrs

Pollution and environment. Impact of population growth(trends, sex ratio, rural and urban) on environment. Poverty and environment. Urbanization and environment. People's participation and environmental movement

UNIT 5 Management and policy

10 Hrs

Fiscal tools: Pollution taxes- subsidies, pollution control boards- national and international environmental policies. Legislative measures of environmental protection in India

Recommended Reading

1. Charles Kolstad- *Environmental Economics*
2. Karpagam I.M., - *Environmental Economics*, Sterling Publishers, Pvt. LTD, New Delhi.
3. Guva,D.D. and Kumar Absan, *Energy And Economic Development*, Amar Prakashan, New Delhi.
4. Sankaran,S, *Environmental Economics*, Mangalam Publications, Madurai.
5. Sankar, V, *Environmental Economics*(Ed) 2001, Oxford University Press, New Delhi.
6. Rabindra, N.Bhattacharya , *Environmental Economics*(Ed), 2001, Oxford University Press, New Delhi.
7. Agarwal, S.K., *Environmental Issues And Themes*, 1997,APH Publishing Corporation, New Delhi.

8. Sumi Krishna, *Environmental Politics Peoples Lives And Development Choices*,1996, New Delhi.
9. Baumol,W.J., And W.E.Oates, *The Theory Of Environmental Policy* 1988, II Edition, Cambridge University Press, Cambridge.

**STATISTICAL METHODS FOR ECONOMICS
ECO 642B**

Objectives

60 Hrs

To help students to acquire basic skills in applied statistics; To develop skills in the field of economic analysis and reasoning; To develop skills in the presentation of data.

UNIT 1: Introduction

15 Hrs

Meaning - Scope of statistics - Importance and limitation of statistics

Collection of Data: Planning and organizing a statistical enquiry - Methods of collecting primary data - Sources of secondary data - Framing a Questionnaire, **Sampling:** Census method Vs. sample method - Theoretical basis of sampling: Law of statistical regularity - Law of inertia of large numbers - Sampling methods: Random and non-random sampling.

UNIT 2: Classification of data

10 Hrs

Meaning - Methods of classification.

Tabulation of data: meaning - Role - Parts of a table - General rules of tabulation.

Presentation of data: Diagrams and graphs - General rules for construction a diagram - Types of diagrams - Types of graphs.

UNIT 3: Measures of central tendency

15 Hrs

Mean, median and mode - Geometric and Harmonic means.

Measures of Dispersion: Range, interquartile range and quartile deviation, mean deviation, standard deviation and Lorenz curve. **Skewness and Kurtosis, Correlation Analysis:** Meaning - Types of correlation - Methods of studying correlation: Scatter diagram method, Graphic method, Karlpearsons co-efficient of correlation, Rank method, Concurrent deviation method and Method of least squares.

UNIT 4: Regression Analysis

15 hrs

Definition - Regression equations: Y on X and X on Y.

Time Series: Meaning - Components of time series data - Measuring linear trend: Graphic method, method of semi-averages, method of moving averages and method of least squares.

Index Numbers: Meaning - Uses - Types: Price, Quantity and Value Indices - Problems in the construction of Index Numbers - Methods of constructing Index Numbers: Un-weighted and Weighted - Tests of adequacy of index number formulae - Consumer price index numbers.

UNIT 5: Testing of Hypothesis

05 hrs

Formulation of statistical hypothesis - Null and alternative - Errors in testing the hypothesis: Type I and Type II errors - Level of significance - Hypothesis testing based on z, t, x and F tests.

Recommended Readings:

1. Gupta, S.C and V. K. Kapoor: *Fundamentals of Applied Statistics.*
2. Croxton, F.E., D.J. Cowden and S. Klein: *Applied General Statistics.*
3. Gupta, S.P: *Statistical Methods.*

4. Elhance: *Introduction to Statistical Methods*.
5. R. Veerachamy: "*Quantitative Methods for Economists*", 5. New Age International Publishers