BHARATHIAR UNIVERSITY: COIMBATORE –46

M.Sc. (Applied Econometrics) CBCS

Syllabus with effect from the academic year 2011 - 2012
(Applicable to the students admitted from July, 2011 onwards)

ELIGIBILITY FOR ADMISSION TO THE COURSE

Any Graduate who have studied Economics / Econometrics / Statistics / Mathematics / Business Economics / Commerce / Management as one of the papers, of study is eligible for admission to M.Sc (Applied Econometrics)

COURSE OF STUDY AND SCHEME

Sem	Code No	Subject	Credit	University Examination		
				Internal (%)	External (%)	Total
I	11ECOC13A	Business Economics	4	25	75	100
	11ECOC13B	Mathematics for Economists	4	25	75	100
	11ECOC13C	Economics of Human Resources	4	25	75	100
	11ECOC13D	Statistical Methods	4	25	75	100
	11ECOC1EA	**Elective:** Marketing Management	4	25	75	100
		Supportive - I	2	12	38	50
II	11ECOC23A	Mathematical Economics	4	25	75	100
	11ECOC23B	Macro Economics	4	25	75	100
	11ECOC23C	Basic Econometric Methods with CA	4	25	75	100
	11ECOC23D	Export Marketing	4	25	75	100
	11ECOC2EB	**Elective :** Operation Research	4	25	75	100
		Supportive - II	2	12	38	50
III	11ECOC33A	Research Methodology	4	25	75	100
	11ECOC33B	Public Economics	4	25	75	100
	11ECOC33C	Advanced Econometrics	4	25	75	100
	11ECOC33D	Financial Econometrics	4	25	75	100
	11ECOC3EC	**Elective:** Industrial Economics	4	25	75	100
		Supportive - III	2	12	38	50
IV	11ECOC43A	Applied Econometrics	4	25	75	100
	11ECOC43B	Economics of Development	4	25	75	100
	11ECOC43C	Economic Administration	4	25	75	100
		Research Project & Viva-voce	12	60 (Viva)	240	300

Total Marks: 2250 **Credit: 90**

Subject Title : BUSINESS ECONOMICS

Course Number : 11ECOC13A

Subject Description:

This subject is aimed at providing knowledge on basic Economic Principles, as well as applied skills to enable the students to gain managerial decision making and skills.

Goals:

This paper intends to give the students a good understanding of the economic theory and applying it in business decisions.

Objectives:

- To gain sound knowledge in basic Economic theories, concepts and models.
- To gain sound knowledge to apply economic theories and models to execute managerial functions.

Contents:

UNIT – I

Managerial Economics – Meaning, Nature and Scope – Economic Theory and Managerial Economics – Role and Responsibilities of Managerial Economist. Demand Analysis – Demand Forecasting – Methods of Demand Forecasting.

UNIT – II

Cost Analysis – Concepts – Classifications – Determinants – Cost-output Relationship – Economies and Diseconomies of Scale – Cost Control – Cost Reduction. Production Function – One Variable Input – Two Variable Inputs – All Variable Inputs - Short-run and Long-run –

UNIT – III

Supply Analysis – Meaning – Law of Supply – Elasticity of Supply – Factors Influencing Supply. Market Structure – Perfect Competition – Monopoly and Monopsony – Price Discrimination – Monopolistic Competition – Oligopoly and Oligopsony.

UNIT – IV

Pricing Policies – Pricing Methods – Specific Pricing Problems – Price Discounts and Differentials – Product-line Coverage and Pricing – Price Forcasting. Profit – Meaning – Nature – Profit Policies – Profit Planning and Forcasting.

UNIT – V

Capital Budgeting – Cost of Capital – Risk – Probability and Investment Decisions. Business Cycle – Business Policies – Economic Forcasting for Business – Econometrics for Management – Mathematical Economics of the Firm – Economic Basis of International Business.

References:

1. R.L. Varshney and K.L. Maheswari "Managerial Economics" Sultan Chand & Sons – Educational Publishers, New Delhi.
2. M.L.Trivedi "Managerial Economics – Theory and Applications," Tata Mc Graw Hill, 2002.
3. AHUJA .H.L. – Business Economics, S.Chand & Co, New Delhi,2004.

Subject Title : MATHEMATICS FOR ECONOMISTS

Course Number : 11ECOC13B

Subject Description:

This course deals with the basic knowledge relating to set theory, relation and functions, derivations, optimization problems and matrix algebra and their applications in economics.

Goals:

The course intends to equip students to develop working knowledge of basic mathematical operations and tools. The course aims at using such skills to apply to economic theory and managerial decisions.

Objectives:

- To impart various mathematical and statistical methods
- To apply quantitative techniques in managerial practices.

Contents:

UNIT – I

Set Theory: Operations on sets and Laws of set operations- Properties of real number solutions of quadratic equations - Solution to Linear Equations with two variables.

UNIT – II

Relations and Functions: Functions of one variable - straight line, parabola, rectangular hyperbola - Exponential and logarithmic functions. Concave and Convex functions - Applications in Business Economics.

UNIT – III

Derivatives and their interpretation and techniques of derivatives. Relationships among Total, Average, and Marginal Revenue and Cost and Elasticity of Functions. Functions of two variables - Partial derivatives and their applications in Economics.

UNIT – IV

Optimisation problems involving one or two variables - Applications in Economics - Homogeneous function and their properties, Eulers Theorem, Cobb-Douglas and CES Production Functions and their properties.

UNIT – V

Matrix Algebra – Determinants and properties, Types of Determinants - Matrix: Square Matrix, Null Matrix, Unit Matrix, Multiplication and Scaler Matrix, Operations - Addition and Subtraction of Matrix, Multiplication - Transpose of a Matrix and Inverse of Matrix. Solutions for simultaneous equations - Crammer's Rule.

Reference Books:

1.Alpha C Chiang, "Fundamental Methods of Mathematical Economics", 3ed McGraw Hill, New York.
2.Tara Yamne, "Mathematics for Economics", 2nd ed. Engle wood Cliffs, New Jercy.
3.Draper, Jean.E, Lingman.K, Jane.S. "Mathematical Analysis-Business and Economic Applications", Harper International ed., New York.
4.Mabbett A.J., "Workout Mathematics for Economists", Macmillan, London.
5.Allen R.G.D., "Mathematical Analysis for Economists", ELBS, Macmillan.
6.Medha and Madhnani, "Mathematics for Economics", Sultan Chand, New Delhi.
7.Dowling.T.E., Introduction to Mathematical Economics, McGraw Hill (Schamm's outline service), New Delhi.
8.Neber.E.J., Mathematical Analysis: Business and Economic Applications, Harper International Edition, New York.

Subject Title : ECONOMICS OF HUMAN RESOURCES

Course Number : 11ECOC13C

Subject Description :

This course is aimed at providing Ideas on basic concepts in Economics of Human Resources as well as applied skills to enable the students to gain knowledge on human resources.

Goals:

This paper intends to give the students a good understanding of the contents of human resources and applying it in business decisions.

Objectives:

- To familiarize in theories and concepts of human resources.

- To gain sound knowledge on human capital theories.
- To enable the students to know about the importance of investment in health and education.

Contents:

UNIT-I:

Importance of Human Resource- Human Resource and Economic Development-The Theory of Investment in Human Capital –Return to Investment in Human Capital –Gender Inequalities- Unemployment-Kinds, Causes and Remedies.

UNIT-II

Importance of Investment in Human Resource; Education and Economic Development –Women's Education- Public Expenditure on education in India-Higher Education in India.

UNIT-III

Importance of Human Resource in Health- Investment in Health - Importance of Health Economics- Demand for Health - Healthcare expenditure in India-Healthcare issues and Challenges- Health Insurance for the Poor.

UNIT-IV

Demand for Labour- Supply of Labour- Theories of Labour Market- Wage Theories – Trade Unions – Women and Child Labour.- Labour Market discrimination- Social Security Measures in India.

UNIT-V

Migration- Types of Migration: Internal and External- Reasons for Migration- Theories of Migration: Micro and Macro –Effects of Urbanisation - Brain Drain in India

Reference Books:

1. Becker. G.S Human Capital
2.Blaug.M An introduction to Economics of Education, Penguin Books.
Economics of Education-Vol -I & II, Penguin Books and ELBS.
3. Psacharapoulos.G Returns to Education.
4. Psacharapoulos.G Economics of Education-Research Studies Program Press
5. Schultz.T.W Economic Value of Education.
6. Nidhi Shah Human Resource Development in Healthcare

Subject Title : STATISTICAL METHODS

Course Number : 11ECOC13D

Subject Description:

This course deals with the basic knowledge relating to set theory, relation and functions, derivations, optimization problems and matrix algebra and their applications in economics.

Goals:

The course intends to equip students to develop working knowledge of basic mathematical operations and tools. The course aims at using such skills to apply to economic theory and managerial decisions.

Objectives:

- To impart various mathematical and statistical methods
- To apply quantitative techniques in managerial practices.

Contents:

UNIT– I

Introduction – Functions of Statistics – Applications of Statistics – Limitations of Statistics – Statistical Survey – Collection of Data – Sampling and Sample Designs – Classification and Tabulation of data.

UNIT – II

Measures of central value – Objectives of averaging – Calculation of Arithmetic Mean – Discrete Series – Continuous Series – Mathematical properties of Arithmetic Mean – Merits and limitations of mean – Median – Computation of Median – Discrete Series – Continuous Series – Mathematical property of median – merits and limitations of median – Mode – Calculation of Mode – Discrete Series – Continuous Series – Merits and limitations of mode.

UNIT – III

Measures of dispersion – Significance of measuring variation – Methods of studying variation – Mean Deviation – Calculation of Mean deviation – Continuous series – merits and limitations – Standard deviation – Difference between mean and standard deviation – Calculation of Standard deviation – merits and limitations – Lorenz curve.

UNIT– IV

Skewness – measures of Skewness – correlation analysis – Regression Analysis – Index numbers – Analysis of time series – Interpolation and Extrapolation – Probability – Theoretical distributions – Binomial – Poisson – Normal distribution – Test of hypothesis.

UNIT– V

Analysis of Variance (ANOVA) and 'F' test – Business forecasting – partial and multiple correlation – Non-parametric tests – Advantages – Kruskal-Wallis or 'H' test – Spearman's Rank Correlation – Limitations – Decision Theory.

References:

1. Dr. S.P. Gupta "Statistical Methods," Published by Sultan Chand & Sons.
2. D.R. Agarwal, "Mathematics and Statistics in Economics," Vrinda Publications (p) LTD.

Subject Title : MARKETING MANAGEMENT

Course Number : 11ECOC1EA (Elective)

Subject Description:

The Subject aims at providing basic knowledge on marketing, functions of marketing, pricing of the product, physical distribution product promotional stratifies and cousumer probeebin

Goals:

This paper methods to develop understanding about the concept of marketing, is functions and skills required to promote a product for marketing.

Objectives:

- To acquire basic knowledge about the functions of market.
- To understand the product planning and development
- To apply the principles marketing in scientific decision making process and problem solving in modern marketing management process.

Unit – I: Introduction: Nature, Scope and Importance of Marketing - Evolution of Marketing Concept – Marketing Environment – Functions of Marketing – Market Segmentation: Concept, Benefits, Methods – Consumer Behaviour – Buying Motives, Theories.

Unit – II: Product and Pricing: Concept of Product – Product Planning – New Product Development, Meaning and Steps – Product Life Style – Pricing: Significance and Factors Affecting Pricing – Pricing of Objectives – Pricing Policies – Kinds of Pricing – Pricing of New Product.

Unit – III: Physical Distribution: Importance of Distribution Channel – Kinds of Channel Members – Factors Influencing Distribution Channel - Types of Middlemen – Function of Middlemen – Inventory Control.

Unit – IV: Promotion: Production Promotion – Meaning, Objectives and Methods of Product Promotion. Advertising: Meaning, Objectives and Kinds of Advertising – Scientific Advertising – Advertising Management – Personal Selling: Meaning and Importance of Personal Selling – Kinds of Salesmen – Selling Process.

Unit – V: Marketing and Society: Need for Consumer Protection – Measures for Consumer Protection – Consumerism – Evolution and Approaches to Consumerism – Laws to Protect Consumers.

Reference

1. **Philip Kotler:** Marketing Management Practice – It all of India, New Delhi.
2. **Gupta C.B. & Rajan Nair. N:** Marketing Management, Sultan Chand & Sons, New Delhi.
3. **Ramasamy V.S. and Namakumari. S:** Marketing Management, Macmillan India, New Delhi.

Subject Title : MATHEMATICAL ECONOMICS

Course Number : 11ECOC23A

Subject Description:

This course deals with the basic knowledge relating to set theory, relation and functions, derivations, optimization problems and matrix algebra and their applications in economics.

Goals:

The course intends to equip students to develop working knowledge of basic mathematical operations and tools. The course aims at using such skills to apply to economic theory and managerial decisions.

Objectives:

- To impart various mathematical and statistical methods
- To apply quantitative techniques in managerial practices.

Contents:

UNIT – I

Trigonometry – Types of Functions. Analytical Geometry – Co-ordinates of point – Length of Line Joining two points – Mid-Point - The Straight Line – Variables and Functions.

UNIT – II

Partial and Total Derivatives – Technique of Partial Differentiation – Partial Derivatives of Second Order – Cross partial Derivative – Partial Derivatives of Functions of More than Two Variables – Applications of partial Derivatives in Economics – Total Differential – Second Order Total Differential – Derivatives of Implicit Functions – Maxima and Minima of a Function of Two Variables.

UNIT – III

Differential Calculus – Production Function – Constant product Curves: Isoquants – Shape of Isoquant – Isoquant and Ridge Lines – Least Cost Combination – Homogeneous Function – Definition and properties – Properties of Linearly Homogeneous Function – Cobb – Doubles Production Function – Expansion Path for Cobb-Douglas Function. Elasticity of Substitution – elasticity of linearly Homogenous Functions – C.E.S. Functions.

UNIT – IV

Linear Programming – Introduction – The General LP Problem – Transformation of Linear Inequalities into Linear Equations: Slack Variables – Geometry of Linear Programming Problem – Feasible and Basic solutions – Degeneracy – Simplex Method – Minimization Example of Linear programming – Simplex Method for Solving Minimisation Problem – Duality – Linear Programming and Basic Economic concepts.

UNIT – V

Input – Output analysis – Assumptions – The Technological Co-efficient Matrix – Closed and Open Input-Output Model – Co-efficient of Matrix and Open Model – The Hawkins-

Simon conditions – Solution for two Industries – Co-efficient of closed Model – The Leontief Production Function – Weaknesses and Limitations. Game Theory – concepts – Classification – Description – Payoff Matrix – Saddle Point Solutions – Mixed Strategy – Dominated Strategies.

References:

1. Allen R.G.D., "Mathematical Analysis for Economists", ELBS, Macmillan.
2. Medha and Madhnani, "Mathematics for Economics", Sultan Chand, New Delhi.
3. Dowling.T.E., Introduction to Mathematical Economics, McGraw Hill.
4. Alpha C Chiang, "Fundamental Methods of Mathematical Economics", 3ed McGraw Hill, New York.

Subject Title : MACRO ECONOMICS

Course Number : 11ECOC23B

Subject Description:

This course aims at students to gain strong fundamentals of macro economy theories policies and models in a historical prospective.

Goals:

The paper examines the basic principles underling the functioning of an economy and deals with the determination of major macroeconomic aggregates.

Objectives:

- To introduce the students on the sectoral flow of national income, its accounting and factors influencing income at current and constant prices.
- To enable students develop a critical insight on classical Keynesian macro economic models and a functioning at four different market conditions.
- To make students to understand roll of expectation uncertainty and the relationship between inflation and employment by providing exp9osure to the contributions of Friedman and Phelps and Phillps.

Contents:

UNIT – I

National Income – Concept and Measurement – GDP – GNP – Difficulties in the Measurement of National Income - Social Accounting – Presentation of Social Accounts - Importance of Social accounting – Difficulties in Social accounting.

UNIT – II

Classical theory of income, Output and Employment – Keynesian theory of Income, Output and Employment – Say's Law of market – Principles of Effective Demand – Importance of Effective Demand – Aggregate Demand and Aggregate Supply.

UNIT – III

Consumption function – Keyne's Psychological Law of Consumption – Determinants of the Consumption function – Investment function – Types of Investment – Marginal Efficiency of Investment (MEI) – Saving and Investment Equality.

UNIT – IV

Multiplier – Assumption – Leakages – Importance of Multiplier - Super Multiplier - Use of Super Multiplier in Business Cycles - Multiplier in an underdeveloped country – Acceleration – Income Determination – IS and LM Functions – General Equilibrium.

UNIT – V

Monetary Policy – Role of Monetary Policy in a Developing Economy – Fiscal Policy – Inflation – Inflationary Gap – Demand pull Vs Cost push Inflation – Causes of Inflation – Measures to control Inflation – Effects of Inflation – The Phillips Curve .

References:

1. M.L. Jhingan "Advanced Economic Theory," Vrinda Publications (P) Ltd.
2. M.C. Vaish "Macro Economic Theory," Vikas Publishing House (P) Ltd.
3. R. D. Gupta and A.S. Rana "Keynes and Post Keynesian Economics," Kalyani Publishers.

Subject Title : BASIC ECONOMETRIC METHODS WITH CA (Computer Application)

Course Number: 10ECOC23C

Subject Description:

This course presents the basic econometrics techniques emphasizing numerical estimation of economic relationships as applied to practical economic and managerial problems.

Goals:

To enable the students to learn the basic econometric techniques relating to the estimation of parameters.

Objectives:

- On successful completion of the course the students should have understood the estimation techniques, learned the difficulties involved in the estimation process, evaluation of parameters and enable understanding scientific decision making process.

Contents:

UNIT –I

Meaning, definition and scope of econometrics – types and methodology of econometrics – importance of stochastic assumptions – random variables- functions of random variables.

UNIT -II

Simple linear regression model - Methods of ordinary least squares – assumptions and properties of OLS estimators – test of significance of the parameter estimates – measure of goodness of fit.

UNIT-III

Regression analysis and analysis of variance – the assumptions of randomness of u – the probability distribution of disturbances 'u' – simultaneous equation models.

UNIT – IV

Nature of forecasting – econometric approach to forecasting – policy evaluation using an econometric model. Forecasting with a single –equation linear regression model. Testing the difference between a single prediction and realization.

UNIT -V

Introduction to maximum likelihood estimation – maximum likelihood applied to a linear regression model – transformation of variables and maximum likelihood – Using SPSS, E-Views and STATA packages.

References:

1. William H. Greene "Econometric Analysis," Pearson Education.
2. A.Koutsoyiannis, "Theory of Econometrics: An Introductory Exposition of Econometric Methods", Educational Low-Priced Books Scheme, McMillan Education Ltd.,(1992)..ls2
3. Damodar Gujarathi "Basic Econometrics", Tata MCGraw Hill Ltd,1999.4th ed.

Subject Title : EXPORT MARKETING

Course Number : 11ECOC23D

Subject Description:

This course presale an insight export promotion measures, procedure for import and export various documents involved in the experts.

Goals:

This course enables the students to understand the various measures undertaken in India to promote experts and develop basic knowledge on the procedure and documents involved in international trade

Objectives:

- To understand pricing of exports and manage finance for exports
- To be familiar with various procedure and documents to be filed and filled in exports.
- To know the different methods of payment for exports and the measures adopted to promote export.

Unit I: Introduction to Export Marketing: Marketing, Domestic Vs Export – Exporting Word Markets- Marketing Strategy- Product, Pricing, Delivery, Distribution and Promotion- Agency- Corporate Export Policy- EXIM Policy of the Government Origin and Developments and Latest Changes and Policy Objectives.

Unit II: Export Pricing and Financing: Pricing Decisions- Cost Analysis- Market Imperatives- Pricing Objectives- Structure of Export Pricing- Quotations and Their Basis- Step by Step Analysis Costing Projects and Services- Need for Finance- Packing Credit- Post-shipment Credit- Short Term Credit- Medium and Long Term Financing- Export-Import Bank of India their Lending Programmes and Services- ECGC, Objectives and Policies- Financial Guarantees- New Features in Export Finance.

Unit III: Export Procedures and Documentation: Offers and Orders- Production of goods- Excise Duty Procedures- Shipment Formalities and Procedures Banking Procedures- Aligned Documentation System (ADS).

Unit IV: Methods of Payment in Exports: Terms of Payment- Different Types of Letters of Credit- Uniform Customs and Practices for Documentary Credits, International Norms- Advance Payment, CAD, DA, Consignment Basis- Packing Credit, Post-shipment, Procedures.

Unit V: Export Promotion Measures in India: Advance License- IPRS- Duty Drawback- MDF Facilities- Fiscal Benefit- Export Promotion Measures- Foreign Trade Organizations- Export Promotion Council- Commodity Boards- Board of Trade, Trade Industry

Associations- FIEU, STC, MMTC- Export Houses, Trading Houses, Star Trading Houses- Free Trade Zone- 100% Export-Oriented Units.

Text Book:

1. T.A.S Balagopal- Export Management, Himalaya Publishing Houses, Mumbai.

2. Reference

3. Pars Ram – Export What, Where and How, Anupam Publishers, Delhi.
4. M.L Maharajan – A Guide to Export Policy Procedure and Documentation.
5. Jacob Cherian & Parab – Export Marketing, Himalaya Publishing Houses, Mumbai.
1. Kathiresan & Radha – Export Management, Bhavani Publications, Madras.

Subject Title : OPERATIONS RESEARCH

Course Number : 11ECOC2EB (Elective)

Subject Description:

This paper covers the basic operation research techniques and deals with the application of these techniques in business practices.

Goals:

This paper enable the students to familiarize with operation research techniques and its applications in managerial decision making.

Objectives:

- To introduce the students to the basic operation research techniques such as Linear Programming, Game theory, Input-output analysis, PERT and CPM and inventory control that are widely used in decision making.
- To enable the students to apply these technique in current business practices and
- To make them draw inference based on the numerical results obtained.

Contents:

UNIT – I

Operations Research – Meaning – Significance – Features – Types of Models – Scope and Applications.

UNIT – II

Linear programming – Structure – Assumptions – Advantages – Limitations – General Mathematical Model and problems. Graphical Solution Method LP Problems – Important Definitions – Feasible Solution.

UNIT – III

Transportation Problem – Structure – Methods for Finding an initial Solution – Degeneracy – Optimal solution – Assignment Problem – Algorithm – Variations.

UNIT – IV

Net Work Analysis – PERT – CPM – Critical Path – Time Estimates – Determination of Critical Path – Waiting Lines Models.

UNIT – V

Inventory – Functions – Steps – Deterministic Inventory Models – EOQ different Models – Inventory Control Approach – ABC Analysis. Simulation – Process – Monte Carlo Method – Inventory Simulation Model – Decision Tree Analysis – Pay-off Tables.

References:

1. J.K. Sharma "Operations Research: Theory and Applications," Mamillan.
2. C.V. Shenoy, U.K. Srivastava and S.C. Sharma "Operations Research," Wiley Eastern Ltd.
3. Ronald L. Rardin, "Optimization in Operation Research," Prentice Hall.

Subject Title : RESEARCH METHODOLOGY

Course Number : 11ECOC33A

Subject Description:

This course is designed to induce the basic principles and methods of quantitative and qualitative research for conducting the empirical research and writing research report.

Goals:

This course will emphasis on research process includes problem identification, conceptualization of research questions, sampling design, measurement, data collection, analysis and dissemination of findings.

Objectives:

- Upon completion of this course, students should have developed an understanding of the research process, its applications in the economic research and its utilizations in the problem solving in economic research.

Contents:

UNIT – I

Meaning of Research – Objectives of Research – Formulating The Research Problem – Formulation of Hypothesis – Research Design: Pure, Applied, Action and Evaluation Research.

UNIT – II

Sources of Data: Primary and Secondary Sources – Methods of Data Collection: Census and Sample survey – Data Collection Instruments: Observation, Interview , Schedules and Questionnaires – Sampling Design: Probability and non – probability Sampling Methods , Secondary Data Sources in India.

UNIT – III

Analysis of Data: Measures of Central Tendency: Mean, Median and Mode – Measures of Dispersion: Range, Mean deviation, Standard Deviation, Variance, Coefficient of Variation.

UNIT – IV

Elementary Theory of Probability: Probability Distribution and Their Properties: Binomial, Poisson and Normal Distributions. Testing of Hypothesis: Parametric and Non – Parametric Tests – Standard Test of Hypothesis: 'Z' test, 't' test, 'F' test and ANOVA, Chi square test – Index Numbers.

UNIT – V

Presenting Results : Written and oral Reports – Stages in Drafting Written Research Report – Layout of Research Report – Footnotes and Bibliography.

Reference Books:

1. Hooda R.P., "Statistics for Business and Economics", Macmillan Publishing House
2.Johnson L.G. (1986) Research Methodology for Economists, (Philosophy and Practice), MacMillan.
3.Krishnaswamy.O.R. (1993) Methodology of Research in Social Sciences, Himalaya Publishing House, Bombay.
4.Lipsey G.R. & Chrystal.K.A. (1995) An Introduction to positive Economics/EL/BS/ with Oxford University Press,Madras.
5.C.R.Kothari (1988) Research Methodology, Methods and Techiniques - Willey Eastern Ltd., 1988.
6.B.N.Ghosh (1992) Scientific Method and Social Research - Sterling Publishers (P) Ltd., 1992.
7.W.J.Goode and Heete.P.K. (1993) Methods in Social Research, McGraw Hill Ltd., New Delhi.
8.Sankar W & Lakshmanasamy T. (1993) Methodology of Applied Economics Research, Sterling Publishers Pvt.Ltd, New Delhi.

Subject Title : PUBLIC ECONOMICS

Course Number : 10ECOC33B

Subject Description:

This subject is primarily aimed at introducing principles of public finance, role of different governments, public expenditure, taxation, budget and fiscal policy in India.

Goals:

To give exposure to the student, the role and the function of the government in a modern economy. The government plays different roles and performs varied functions which are different from earlier societies. In this context the public financial functions of the government need to be understood by a student, by studying the relevant theory and empirical analysis.

Objectives:

To gain sound knowledge on the principles of public finance.

To understand roles of different governments.

To provide a strong knowledge base on Indian public finance.

Contents:

UNIT – 1

Role of government in managing Economy under different economic systems – Social Welfare Function – Theory of Public Goods - Market failure – Externalities – Problems in allocation of Resources – Theoretical developments in Demand revelation for social goods – Public Choice.

UNIT – 2

Public Expenditure: Theories of Public Expenditure – Structure and Growth of Public Expenditure – Criteria for Public Investment – Income Redistribution – Expenditure Programmes for the Poor.

UNIT – 3

Budget – Concept of PPB – Zero-based Budgeting – Deficit Budgeting – types of Deficits – Public Dept: Trends and composition of Indian Public Dept – Dept Management

UNIT – 4

Taxation : Theory of Taxation – Benefit and Ability-to-pay approaches – Indian Direct and Indirect Taxes – Tax reforms since 1975 – Chelliah Committee Report – Evaluation of Tax Reforms – Taxation Incidence and alternative concepts of incidence.

UNIT – 5

Fiscal Policy – Role of Fiscal policy in India – Principles of fiscal Federalism in India – Vertical and Horizontal Imbalance – Finance commissions and Planning commission – Issues in Revenue devolutions and grants-in-aid – Local Finance.

References:

1. Dr. B.P. Tyagi "Public Finance," Jai Prakash Natu & (O).
2. S.K. Singh "Public Finance in Theory and Practices," Sultan Chand & Co.
3. D.K. Srivastava, "Issues in Indian Public Finance," New Century Publications.

Subject Title : ADVANCED ECONOMETRICS

Course Number : 11ECOC33C

Subject Description:

This course presents the basic econometrics techniques emphasizing numerical estimation of economic relationships as applied to practical economic and managerial problems.

Goals:

To enable the students to learn the basic econometric techniques relating to the estimation of parameters.

Objectives:

- On successful completion of the course the students should have understood the estimation techniques, learned the difficulties involved in the estimation process, evaluation of parameters and enable understanding scientific decision making process.

Contents:

UNIT-1

The theory of house hold – Single demand equations- aggregation- Industrial organization – Nature of econometric project.

UNIT-2

Model with two explanatory variables – partial correlation coefficients – extension of the linear regression model to non-linear relationships.

UNIT -3

Nature of the problem of auto correlation – consequences of auto correlation – Tests and solutions for the case of auto correlation – methods for estimating the auto correlation parameters.

UNIT -4

Assumption of non-Multicollinear Regressors – plausibility of the assumption – tests for detecting Multicollinearity – remedial measures. Practical consequences of Multicollinearity – Dummy variables – Identification and Multicollinearity.

UNIT -5

Time series analysis: Time series vs Cross section data, pooling micro data, approaches to economic forecasting – transforming non-stationary time series. Regression of a Unit root time series on another unit root time series – Estimation and forecasting with vector Autoregression (VAR).

References:

1. William H. Greene "Econometric Analysis," Pearson Education.
2. A.Koutsoyiannis, "Theory of Econometrics: An Introductory Exposition of Econometric Methods", Educational Low-Priced Books Scheme, McMillan Education Ltd.,(1992)..ls2.
3. Damodar Gujarathi "Basic Econometrics", Tata MCGraw Hill Ltd,1999.4th ed.
4. Dr. M. Upender, "Applied Econometrics," Vrinda Publications (P) Ltd.

Subject Title : FINANCIAL ECONOMETRICS

Course Number : 11ECOC33D

Subject Description:

This course presents the basic econometrics techniques emphasizing numerical estimation of economic relationships as applied to practical economic and managerial problems.

Goals:

To enable the students to learn the basic econometric techniques relating to the estimation of parameters.

Objectives:

- On successful completion of the course the students should have understood the estimation techniques, learned the difficulties involved in the estimation process, evaluation of parameters and enable understanding scientific decision making process.

Contents:

UNIT – I

Stochastic Process and their Properties: Martingales – Random Walks – Gaussian White noise processes – Wiener Processes – Stationarity and Ergodocity, Behaviour and Valuation of Security Prices: Generalised Wiener Processes – Geometric Wiener Process and Financial Variable Behaviour in the Short Term and Long Run.

UNIT - II

Time – Varying Volatility Models – GARCH and Stochastic Volatility – ARCH and GARCH and their variations – Multivariate GARCH – Stochastic Volatility – Univariate Persistence Measures – Multivariate persistence – Impulse response analysis and variance decomposition – Non-orthogonal cross – Effect impulse response Analysis.

UNIT – III

Modeling regime shifts – Markov Chains – Estimation – Smoothing – Rime-varying Transition probabilities – Examples cases. State Space Model and the Kalman Filter – State Space Expression – Kalman Filter Algorithm – Time-varying coefficient Models – AR(p) process – ARMA(p,q) process – Stochastic Volatility – Time-varying co-efficient.

UNIT – IV

The basic present value model and its time series characteristics – the VAR representation – The present Value Model on Logarithms with time – Varying discount rates – The VAR representation for the present value model in the log linear farm – Variance Decomposition.

UNIT – V

Financial Economics and econometrics literature on the internet – Econometric Package for Financial and Economic Time series – Learned Societies and Professional Associations – Organizations and Institutions – International Financial institutions and other organizations – Major Stock Exchangers, Options and Futures, Exchanges and Regulators – Central Banks.

References:

1. Peijewang “Financial Econometrics: Methods and Models” Routledge – Taylor & Francis Gorup – Vikas Publishing House, Pvt Ltd.

Subject Title : INDUSTRIAL ECONOMICS

Course Number : 11ECOC3EC (Elective)

Subject Description:

This paper ewers the basic concepts of productivity, various productivity measurements, Theory of Production Functions and numerical measurement of elasticities.

Goals:

This course aims at providing an indepth knowledge on the need, significance, measurement and use of various industrial productivity concepts. The scope also intends to develop skills to monitor and mange enterprises at optimal levels of industrial productivity.

Objectives:

- To introduce to the students the various concepts of Productivity.
- To enable the students to measure productivity numerically using mathematical and econometric techniques.
- To make students to draw inferences based on the numerical measurements.

Contents:

UNIT-I

Meaning of the Firm and Industry-Industrial Efficiency: Meaning of the concept- The determinants of Economic Efficiency- Measurement of the Efficiency Levels- Types of Organisational Form- Business Motives

UNIT-II

The Theory of Cost and Production- The concept of Production Function and Optimal Input Mix- The Efficiency and Size of the Firm- Market Concentration- Measurement of Market Concentration.

UNIT-III

Concept of Total Factor Productivity Index – Methods of Estimation: Kendrick – Solow – Divisia – Malmquist – Economic significance of inter – regional and inter – industry variations in TFPG – estimates.

UNIT-IV

Financial Ratio Analysis- Classification of Financial Ratios- Methods of Project Evaluation: NPV, Payback Method, IRR, ARR, Cost-Benefit Analysis- Inventory Investment Approach.

UNIT-V

Role of Advertising- Pricing Procedures- Pricing in Public Enterprises- The General Determinants of Industrial Location- Approaches to Industrial Locational Analysis- Weber's Theory of Industrial Location.

References:

1. Sanhey S. C. "Productivity Management: Concepts and Techniques," Tata McGraw Hill, New Delhi.
2. Heathfield F.D. "An Introduction to Cost and Production Functions." Macmillon Education & Soren Wibe London.

Subject Title : APPLIED ECONOMETRICS

Course Number : 11ECOC43A

Subject Description:

This course presents the basic econometrics techniques emphasizing numerical estimation of economic relationships as applied to practical economic and managerial problems.

Goals:

To enable the students to learn the basic econometric techniques relating to the estimation of parameters.

Objectives:

On successful completion of the course the students should have understood the estimation techniques, learned the difficulties involved in the estimation process, evaluation of parameters and enable understanding scientific decision making process.

Contents:

UNIT-I

Nature of Heteroscedasticity- OLS estimation in the presence of Heteroscedasticity- Method of Generalised Least Squares (GLS) - Consequences of using OLS in the presence of Heteroscedasticity- Direction of Heteroscedasticity- Remedial measures- Method of weighted of weighted least squares.

UNIT-II

Model selection criteria- Types and consequences of model specification errors- Errors of measurement- Intrinsically linear and intrinsically non-linear regression models- Estimation of linear and non-linear regression models.

UNIT-III

The nature of qualitative response models- The linear probability model- The Logit model- Estimation of panel data regression model.

UNIT-IV

The role of "time" or" lag" in economics- The reasons for lags- Estimation of distributed-lag models- the Koyck approach to distributed-lag model- The Almon or Polynomial distributed-lag- The Granger Causality Test.

UNIT-V

Tests of Stationarity: Graphical Analysis, Autocorrelation Function (ACF) and Correlogram, Statistical significance of autocorrelation coefficients- The Unit Root Test: The Augmented Dickey-Fuller (ADF) Test, The Phillips-Perron (PP) Unit Root Tests.

References:

1. William H. Greene "Econometric Analysis," Pearson Education.
2. A.Koutsoyiannis, "Theory of Econometrics: An Introductory Exposition of Econometric Methods", Educational Low-Priced Books Scheme, McMillan Education Ltd.,(1992)..ls2.
3. Damodar Gujarathi "Basic Econometrics", Tata MCGraw Hill Ltd,1999.4th ed.

Dr. M. Upender, "Applied Econometrics," Vrinda Publications (P) Ltd.

Subject Title : ECONOMICS OF DEVELOPMENT

Course Number : 11ECOC43B

Subject Description:

This course will enable the students to acquire advanced knowledge as to how policies facilitate the economic growth and development in advanced countries.

Goals:

This paper enables the students to understand important growth models and helps them to familiarize with factors that contribute to economic growth.

Objectives:

- To familiarize economic theories and growth models.
- To provide a strong knowledge base on India's economy both during pre and post reform periods.
- To develop a critical study on recent development in the Indian Economy in the context of the world economic scenario.

Contents:

UNIT-I

Economic Growth and Economic Development- Early Growth Theories: Mercantilist Growth Theory, Physiocratic Growth Theory, Adam Smith's Theory of Economic Growth – Keynesian Theory of Secular Stagnation – Marxian Theory of Economic Growth.

UNIT – II

Economic growth- Measurement of Development: Conventional, HDI and Physical Quality of life Indies (PQLI) – Factors Determining Economic development – Obstacles of Economic development: vicious circle of Poverty-Economic Development and sustainable Development.

UNIT III

Doctrine of balanced growth-Concept of unbalanced growth-Dualistic theories-Technological Dualism-Myrdal theory-Regional Inequalities-Growth Models-Harrod-Domar model.

UNIT 1V

Joan Rabinson's model of capital accumulation-Meade's neoclassical model-Solow's Model of Long Run Growth.

UNIT – V

Kaldor's model -Models of Technical Change – Mahalanobis Model, Lewis Model: Two sector economy- Cobb Douglas Production Function.

References:

1. Debraj Ray "Development Economics," Oxford University Press.
2. Jaydeb Sarkhel "Growth Economics," Book Syndicate (P) Ltd.
3. Michacl P. Todaro and Stephen C. Smith "Economic Development," Pearson Addison Wesley.
4. The Economics of Development and Planning – M.L.Jhingan, Vrinda Publications (P) Ltd.

Subject Title : **ECONOMIC ADMINISTRATION**

Course Number : **11ECOC43C**

Subject Description :

This Subject is aimed at providing knowledge on basic Economic Administrative Principles as well as applied skills to enable the students to gain Administrative Decision making skills.

Goals : This paper indents to give the students a good understanding of the economic administration.

Objectives

- To enable the students to appreciate the utility of economics in day – to day life.
- To gain sound knowledge on Economic Administration.

Contents

Unit 1: National Income: Concept of National Income -Circular flow of income; Methods of calculating National Income: Value Added or Product method, Expenditure method, Income method. Concepts and Aggregates Related to National Income: Gross National Product (GNP), Net National Product (NNP), Gross and Net Domestic Product (GDP and NDP) – at Market Price, at Factor Cost; National Disposable Income (Gross and Net), Private Income, Personal Income and Personal Disposable Income; Real and Nominal GDP-GDP and Welfare.

Unit 2: Government Budget and the Economy : Concept and Types of Tax – Direct Tax and Indirect Tax, Canons of Taxation, Subsidy, Transfer Policy ; Budgetary Procedure-Types of Budget-Classification of Receipts : Revenue Receipt and Capital Receipt; Classification of Expenditure : Revenue Expenditure and capital expenditure; Various Measures of Government Deficit : Revenue Deficit, Fiscal Deficit, Primary Deficit-their Meaning and Implications.

Unit 3: Revenue Resources and Public Debt: Deficit Financing and Methods - An Evaluation of Fiscal Policy of Government of India – Highlights of Recent Budget; Sources of Public Debt-Internal and External Debt; Burden of Public Debt; Redemption of Public Debt; Debt Trap; Role of Public Debt with Special Reference to Developing Countries.

Unit 4 : Money Market and Capital Market: Nature and Functions of Indian Money Market- Nature and Functions of Indian Capital Market-Stock Markets - Meaning and functions of Stock Market - Functions of Securities Exchange Board of India (SEBI).
Credit Control: Quantitative Measures: Bank Rate -Open Market Operations - Variable Reserve Ratio - Statutory Liquidity Ratio - Qualitative Credit Control: Limitations.

Unit 5 : Index Numbers and Inflation: Inflation – Meaning and types – Effects of Inflation – Measures to Control Inflation – Inflationary Gap – Deflation – Meaning, Causes, Types, Effects – Deflationary Gap.

Index Numbers : Type – Construction of Simple ,Weighted, Chain-Base Index Numbers-Difficulties-Limitation- Index Numbers and Inflation

References

Dutt and Sundaram: Indian Economy, S Chand and Company, Delhi

Agarwal: Indian Economy, Vikas Publishing Company, Delhi

Indian Economy: AN Agrawal. New Age International Economics : Mc Graw-Hill

Indian Economy: Misra and Puri Himalaya Pub.House

Economic Survey, Different volumes