VELS

INSTITUTE OF SCIENCE, TECHNOLOGY & ADVANCED STUDIES (VISTAS)
(Deemed to be University Estd. u/s 3 of the UGC Act, 1956)
PALLAVARAM - CHENNAI
ACCREDITED BY NAAC WITH 'A' GRADE
Marching Beyond 30 Years Successfully
INSTITUTION WITH UGC 12B STATUS



M.A.Economics

Curriculum and Syllabus

Regulations 2022

(Based on Choice Based Credit System (CBCS))

and

Learning Outcomes based Curriculum Framework (LOCF)

Effective from the Academic year

2022-2023

Department of Economics

School of Management studies and commerce

SCHOOL OF MANAGEMENT STUDIES AND COMMERCE

DEPARTMENT OF ECONOMICS

Vision of the Department

To be a Centre of Excellence in Management Studies and Commerce, imparting and developing Managerial leadership and entrepreneurial skills to students and provide managers for the global market.

Mission of the Department

- Provide an affordable opportunity for diverse group of students and other stakeholders to learn by synergizing education, research, innovation and outreach efforts.
- To inculcate self-discipline, values, ethics and devotion to duty among the students to make them good citizens, leaders, professionals & entrepreneurs.
- To develop the future business leaders through imparting high quality of analytical ability & decision making capability.
- To offer exposure to global business standards and inculcate strategic management aspiration.

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS)

CHENNAI - 600 117

REGULATIONS 2022

PROGRAM OUTCOME (PO)

PO1: Logical / Analytical reasoning: Learners will effectively visualize, conceptualize, articulate, and solve complex problems or address problems that do not have a clear answer, with available information, through experimentation and observation, using microeconomic and macroeconomic theories as well as calculus and statistical tools.

PO2: Conceptualizing: Learners are capable to apply economic analysis for day to day problems by helping them to understand events, identify proposals to solve the issues, evaluate specific policy proposals and implement the policies in an effective manner.

PO3: Integrative Knowledge: Students will broaden their global and disciplinary knowledge, enhancing their understanding of the world around them both within economy and beyond.

PO4: Applicability: Students are provided with opportunity to focus on applied and policy issues in Economics by emphasizing quantitative and theoretical aspects of Economics.

PO5: Superintendence: Students are equipped with skills to work as part of a team and lead others, ensuring them to prepare and navigate diverse audiences and situations.

PO6: Specialization: Learners to understand the economic functioning and conditions of our country in the context of past, present and future.

PO7: The Teacher and Society: Application of reasoning for the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional teaching practice.

PROGRAM EDUCATIONAL OBJECTIVES (PEO)

PEO1: Program enables the learners to build up a professional carrier as economists, financial advisors, economics planners and policy makers. It prepares them to cope up with the obstacles involved in the process of economic development.

PEO2: Exhibits theoretical and practical knowledge of economic concepts and theories to explain and understand the business and economic phenomena in the domestic and global context.

PEO3: Acquaint with statistical, mathematical methods to be applied to obtain solutions to pertinent questions by using qualitative and quantitative reasoning. Application of Statistical techniques to analyze and interpret data for more authentication.

PEO4: Equips knowledge of the discipline of Economics including concepts, fundamental theories, fiscal and monetary policies to overcome the problems of inflation and deflation.

PEO5: Publish research findings and innovations in national, international conferences and seminars, project presentations, and publication of research articles in peer reviewed and indexed conferences and journals.

PROGRAMME SPECIFIC OUTCOMES (PSO)

PSO1: Demonstrate competency across economic disciplines, specifically apply the essential elements of core political theories and economics principles to analyse and evaluate problems and to construct and implement solutions in the political environment.

PSO2: As the Post Graduate Course contains the fields like public administration, Indian constitution, Political Geography and cyber laws etc., it enhances them to compute and assess the real situation of the economy.

PSO3: Demonstrate ability to recognize and identify the working of the Indian constitution and its operation at the central and state level.

PSO4: To enable the students comprehend and evaluate how power politics functions at the state, national, regional, and international levels.

PSO5: Offer students the chance to pursue higher education careers in disciplines including law, public administration, gender studies, international relations, sustainable development, environmental law, and fields relating to public policy, international law, and international politics.

VELS INSTITUTE OF SCIENCE, TECHNOLOGY AND ADVANCED STUDIES (VISTAS)

M.A. DEGREE COURSE- ECONOMICS
Course of Study and Scheme of Assessment
Minimum credits to be earned: 92

SEMESTER - I

Catergory	Course Code	Subject	Lecture	Tutorial	Practical	Credits
CORE	22CMCN11	ADVANCED MICRO ECONOMIC ANALYSIS - I	4	0	0	4
CORE	22CMCN12	PUBLIC ECONOMICS- I	4	0	0	4
CORE	22CMCN13	INDIAN ECONOMY- I	4	0	0	4
CORE	22CMCN14	MANAGERIAL ECONOMICS	4	0	0	4
DSE	22DMCN11	STATISTICAL METHODS	3	1	0	4
SEC	22SMCN11	BUSINESS COMMUNICATION	3	0	0	3
			22	1	0	23

SEMESTER - II

Catergory	Course Code	Subject	Lecture	Tutorial	Practical	Credits
CORE	22CMCN21	ADVANCED MICRO ECONOMIC ANALYSIS- II	4	0	0	4
CORE	22CMCN22	PUBLIC ECONOMICS-II	4	0	0	4
CORE	22CMCN23	INDIAN ECONOMY-II	4	0	0	4
CORE	22CMCN24	INTERNATIONAL ECONOMICS	4	0	0	4
DSE	22DMCN21	MATHEMATICAL ECONOMICS	3	1	0	4
SEC	22SMCN21	COMPUTER APPLICATIONS FOR ECONOMISTS	3	0	0	3
			22	1	0	23

SEMESTER - III

Catergory	Course Code	Subject	Lecture	Tutorial	Practical	Credits
CORE	**Code**	MACRO ECONOMICS-1	4	0	0	4
CORE	22CMCN31	MONETARY ECONOMICS	4	0	0	4
CORE	22CMCN32	ENVIRONMENTAL AND RESOURCE ECONOMICS	4	0	0	4
CORE	22CMCN33	ENERGY ECONOMICS	4	0	0	4
DSE	22CMCN34	ECONOMETRICS	3	1	0	4
SEC	22DMCN31	INDUSTRIAL ECONOMICS	3	0	0	3
			22	1	0	23

SEMESTER - IV

Catergory	Course Code	Subject	Lecture	Tutorial	Practical	Credits
CORE	22CMCN41	MACRO ECONOMICS-II	4	0	0	4
CORE	22CMCN42	FINANCIAL ECONOMICS	4	0	0	4
CORE	22CMCN43	RESEARCH METHODOLOGY	4	0	0	4
CORE	22CMCN44	COMPUTATIONAL ECONOMICS	4	0	0	4
DSE	22DMCN41	DISSERTATION	4	0	0	4
SEC	22SMCN41	INTERNSHIP	0	0	3	3
			23	0	0	23

LIST OF ELECTIVE COURSES		
DSE	22DMCN11	STATISTICAL METHODS
SEC	22SMCN11	BUSINESS COMMUNICATION
DSE	22DMCN21	MATHEMATICAL ECONOMICS
SEC	22SMCN21	COMPUTER APPLICATIONS FOR ECONOMISTS
DSE	22CMCN34	ECONOMETRICS
SEC	22DMCN31	INDUSTRIAL ECONOMICS
DSE	22DMCN41	DISSERTATION
SEC	22SMCN41	INTERNSHIP

SEMESTER -I

ADVANCED MICRO ECONOMIC ANALYSIS -I

Sub. Code: 4 0 0 4

Course Description:

Advanced microeconomic analysis at an advanced level presents formal techniques as well as critical perspectives along with possible alternatives. Topics include product pricing under risk and uncertainties, market structures and extension of oligopoly models.

Course Objective

This Course introduces some techniques of microeconomic analysis which lays solid foundation to microeconomic theory and its application.

Unit - I INTRODUCTION TO MICROECONOMICS 12

Micro Economics- Cost Minimization and profit Maximisation - Constrained Maximization Envelope theorem – Concavity and quasi-concavity -Homogeneous and homothetic functions - Principles of economic modelling

Unit -II CONSUMER BEHAVIOUR 12

Utility Analysis of Demand - Theory of Demand - The Revealed Preference Theory - Income Substitution Effects - The Slutsky theorem; Compensated demand curves.

Unit -III THEORIES OF PRODUCTION AND COST 12

Theory of Production: Stages of production function; Returns to factor proportions - Return to scale; Elasticity of substitution; Technical progress and production function - Cost and Revenue Analysis (traditional and modern theories of cost) - Equilibrium of the firm-marginal analysis - Optimum factor combination and product combination

Unit -IV MARKET STRUCTURES 12

Equilibrium of firm and industry under perfect competition – Monopoly Bilateral monopoly; Discriminating monopoly and Monopolistic competition; Excess capacity and imperfect competition - Pricing and output behaviour under oligopoly: Collusive and non-collusive models: Extensions of Oligopoly Models

Unit -V OLIGOPOLY MODELS 12

Baumol's Model - Marris and Williamson's Model - Behavioural theory of the Firm - Cyert and March - Full cost pricing principle - Limit pricing principle -Bains, Modigliani and Bhagawati

Total Hours: 60 hours

Course Outcome

CO1 It will enable the students better to undertake the tasks of critique of existing theory and construction of alternatives.

CO2 It provides exposure to alternative approaches and to critical perspectives in microeconomics.

CO3 To explore the competitive market conditions and theories relating to it.

CO4 To acquaint the students with the knowledge of micro economic theories and their practical applications

CO5 To practically apply the knowledge gained to solve the dynamic business situations

Books for Reference

1. Henderson and Quandt (1980) Microeconomic Theory, **McGraw-Hill Education Publications**
2. Koutsoyiannis, A (1979), Modern Microeconomics, Palgrave Macmillan Publishers
3. Layard, P.R.G. and A W. Walters (1978) Microeconomic Theory. McGraw Hill, New York.
4. MasCollel, A. Whinston M.D. and Green J.R. (2012) Microeconomic Theory, Oxford University Press, India
5. Sen, A. (1999) Microeconomics; Theory and Applications, Oxford University Press, New Delhi.
6. Varian, H (2009) Microeconomic Analysis, 3rd edition Viva Books Private Limited

Web Links

1. Lecture 1, The Queen of Social Sciences:https://www.youtube.com/playlist?list=PLmtuEaMvhDZbgLy0on9VQAVNajp1-5-U3
2. Lecture 2, Consumers: The Samuelsonian Program:https://www.youtube.com/playlist?list=PLmtuEaMvhDZZsehVGMa_Hqk4GaPOKTfse
3. Lecture 3, Consumers, Demand:https://www.youtube.com/playlist?list=PLmtuEaMvhDZbMICKH3OdQYS_Pams81xEu
4. Lecture 4, The Theory of the Firm:
5. https://www.youtube.com/playlist?list=PLmtuEaMvhDZaC-J9RQv6cS5uOOL4Mgt
6. Lecture 5, Risk and Uncertainty:
7. https://www.youtube.com/playlist?list=PLmtuEaMvhDZYQ9Ybrny16qtbRkUWkrlMd

PUBLIC ECONOMICS - I

Sub: Code **4 0 0 4**

Course Description

There is wide and vast area of the subject. It analyses the public revenue and expenditure trends and programmes, budgetary procedures, stabilization instruments debt issue levels of government etc., which raise a spectrum of issues arising from the operation of these institutions. Further the existence of externalities concern from adjustment in the distribution of income and wealth etc. require political processes for their solution in a manner combines individual freedom and justice

Course Objective

The objective of this course is to introduce specific role of the state in economic development.

UNIT-1: INTRODUCTION **12**

Meaning and Definition of Public finance - Scope of Public Finance- Similarities and Dissimilarities of Public and Private Finance - Market Failure-Causes of Market Failure - Spill Over Benefit and Spill Over Cost - Role of government in Economic Activity.

UNIT 2: INTER- SECTOR ALLOCATION AND PUBLIC CHOICES 12

Private & Public Mechanism for Allocating Resources - Types of Goods and Their Characteristics -Private, Public and Merit Goods - Principle of Maximum Social Advantage - The Medium Voter Theorem - Arrow's Impossibility Theorem.

UNIT -3: THEORIES OF PUBLIC EXPENDITURE **12**

Meaning of Public Expenditure- Classification of Public Expenditure - Causes of Increase in Public Expenditure- Importance of Public Expenditure - Canons of Public Expenditure- Wagner's law of Public Expenditure - Wiseman & Peacock Hypothesis on Public Expenditure. -Prof. Samuelson's Pure Theory of Public Expenditure - Trends of Public Expenditure in India.

UNIT-4 PUBLIC REVENUE AND THEORIES OF TAXATION **12**

Meaning and Definition of Public Revenue - Sources of Public Revenue - classification of Public Revenue - Meaning and definition of Tax - Characteristics of Tax - Objectives and effects of taxation.

UNIT-5 DIRECT AND INDIRECT TAXES **12**

Characteristics of Good tax system - Direct Tax-its meaning and merits and demerits of direct tax - Indirect Tax-its meaning and merits and demerits of

indirect tax - Laffer Curve - GST- -meaning and history of GST- types of GST in India.

Total Hours: 60 Hours

Course Outcome

CO1 Equip the knowledge of fiscal institutions with a careful analysis of the issues, which underline budgetary policies in general, and Indian experience in particular.

CO2 To analyse the role of the Government in the context of fiscal behaviour.

CO3 To understand the basic problems of use of resources, distribution of income etc.

CO4 To apply the studied policies and theories to the economic policy making

CO5 To equip the students with the knowledge of the tax and tax policies.

Books for Reference

1. Buchanan J.M. (1970) The Public Finances, Richard D. Irwin, Home Wood.
2. Goode R (1986) Govt. finance in Developing Countries, Tata McGraw Hill New Delhi.
3. Houghton J.M. (1970) The Public Finance selected Readings, Penguin, and Harmondsworh.
4. Jha, R. (1998) Modern Public Economics, Routledge, London.
5. Menutt P. (1996) The Economics of Public Choice Edward Elgar, U.K.
6. Musgrave R.A. (1956) The Theory of Public Finance, McGraw Hill K/akhuse, Tokyo.
7. Musgrave R.A. and P.B. Musgrave (1976) Public Finance in Theory and Practice, Macgraw Hill, Kogukhusa, Tokyo.
8. Shoup,C.S. (1970) Pubic finance, Aldine Chicago.
9. Shome P. (Ed) (1995) Tax Policy Hand Book Tax Division, Fiscal Affairs Department, International Monetary Fund Washington, D.C.
10. Auerbach, A.J. and M Feldstein (Eds) (1985), Handbook of Public Economics, Vol-I, N/th Holland, Amsterdam.
11. Bhatia, H.L., (2003), Public Finance, Vikas Publishing House Pvt. Ltd., New Delhi

INDIAN ECONOMY-I

Sub: Code **4 0 0 4**

Course Description

Indian Economy paper-1 presents description as well as analysis of current status of Indian economy in comparison to its different stages. Topics include national income, agriculture, industry, planning and labour and employment.

Course Objective

This subject introduces lays solid foundation to the general understanding of Indian economy.

UNIT-I: NATIONAL INCOME **12**

Official estimates: National Accounts Statistics - Growth and Structural Change - Sectoral Composition - Features of High Growth Regime - Changes in the Methodology of National Income Measurement

UNIT-II: AGRICULTURE **12**

Technologies and Institutions; Land Relations and Land Reforms - Rural Credit; Modern Farm Inputs and Marketing— Price Policy and Subsidies - Commercialisation and Diversification; Agriculture and WTO Food Processing, Subsidies, Agricultural Prices and Public Distribution System - Impact of Public Expenditure on Agricultural Growth.

UNIT -III: INDUSTRY **12**

Strategy of Industrial Development— Industrial Policy Reform - Reservation Policy Relating to Small Scale Industries - Sources of Industrial Finances - Bank, Share Market, Insurance Companies, Pension Funds, Non-Banking Sources and Foreign Direct Investment - Role of Foreign Capital for Direct Investment and Portfolio Investment - Growth of the tertiary sector -Public Sector Reform, Privatisation and Disinvestment

UNIT-IV PLANNING **12**

From Central Planning to Indicative Planning - Relation between Planning and Markets for Growth - Alternative Development Strategies - Goal of Self-Reliance Based on Import Substitution and Protection - Stabilisation and structural adjustment packages - fiscal reforms, financial sector reforms and trade reforms - Niti Aayog and Economic Planning – Differences between Planning Commission and Niti Aayog

UNIT-V LABOUR AND EMPLOYMENT **12**

Concepts and Measurement of Employment - Trends in Unemployment and Underemployment - Different NSS Rounds on Employment and Unemployment - Urban Labour Market and Informal Sector Employment and Poverty; Strategies for Employment Generation - Social Issues Relating to Labour - Child Labour; Rural Employment Guarantee Scheme– MGNAREGA.

Course Outcome

CO1 It will enable the students better to undertake the tasks of critique of existing theory and construction of alternatives.

CO2 It provides exposure to alternative approaches and to critical perspectives in economy

CO3 The course acquaints the students with the knowledge of various sector of the economy

CO4 it enables the students to understand the economic planning and policies

CO5 The course describes the labour policies and employment trends in the economy

Books for Reference

1. A.N. Agarwal: Indian Economy, Problems of Development and Planning, New Age.
2. Anne O Krugger: Economic Policy Reforms and the Indian Economy, OUP
3. D Nayyar and A Bhaduri: Intelligent Person's Guide to Liberalisation, Penguine.
4. D Nayyar: Liberalisation and Development, OUP
5. D.Mazumdar and S Sarkar: Globalisation, Labour Markets and Inequality in India, Routeledge.
6. Francine R Frankel: India's Political Economy, 1947-2004, 2nd Edition. OUP
7. Government of India: Economic Survey (latest issue)
8. J Dreze and A Sen: India, Development and participation, OUP
9. Mishra and Puri: Indian Economy, Himalaya.
10. NCEUS: Report on Conditions of Work and Promotion of Livelihood in Unorganised Sector.
11. Planning Commission: Eleventh Five Year Plan, Vol I, II and III, Academic Foundation.
12. R Dutta and K P M Sundaram: Indian Economy, S Chand
13. S Chakravarthy: Development Planning, An Indian Experience, OUP.
14. T. J. Byres (ed): The State, Development Planning and Liberalisation in India, OUP

MANAGERIAL ECONOMICS

Sub: Code **4 0 0 4**

Course Description

Managerial Economics presents the application of economic theories for the managerial practices. Important topics under the subject include demand forecasting, pricing policies, break-even analysis and capital budgeting.

Course Objective

This subject helps to manage business by taking optimal decisions by the application of managerial theories.

UNIT-1: INTRODUCTION **12**

Managerial Economics -Role and Significance - Contribution of Economics to Managerial Functions - The Scope of Managerial Economics - Objectives of Business Firms: Profit Maximisation-Revenue Maximisation- Entry Prevention and Risk Avoidance - Decision Rules: Opportunity Cost - Marginal Principle, Incremental Principle -The Equi-Marginal Principle.

UNIT-II: DEMAND FORECASTING **12**

Purpose of Forecasting Demand - Scope of Demand Forecasting - Methods of Demand Forecasting - Survey Methods - Statistical Methods - Case Studies of Demand Forecasting

UNIT -III: PRICING PRACTICES AND STRATEGIES **12**

Cost Oriented Pricing: Cost-Plus Pricing Marginal Cost Pricing - Competition Oriented Pricing- Going Rate Pricing - Multiple Product Pricing and Pricing in Life-Cycle of a Product - Pricing in Relation to Established Products - Transfer Pricing- Competitive Bidding of Price- Peak Load Pricing

UNIT-IV BREAK-EVEN ANALYSIS- PLANNING FOR PROFIT **12**

Break-even Analysis –Illustration - Linear Cost and Revenue Function- Non-Linear Cost and Revenue Functions - Contribution Analysis, Profit-Volume Ratio and Safety Margin - Managerial Uses of Break-Even Analysis

UNIT-V CAPITAL BUDGETING **12**

Meaning and importance of capital budgeting - Pre-Requisites of Capital Budgeting - benefit and cost analysis - Determining the Optimum Level of Capital - Investment Decisions Under Certainty- Pay-back Period Method, Net Present Value Method, Internal Rate of Return Method - Sources and Cost of Capital

Total Hours: 60 Hours

Course Outcome

CO1 It will enable the students better to undertake the tasks of managing business by pricing of the product, input procurement and managerial decision making.

CO2 It provides exposure to various approaches to business management.

CO3 To examine the profit position of the firm through Break even analysis

CO4 To Critically evaluate the business practices existing in the market

CO5 To equip the students with the knowledge of capital budgeting in business planning.

Books for Reference

1. David Besanko and Ronald R. Braeutigam. Microeconomics: An Integrated Approach. John Wiley & Sons, Inc., New York, USA, 2001.
2. Geetika, Ghosh & Choudhury, Managerial Economics, Tata McGraw Hill, New Delhi, 2011
3. Gupta G.S., Managerial Economics, Tata Mcgraw-Hill, New Delhi.
4. Michael R. Baye. Managerial Economics and Business Strategy. McGraw-Hill, International edition, 5th edition, 2006.
5. Moyer &Harris, Managerial Economics, Cengage Learning, New Delhi, 2005
6. W. Bruce Allen, Neil A. Doherty, Keith Weigelt and Edwin Masfield. Managerial Economics: Theory, Applications, and Cases. W.W. Norton & Company, Ltd., 6th edition, 2005.
7. Yogesh Maheswari, Managerial Economics, Phi Learning, New Delhi, 2005

WEB SOURCES:

1. https://www.cheggindia.com/career-guidance/managerial-economics-principals-types-and-scop e/
2. https://theinvestorsbook.com/managerial-economics.html
3. https://www.analyticssteps.com/blogs/what-managerial-economics-definition-types-nature-pr inciples-scope

STATISTICAL METHODS

Course: Code **3 1 0 4**

Course Description

Statistical Methods help to provide students with an understanding of the data and its relevance in business and develop an understanding of the quantitative techniques from statistics. A particular emphasis is placed on developing the ability to interpret the numerical information that forms the basis of decision-making in Economics

Course Objective

The main aim of this subject is to develop the student's ability to deal with numerical and quantitative issues in business and to enable the use of statistical, graphical and algebraic techniques wherever relevant. Moreover, learning of this subject helps a proper understanding of Statistical applications in Economics and Management.

UNIT-1: INTRODUCTION **12**

Data, Methods of Collection and Presentation of Data - Basic concepts: population, sample, sampling vs. population, variable, parameter, primary and secondary data - Techniques of data collection - Sampling: Random and Non-Random Sampling; Simple Random; Stratified Random, Multi-stage Sampling, Quota Sampling, Cluster Sampling; Judgement Sampling - Frequency Distribution, Cumulative Frequency, Tabular, Graphic and diagrammatic representation of data.

UNIT-II: MEASURES OF CENTRAL TENDENCY **12**

Measures of central tendency: Mean, Median, Mode, Geometric mean and Harmonic mean - Measures of dispersion; Range, Quartile deviation, Mean Deviation, Standard Deviation - Coefficient of Variation - Skewness and Kurtosis - Measures of Central Tendency Vs. Measures of Dispersion.

UNIT -III: CORRELATION AND REGRESSION ANALYSIS **12**

Correlation: Co-efficient of correlation – Karl Pearson and Rank Correlation - Partial and Multiple Correlation Analysis - Regression analysis - Estimation of regression line in a bivariate distribution - Least squares methods, interpretation of regression coefficients.

UNIT-IV TIME SERIES ANALYSIS AND INDEX NUMBERS **12**

Time series analysis – Concept and Components - Determination of Regular Trend and Seasonal Indices - Index Numbers – Concept, Price Relative, Quantity Relative, Value Relative - Laspeyer's, Paasche's and Fisher's Index

Numbers - Family budget method; Problems in the construction and limitations of index numbers, Tests for ideal index numbers.

UNIT-V STATISTICAL INFERENCE AND HYPOTHESIS TESTING 12

Statistical Inferences and Hypothesis Testing - Concept of an estimator; Desirable properties of an estimator - Hypothesis –Formulation of statistical hypotheses – Null and alternative; goodness of fit - Confidence intervals and level of significance - Hypothesis testing based on Z, t, x2 (Chi-square), F test; Type 1 and Type 2 errors.

Total Hours: 60 Hours

Course Outcomes

On completion of this course, the students will be able to:

CO 1 Describe and discuss the key terminology, concepts tools and techniques used in business statistical analysis

CO 2 Critically evaluate the underlying assumptions of analysis tools

CO 3 Understand and critically discuss the issues surrounding sampling and significance

CO 4 Discuss critically the uses and limitations of statistical analysis

CO 5 Solve a range of problems using the techniques covered

Books for Reference

1. Goon A.M., Gupta M.K. and Dasgupta B. (2002): Fundamentals of Statistics, Vol. I& II, 8th Edn. The World Press, Kolkata.
2. Gupta.S.C.(1993), Fundamentals of Applied Statistics. Chand & Sons, New Delhi.
3. Miller, Irwin and Miller, Marylees (2006): John E. Freund's Mathematical Statisticswith Applications, (7th Edn.), Pearson Education, Asia.
4. Mood, A.M. Graybill, F.A. and Boes, D.C. (2007): Introduction to the Theory ofStatistics, 3rd Edn., (Reprint), Tata McGraw-Hill Pub. Co. Ltd.
5. Nagar A.L. and R.K.Das (1993), Basic Statistics, Oxford University Press, New Delhi.Publisher, New Delhi.
6. Speigal,.M.R (1992), Theory and Problems of Statistics, Mc Graw Hill Books Co., London.
7. Veerachamy.R (2002), Quantitative Methods for Economists, New Age International.

BUSINESS COMMUNICATION

Course: Code **3 0 0 3**

COURSE OBJECTIVE:

- To study the communication skills
- To apply it in practical business situations, written exercises & e-mails and letters: Re-writing and re-framing of sentences are being delivered.

UNIT I INTRODUCTION 9

Fundamentals of Communication, Business Communication, The Communication Model, communicating in teams, Overcoming the Barriers to Communication. Non-verbal communication, Introducing the 7 Cs of business writing – Candid, Clarity, Complete, Concise, Concrete, Correct and Courteous, writing business messages, The Stages in writing, Pre writing, Writing and Post writing.

UNIT II REVISING AND CHECKING MESSAGES 9

Revising to improve the content and sentence structure, avoiding redundant phrases and words, Proof-reading to correct grammar, spelling, punctuation, format, and mechanics, Evaluating whether the message achieves its purpose. The Process of Writing E Mails, breaking it Down – The PAIBO Technique, Structuring an E Mail – The 3 T's – Introduction, Body and Conclusion, Effective Subject lines, Salutation and Signing off. Business reports and Proposals, Format, visual aids and contents, Oral Business presentations

UNIT III ETIQUETTE ANDINTERVIEW 9

Meaning, Body Language, Gesture, Postures, Expressions, Dress code, Etiquette etc. Public

speaking and Speech composition Technical Speeches and non technical presentation Principles of effective speaking and Presentations. Interview, Exit interview, Appraisal etc.. Importance of Interview, Art of conducting and giving interview Types of Interviews like Placement interview Discipline interview, Appraisal interview, Exit interview etc...

UNIT IV MEETING AND LETTERS 9

Opening and closing of meeting, Brain storming, e-meeting etc.. Importance of Meeting Procedure of conducting Group Discussions Significance of Brain Storming in Business Decisions, Advantages/Disadvantages of E-Meeting Preparing Agenda and Minutes of the meeting. Inquires, Circulars, Quotations, Orders, Memo, Minutes, Notice etc... Types of

Letters : Letter Writing –letters - Business letters. Application for a job / covering letter with bio-data. Attitude. Negotiation skills Social Conversation - Values and ethics - Managing stress.

UNIT V SOFT SKILLS **9**

Principles of group discussion - Purpose of group discussion - Preparation - Skills to be acquired — communication, leadership, problem-solving - Effective participation. Personality Enrichment - Positive attitude - SWOT Analysis - Self-confidence and motivation - Inter-personal skills - Projecting a positive social image Time Management - Goal setting and prioritisation - ABC Analysis—preparing a personal schedule - Short term and long term goals - Implementing goals - Task list organisation Leadership Skills - Setting objectives and taking initiatives - Persuading and negotiating - Team work - Maintaining morale - Inspiring others

TOTAL: 45 HOURS

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO – 1 : Recall the basics of communication and its process, elements and importance.

CO – 2 : Evaluate the effectiveness of revising, checking and proof reading the messages.

CO – 3 : Discuss the concept of Etiquette and significance of Interviews

CO – 4 : Identify different types of letters to make effective internal and external correspondence

CO – 5 : Evaluate the effectiveness of revising and checking the messages.

Books for Reference

1. Sanjay Kumar &Pushpalatha, Communication Skills, Oxford University Press, 2011.
2. Kaul& Asha, Effective Business Communication, PHI 2nd Edition, 2006.
3. Lesikar R.V &Flately M V, Basic Communication Skills for empowering the internet generation, Tata-McGraw Hill, 2009.
4. Sharma R C & Mohan K, Business Correspondence & Report Writing, TMH, 2009.

Web Sources:

1. https://www.softskillsusa.com/what-is-meaning-of-business-communication-skills.php
2. https://www.atctraining.com/soft_skills_definition_of_communication.htm
3. https://www.jobwise.co.uk/the-importance-of-soft-skills-in-business/

SEMESTER-II

ADVANCED MICRO ECONOMIC ANALYSIS-II

Course. CODE: 4 0 0 4

Subject Description

This course covers topics such as choice under uncertainty, game theory and strategic equilibrium, partial and general competitive equilibrium models, welfare Economics, externalities and public goods.

Course Outcome

The purpose of this course is to prepare students to the final stages of microeconomic theory and its applications. Upon successful completion of this course, students are expected to be able to read, interpret and analyse articles published in the field of microeconomics and contribute.

UNIT-1: FACTOR MARKETS 12

Marginal Productivity Theory of Distribution - Demand and supply of inputs: Firm's and Industry's input demand curves - Factor Market Equilibrium-Labour, Land, Capital and Interest - Monopsony and Monopoly in input markets; Unions as monopolists; Bilateral monopoly; Choice of optimal combination of inputs - Adding-Up Problem; Product Exhaustion theorems – Euler's and Clark-Wicksteed-Walras theorems.

UNIT -II: GENERAL EQUILIBRIUM THEORY 12

Walras model- Properties; Problem of existence, uniqueness and stability of equilibrium - Excess demand function approach to general equilibrium analysis; Fixed point theorem and the existence of the solution - Modern approach: Input-output and Linear programming model of general equilibrium - Determination of output and price (only Static open models); Notion of equilibrium in economics - Equilibrium vs. anti-equilibrium theory of economic system – Hahn vs Kornai.

UNIT-III: WELFARE ECONOMICS 12

Growth of GNP and welfare; Criteria of welfare maximization: Cardinalist's criterion, Bentham's Criterion - Pareto optimality criteria; Compensation principle - Social welfare function – Properties and limitations - Theory of second best. Arrow's impossibility theorem - Sen's proof of this theorem; Equity and efficiency

UNIT-IV EXTERNALITIES AND PUBLIC GOODS 12

Externalities and Efficiency Loss - Regulation (Direct Regulation, Taxes/Subsidies, Tradable Permits - Internalization, Property Rights and Coase

Theorem) - Common Property Resources - Public Goods and Efficiency - Free Riding Problem

UNIT-V ASYMMETRIC INFORMATION 12

Hidden Characteristics and Adverse Selection - Private and Government Response - Public Goods – Free Rider Problem – Efficient Provision of a Public Good – Voting - Hidden Action and Moral Hazard Problem - Akerlof's Market for Lemons - Cheap Talk Models, Costless Signals

Books for Reference

1. Baumol, W.J. (1985): Economic Theory and Operations Analysis, Prentice Hall.
2. Dobbs, I. (2000): Managerial Economics, OUP, ND.
3. Gibbons, R. (2010) -Game Theory for Applied Economists, Pearson Higher Education &
4. Henderson, J. and R.A. Quandt (1984): Microeconomic Theory, McGraw Hill, Tokyo.
5. Intriligator, M.D. (1971): Mathematical Optimization and Economic Theory, Prentice Hall, EnglewoodCliffs.
6. Jhele G.A. and ReneyP.J.(2006) Advanced Microeconomic Theory, Pearson Education, India.
7. Koutsoyiannis, A. (1980): Microeconomic Theory, MacMillan.
8. Lancaster, K. (1972): Consumer Demand: A New Approach, CUP, NY.
9. Layard, P.R.G. and A.A. Walters (1978): Microeconomic Theory, McGraw Hill, NY.
10. Maddala, G.S. and E. Miller (1989): Micro Economics- Theory and Applications, McGraw, New Delhi.
11. MasCollel, A. Whinston M.D. and Green J.R. (2012) Microeconomic Theory, Oxford UniversityPress, IndiaProfessional Group
12. Salvatore, D. (2003): Microeconomics: Theory and Applications, OUP, New Delhi.
13. Salvatore, D. (2004): Managerial Economics in a Global Economy with Economic Applications (5e),CENGAGE Learning/South Western.
14. Sen, A. (1999): Microeconomics: Theory and Applications, OUP, ND.
15. Shepherd, R.W. (1970): Theory of Cost and Production Functions, Princeton Univ. Press, N.J.
16. Varian, H. (2000): Intermediate Microeconomics: A Modern Approach (5e), Affiliated East-West Press.

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2. https://www.youtube.com/playlist?list=PLmtuEaMvhDZY3M47cVW5VRH6HO PRVBJGqLecture 8, Markets: 'Partial Equilibrium': Analysis of Individual Markets:

3. https://www.youtube.com/playlist?list=PLmtuEaMvhDZaZ9UkuQh4DoAvE7F CffyLnLecture 9, Markets: 'Partial Equilibrium': Externalities and Public Goods:
4. https://www.youtube.com/playlist?list=PLmtuEaMvhDZZZTjp7lanWeGUDu6_ HEoicLecture 10, Social Welfare and Judgment:
5. https://www.youtube.com/playlist?list=PLmtuEaMvhDZZ2tCkK9D3LJqAj4jyxFXB 5Lecture 11, General Equilibrium Theory:
6. https://www.youtube.com/playlist?list=PLmtuEaMvhDZbjczrZN77wc7CNyNB 39HEGLecture 12, General Equilibrium Theory: Possible Extensions and Applications:
7. https://www.youtube.com/playlist?list=PLmtuEaMvhDZZTT30dcKM0TwWGb Q0hvukt

INDIAN ECONOMY-II

SUB. CODE: 4 0 0 4

Subject Description

Indian Economy paper-II presents description as well as analysis of current status of Indian economy. Topics include economic reforms, development experience under reforms, population and human development and contemporary developmental challenges of Indian Economy

Aims

The subject lays solid foundation to the contemporary issues, challenges and the way forward for making Indian economy at a higher level.

Course Outcome

It will enable the students better to understand the current scenario of Indian Economy. It provides exposure to alternative approaches to find alternatives in different facets of macroeconomics.

UNIT-1: INTRODUCTION 12

Economic Development Since Independence - Features of Indian Economy on the Eve of Independence - Growth and Development Under Different Policy Regimes - Performance Assessment—Sustainability and Regional Contrasts - Structural Change, Savings and Investment.

UNIT-II: ECONOMIC CRISES AND ECONOMIC REFORMS 12

Dilemma of Development: Agriculture Vs Industry - Food Crisis - Green Revolution and Government Intervention - PDS and Priority Sector Lending - Poverty Alleviation- Public Intervention for Poverty Alleviation - Economic Crises during Eighties: External Debt Crisis, Fiscal Imbalance, Balance of Payments Problems and Inflation - New Economic Policy and Continual Reform Initiatives- Global Financial Meltdown and India - Covid-19 Pandemic and Economic Recession Measures for Economic Revival

UNIT-III DEVELOPMENT EXPERIENCE UNDER REFORMS 12

External sector, Fiscal and Monetary sectors: Balance of payments—trend and composition - Currency Convertibility and Exchange Rate Movements - Exim Policy and WTO Related Issues - Portfolio Investment and Foreign Direct Investment - Growth and Social Sector Developments, Poverty, Inequality and Unemployment

UNIT-IVPOPULATION AND HUMAN DEVELOPMENT 12

Demographic trends and issues- Demographic Dividend - Education- Primary, Secondary and Tertiary Levels- educational Inequalities according to sex and region - Health and Malnutrition - Sustainable Development Goals- Challenges

for India - Physical Quality Life Index (PQLI), Human Development Index (HDI), GEM -Human Development Experience

UNIT-VCONTEMPORARY DEVELOPMENT CHALLENGES 12

Need for pushing reforms in Fiscal and monetary front - Tax reforms and measures; pension reforms - Trade liberalization and economic cooperation Reviving agricultural and economic growth - Public Sector Reforms, Labour Laws and Labour Markets, and Infrastructure Needs.

Books for Reference

1. Bhagwati and Desai: India Planning for Industrialization, Oxford University Press
2. Bimal Jalan: India's Economic Crisis – The Way Ahead, Oxford University Press
3. C. Rangarajan: Indian economy – Essays on Money and Finance,UBS Publishers' Distributors Ltd.
4. India Infrastructure Report, Different Volumes.
5. Pramit Chaudhuri: The Indian Economy,Poverty and Development, Vikas Publishing House.
6. Raja J.Chelliah: Towards Sustainable Development – Essays in Fiscal and Financial Sector Reforms in India, Oxford University Press
7. Sukhomoy Chakraborty: Development Planning –The Indian Experience, Oxford University Press.
8. Uma Kapila (Edited): Indian Economy since Independence, different volumes, Academic Foundation Economic Survey, different volumes.

WEB- SOURCES

- Ministry of Finance
- Department of Economic Affairs
- Planning Commission
- https://www.rbi.org.in/Scripts/BS_ViewBulletin.aspx?Id=20019
- https://nptel.ac.in/courses/109/104/109104184/

PUBLIC ECONOMICS-II

SUB. CODE: 4 0 0 4

Subject Description

Public Economics Paper-II analyses the publicdebt, fiscal policy, Budget, fiscal federalism and Indian federal finance. Further the distribution of income and wealth etc. require political processes for their solution in a manner combines individual freedom and justice.

Aims

- ❖ Role and functions of the Government in an economy have been changing with passage of time.
- ❖ It is necessary for post-graduate students to know principles of public finance and package of policy executed by the State Government and Central Government.

Course outcome

- Budgetary policy is an important part to understand the basic problems of use of resources, distribution of income, etc.
- This paper aims to well-equipped P.G. students of Economics about tax system, public expenditure, public debt. and budgetary procedure as stabilization instrument.
- This paper explains thorough understanding of fiscal institutions.

UNIT-1 PUBLIC DEBT 12

Meaning and Definition Public debt - Public Debt Vs. Private Debt- Difference between Public debt and private debt - Classification of Public debt - Sources of Public debt —Effectsof Public debt - Burden of Public debt – Trends of Public debt in India.

UNIT-2 FISCAL POLICY 12

Meaning and definition of Fiscal policy - Objectives of Fiscal policy Instruments of Fiscal policy - Role of fiscal policy in controlling inflation - fiscal policy for full employment – Limitations of fiscal policy - Fiscal reforms in India after Economic Reforms

UNIT- 3 BUDGET 12

Concept of budget - Kinds of Budgets - Components of the Government Budget - Zero-base budgeting - different concepts of budget deficits Latest Budgets of the Union Government in India.

UNIT- 4 FISCAL FEDERALISM **12**

Meaning of Federal Finance - Principles of Federal Finance - Centre & StateFinancial relations in India - Imbalance between fiscal Needs and Capacity - Fiscal Needs of Panchayat Raj Institutions.

UNIT-5 INDIAN FEDERAL FINANCE **12**

Finance Commission - Constitution and Functions of Finance commission - Finance Commission and States - Finance Commission- Centra and State Governments and Local Bodies - Recommendation of latest Finance commissions.

Books for Reference

1. AtkisonA.B.and J.E. Stiglitz: (1980) Reading on Public Economics, Tara McGraw Hill New York.
2. Auerbach A. Jand M. Feldstem (Ed)(1995) Hand book of Public Economics, Vol. 1 N/th Holland,Amsterdam.
3. Goode R. (1986) Govt. finance in Developing Countries, Tata McGraw Hill, New Delhi.
4. Houghton J.M. (1970) The Public Finance selectedReadings,Penguin, Hairmonds w/th.
5. Jha, R. (1998) Modern Public Economics Routledge, London.
6. Menutt P. (1996) The Theory of Public Choice Edward Elegar, U.K.
7. Musgrave R.A. (1996) The Theory of Public Finance, McGraw Hill, Jogukhusa, Tokyo.
8. Musgrave R.A. and P.B. Musgrave (1976) Public Finance in Theory and Practice, McGraw Hill,Jogukhusa, Tokyo.
9. Some P: (Ed) (1995) Tax Policy Hand Book Division, Fiscal Affairs Department, International MonetaryFund, Washington, D.C.

Web Links

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INTERNATIONAL ECONOMICS

SUB. CODE: **4 0 0 4**

Subject Description

The International Economics paper covers theories of international trade, gains from trade and its distribution; theory of interventions, exchange rate, trade Units and forms of international trade cooperation.

Aims

To apply and analyse different policies and practices of international trade.

Course Outcomes

On successful completion of this course, the students will be able to

1. Analyseand apply the trade theories and theories of tariff;

2. Apply and analyse the different policies for BOPs adjustments of developing countries like India; and

3. Comment critically on and participate in current debates on international economic policy.

UNIT-1: THEORIES OF INTERNATIONAL TRADE **12**

Classical Theories- Adam Smith and Ricardo - Neo-Classical Theories - Heberler's Opportunity Cost Approaches - Heckscher and Ohlin Model -Leontief Paradox - Factor Price Equalization Theorem.

UNIT-II: GAINS FROM TRADE **12**

Measurement - Terms of Trade – Income and Factorial Terms of Trade - Hypothesis of Secular deterioration of terms of trade - Immeserising Growth - Trade as an Engine of Growth.

UNIT -III: THEORY OF INTERVENTIONS **12**

Tariff Issues, Quotas and non-tariff barriers - Nominal, Effective and Optimum Rates of Tariffs - Balance of Payments: Causes for Disequilibrium in BOP and Measures to Correct - Expenditure Reducing and Switching Policies - Marshall and Lerner's conditions.

UNIT-IV FOREIGN EXCHANGE RATE AND REGIONAL BLOCS **12**

Foreign Exchange rate determination under the Gold Standard - Fixed and Flexible exchange rate, Purchasing Power Parity theory - India's foreign exchange reserves - Convertibility of Rupee, FEMA - Importance of International Trade for a Developing economy.

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UNIT-V FORMS OF ECONOMIC CO-OPERATION 12

Union, Regionalism (EU, NAFTA) - Multilateralism and WTO - Foreign Capital and Developing Countries - Problems of India's International Debt - Export Promotion Strategies and EXIM Policies - Inter- Regional Trade, SAARC/ SAPA and ASEAN Regions, Problems and prospects of Customs.

Books for Reference

1. Bhagavati, J (Ed): International Trade Selected Readings, Cambridge University Press, Massachusetts.
2. Brahmananda, P.R.: The IMF Loan and India's Economic Future, Himalaya
3. Dunn, RM & JM Mutti : International Economics, Routledge, London, 2000
4. Kindle Berger: International Economics, R.D Irwin, Home Wood
5. Krugman, PR &M.Obstfeld : International Economics Theory & Policy, Glenview, Foresman
6. Man Mohan Singh: India's Export Trends and the prospects for self-sustained Growth, Oxford University Press, New Delhi
7. Mundell, R: International Economics, the Macmillan Company Ltd., New York.
8. Nayyar, D: India's Exports and Export Policies in the 1960's Cambridge University Press
9. Panchamukhi, V.R.: Trade Policies of India - A Quantitative Analysis, Concept Publishing Company, New Delhi.
10. Publishing House, Bombay
11. Soderston, B.O.: International Economics, the Macmillan Press Ltd., London.

Books for Reference

1. https://resources.saylor.org/wwwresources/archived/site/textbooks/International%20Economics%20-%20Theory%20and%20Policy.pdf
2. https://www.e-booksdirectory.com/details.php?ebook=2115

MATHEMATICAL ECONOMIS

SUB.CODE: **3 1 0 4**

Subject Description:

This subject focuses on the mathematical methods and models that are required to understand current economics and to investigate economic models. Topics may include Fundamentals of Matrices, Differentiation, Linear Programming, and Static and Dynamic Optimisation.

Aims:

Draw on discipline-based experiences of working collaboratively, communicating mathematical and economics knowledge and acting professionally and responsibility in further study, or professional pursuits.

Course Outcome:

On successful completion of this course, students will be able to:

1. Use appropriate techniques to solve problems with calculus and linear algebra.
2. Model economic questions as mathematical problems.

UNIT-1: BASIC MATHEMATICS FOR ECONOMICS **12**

Real Number System, Sets and Set Operations - Relations and Functions, Inverse Functions; Solution of Linear Equations in Two Variables - Higher-order Derivatives - Convex and Concave Functions - Multivariable Functions; Types of Production Functions, Homogeneous and Homothetic Functions.

UNIT-II: FUNDAMENTALS OF MATRICES **12**

Vectors, Matrices, Determinants – Types and Properties. Solution of Simultaneous Equations Through inversion and Cramer's Rule - Concept of Quadratic Forms – Eigen Roots and Eigen Vectors - Difference Equations – Solution of First order and Second order Difference Equations - Applications in Trade Cycle Models - Applications in Growth Models and Lagged Market Equilibrium Models.

UNIT -III: DIFFERENTIATION **12**

Partial Differentiation - Interpretation; Problems of Maxima and Minima in Single and Multivariable Functions - Differentiation-idea of limit meaning and economic interpretations of derivative - Rules of differentiation including logarithms and exponential functions - Unconstrained optimization - single choice variable; global and local - Calculus of multivariable functions, higher order derivatives, constrained optimization with up to 2 equality constraints.

UNIT-IV LINEAR PROGRAMMING 12

Linear Programming, Game Theory and Input-Output Analysis - Formulation of a Linear Programming Problem, Solution of Linear Programming Through Graphical and Simplex Methods - Formulation of The Dual of a Linear Programme and its Interpretation - Shadow Prices and Their uses - Concept of Duality and Statement of Duality Theorems

UNIT-V STATIC AND DYNAMIC OPTIMIZATION 12

Static Optimization: Review of Classical Constrained Programming and Nonlinear Programming - Comparative Statics, Envelope Theorem - Saddle Point Theorem, Concave and Convex Programming - Optimal Control Theory and Hamiltonian Dynamic Programming - Choice under uncertainty: Risk and portfolio analysis

Books for Reference

1. Chiang, A.C. (1984), Fundamental Methods of Mathematical Economics, 3rd Edition, Mc-Graw Hill.
2. Edward T. "Mathematics for Economists" (Schaum's Outline Series, Tata Mcgraw Hill
3. Allen, R.G.D. (1974), Mathematical Analysis for Economists, Macmillan Press, London.
4. Sydsaeter, Knut, Peter Hammond (2002), Essential Mathematics for Economic Analysis, Prentice Hall.
5. Dixit, A.K. (1990), Optimization in Economic Theory, 2nd Edition, Oxford University Press.
6. Mathur, P. N. and R. Bharadwaj (Eds.) (1967), Economic Analysis in Input-Output Research, Input-Output Research Association of India, Pune.
7. Hadley, G. (1962), Linear Programming, Addison Wesley Publishing Co., Massachusetts.
8. Kothari, C. R. (1992), An Introduction to Operations Research, Vikas Publishing House, New Delhi.
9. Yamane, Taro (1975), Mathematics for Economists, Prentice Hall of India, New Delhi.
10. Baumol, W. J. (1984), Economic Theory and Operations Analysis, Prentice Hall, Englewood Cliffs, New Jersey.

COMPUTER APPLICATIONS FOR ECONOMISTS

SUBJECT CODE **3 0 0 3**

COURSE OBJECTIVE:

- To introduce the essential concepts necessary to make effective use of the computer.
- To understand what a computer can do, how it works, and how it can be used to create documents using word processing and spreadsheet applications for personal and business use.

UNIT I INTRODUCTION 9

History of Computer – Definition – Types of Computers – Desktop Computer – Laptop – Functions of Computer – Application and Current Trends for business related problems

UNIT II HARDWARE &SOFTWARE 9

Hardware System – Types of Hardware: Input, storage and output devices – Internal and External Parts of Hardware – Software – System Software: Operating System (OS) such as Microsoft Windows and Macintosh– Application software – Internet

UNIT III MICROSOFT WORD 9

Microsoft Word – History, Version – Features of Word Such as File Creation, Formatting, Editing, Paragraph Formatting, Inserting Header and Footer and Page Number, Inserting Tables, Inserting Symbols, Print Review and Printing

UNIT IV MICROSOFT EXCEL0 9

Microsoft Excel – History, Version – Features of Excel Such as File Creation, Formatting, Editing, Organizing the Worksheet, Formulas/Functions, Sorting, Filters, Creating Charts, Print Review and Printing

UNIT V MICROSOFT POWERPOINT 9

Microsoft PowerPoint – History, Version – Features of PowerPoint Such as File Creation, Slide Creation, Formatting, Editing, Adding Transitions and Animation, Print Review and Printing.

TOTAL: 45 HOURS

COURSE OUTCOMES:

At the end of the course, the students will be able to:

CO – 1 : Describe the fundamentals of computer.

CO – 2 : Explain the basics of hardware and software.

CO – 3 : Identify different components of hardware systems.

CO – 4 : Discuss about the word processing using Microsoft Word.

CO – 5 : Demonstrate working with Spreadsheets using Microsoft Excel.

Books for Reference

1. Turban Rainer and Potter – Introduction to Information Technology, John Wiley & Sons, 2005.

2. Richard D Gitlin, Jeremiah F Hayes, Stephen B Weinstein, Data Communications Principles, Springer, 1992

REFERENCE BOOKS:

1. William Stallings, Data and Computer Communications, Prentice Hall, 2007

2. Behrouz A. Forouzan, DeAnza College, Data Communications and Networking, McGraw-Hills, 2007

3. N.D.Birrell, M.A. Ould, A Practical Handbook for Software Development, Cambridge University Press, 1988

4. Sanjay Saxena, A first course in computers, Vikas Publishing House Pt. Ltd. 2000

WEB SOURCES:

1. https://mcc.iavalley.edu/academic/computer-science-information-technologies/computer-app lications-business/

2. https://www.oakton.edu/academics/academic_departments/computer_app_business/index.ph p

3. https://visionarybusinessperson.com/computer-application-in-business/

SEMESTER-III

MACROECONOMICS-I

SUB.CODE: 4 0 0 4

Subject Description

understanding of macroeconomic theoretical structure is considered essential for the proper comprehension of different issued and policies. Keeping in view this the course has been designed to cover such aspects of the Macroeconomics as National Income and accounts, consumption functions, Investment function, and Demand for Money.

Aims

The purpose of this course is to help students learn the fundamentals of economics and they can apply these concepts to their lives and to the world in which they live. Therefore, this course gives greater understanding about economic news and issues around the world. It enhances the capability of participants to understand the prevailing economic and business policy in totality.

Course Outcome

Develop the ability to understand the economic terms like consumption, National Income, working of the economy as a whole. Develop the ability to explain macroeconomic, concepts and theories.

UNIT-I:NATIONAL INCOME AND ACCOUNTS 12

Concept of National Income and National Product - Different forms of National Income Accounting, Social Accounting, Green National Income Accounting, Input- Output Accounting - Flow of Funds, Balance of Payment – Accounting - Problems of Measurement - Circular flow of Income – Two, Three and Four Sector Economy.

UNIT-II: THEORY OF EMPLYMENT 12

Classical Theory of Employment - Say's Law of Market, Principle ofEffective Demand - Keynesian and Pigou Theory of Employment - Comparison of Classical and Keynesian Models - National Income Determination of Keynesian Model - Two, Three and Four Sector Economy.

UNIT -III:CONSUMPTION FUNCTION 12

Keynesian Psychological Law of Consumption - Short Run & long run Consumption Function - Theory of Consumption Function - Absolute Income Hypothesis, Dusenbery's Relative Hypothesis - Life Cycle and Permanent Income Hypothesis

UNIT-IV INVESTMENT FUNCTION **12**

Marginal Efficiency of Capital and Investment - Saving and Investment Equality, Multiplier and its working - Accelerator and its working, Super- Multiplier. Supply of Money - Determinants of Money Supply, Measurement of Money supply - Control of Money Supply. High Powered Money, Money Multiplier.

UNIT-V DEMAND FOR MONEY **12**

Fisher and Cash Balance (Cambridge) Approach - Fundamental Equation of Keynes - Friedman's reformulation of the quantity theory of money - Post Keynesian Approach to Demand for Money - Patinkin, Baumol's, JamesTobin - Friedman, and Gurley & Shaw's Approaches.

Books for Reference

1. A. Leijonhufvud, (1968), "On Keynesian Economics and the Economics of Keynes", New York.

2. Advanced Macroeconomics by David Romer, 4th Edition, Mc Graw Hill-Irwin.

3. Barro, Robert J and Herschel I Grossman, "A General Disequilibrium Model of Income andEmployment" American Economic Review.

4. Froyen Richard T. "Macroeconomics: Theories and Policies", Sixth Edition, Pearson EducationIndia.

5. John Maynard Keynes (1936), "The General Theory of Employment, Interest and Money",Macmillan, London.

6. Macroeconomic Theory and Policy by William Branson, 3rd Edition, Addison Wesley.

7. Macroeconomics by N Gregory Mankiw, 6th Edition, Worth Publishers.

8. Malinvaud, E. (2006) "Disequilibrium Econometrics", StatisticaNeerlandica, Vol. 60, nr. 2, pp. 171-180.

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http://mospi.nic.in/sites/default/files/press_release/PRESS%20NOTE%20SAE%2026-02-2021.pdf

MONETARY ECONOMICS

SUB.CODE: 4 0 0 4

Subject Description

This module contains supply and demand for money, money market and product market equilibrium besides discussing in detail about the central bank, commercial banks and monetary policy.

Aim

This paper provides an introduction to monetary theory, to the effects of monetary variables on the macroeconomic system, the role of the Central Bank and the conduct of monetary policy

Course Outcome

This course will enable to students of economics to understand theory, practice and analyse the interconnection between the monetary forces and real forces, their developmental role and limitations in shaping and influencing the monetary and related policies both at the national and international levels.

UNIT-1: SUPPLY OF MONEY 12

Functions of Money - Determinants of Money Supply - RBI approach to Money Supply - High Powered Money and Money Multiplier - Control of Money Supply.

UNIT-II: DEMAND FOR MONEY 12

Keynes's liquidity preference approach to demand for money - Aggregate demand for money - Post Keynesian Theories of Demand for Money - Tobin and Baumol's Theory of Demand for Money - Friedman's Theory of Demand for Money.

UNIT -III: MONEY MARKET EQUILIBRIUM AND IS-LM MODEL 12

Equilibrium in money market - Equilibrium in product market - Derivation of LM Curve - Derivation of IS Curve - General Equilibrium

UNIT-IV BANKING 12

RBI and its functions - Methods of Credit Control - Reserve Bank of India and Monetary Policy - Objectives and functions of Commercial Banks - Money Market and Role of Commercial Banks – Privatization of Commercial Banks.

UNIT-V MONETARY SECTOR REFORMS IN INDIA 12

Banking Sector Reforms - Chakravarthy Committee Report - Narasimham Committee Report - Insolvency and Bankruptcy Act - NPA's and Privatisation of Public Sector Banks

Book for Reference

1. Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
2. Chakravarty, S.C. (1985), Report of the Committee to Review the Working of the Monetary System, Reserve Bank of India, Bombay.
3. Dornbusch, Fischer and Startz, Macroeconomics, Tata McGraw Hill, New Delhi.
4. Edward Shapiro: Macroeconomics, McGraw Hill, New York.
5. Gurley, J and E.S. Shaw (1960), Money in a Theory of Finance, Brooking Institution, Washington.
6. James Froyen: Macroeconomics, McGraw Hill, New York.
7. Keynes, J.M. (1936), The General Theory of Employment, Interest and Money, Macmillan, London.
8. Laidler, D.E.W. (1977), Demand for Money: Theory and Evidence, Dum-Don Valley, New York.
9. Reddy, Y.V. (2000), A Review of Monetary and Financial Sector Reforms in India – A Central Banker's Perspective, UBSPD, New Delhi.

Web Sources

https://gimms.org.uk/fact-sheets/

https://www.economicsnetwork.ac.uk/archive/starkey_banking

https://legacy.saylor.org/econ302/Intro/

ENVIRONMENTAL AND RESOURCE ECONOMICS

SUB.CODE: **CREDITS:4**

Subject Description

The subject outlines the common property resources, market failure and environmental degradation. It also delas with sustainable development and green accounting along with different approaches of environmental accounting, global environmental issues and resource economics

Aim

The objective of the Environmental Economics is to provide students with the necessary training for the application of economic theory and analysis to natural resource and environmental management issues.

Course Outcome

The subject will impart understanding on the environmental regulatory approaches for correcting market failures, and making use of economic evaluation techniques to assess environmental issues and policies.

UNIT-1: COMMON PROPERTY RESOURCES **12**

Poverty and Environmental Degradation - Community Management of Common Property Resources - Coordination Failure- Increasing Returns, Free-riding Problem (Assurance Gameand Prisoner's Dilemma) - Market Failure and Tragedy of the Commons - Community Institutions: Case Studies

UNIT-II: SUSTAINABLE DEVELOPMENT AND GREEN ACCOUNTING **12**

Environmental Kuznets Curve - Irreversibility, Uncertainty and Economic Development - Concept of Sustainability and Constraints - Environmental Accounting: Basic Theory - Environmentally Adjusted National Product

UNIT -III:ENVIRONMENTAL VALUATION AND COST-BENEFIT ANALYSIS **12**

Total Economic Value of the Environment - Revealed Preference Approach - Household Production Function- Travel Cost- Hedonic Price Theory -Statistical Value of Life - Stated Preference Approach - Hypothetical Market and Contingent Valuation Method

UNIT-IV GLOBAL ISSUES AND THE ENVIRONMENT **12**

Trade, Development and Environment - The Pollution Haven Hypothesis - International/ Interregional Cooperation - The Problem of Managing Transnational Commons - Porter Hypothesis - Economics of Climate Change

UNIT-V NATURAL RESOURCE ECONOMICS 12

Types, scarcity and classification of Natural Resources - Depletable and non-renewable resources - Recyclable resources – Replenishable but depletable resources – Storable renewable resources - Renewable common property Resources– Economic Theory of Depletable Resources- Optimal Use of Exhaustible Resources - Economics of Forestry and fisheries exploitation

REFERENCE BOOKS

1. Baland&Platteau (2003): Economics of Common Property Management Regimes inMäler& Vincent (eds.) Handbook of Environmental Economics, Vol 1, North-Holland.
2. Barceló, D.(editor), (1996): "Environmental analysis. Techniques, Applications and Quality Assurance",Elsevier, The Netherlands.
3. Dasgupta, P (1982): The Control of Resources, HUP.
4. Eugene P.Odum, Ecology, (1996): Sinauer Associates Inc. chapters 3 and 5 Parts from :Y.Anjaneyulu, Introduction to environmental Science, B.S.Publications 2004.
5. Kadekodi , G. (2004): Environmental Economics in Practice: Case Studies from India, OUP.
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8. Perman, Ma, MacGilvray and Common (2003) Natural Resource and EnvironmentalEconomics, Prentice Hall.
9. Ramprasad Sengupta,(2012): Ecological Limits and Economic Development, Oxford UniversityPress
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http://moef.gov.in/en/environment/pollution/

https://climateknowledgeportal.worldbank.org/country/india

https://onlinecourses.nptel.ac.in/noc20_hs02/preview

ENERGY ECONOMICS

SUB.CODE: **4 0 0 4**

Subject Description

This paper introduces various energy concepts followed by issues related toanalysing energy demand and supply, energy pricing, efficient use of energy, energy conservation besides giving energy planning and policy.

Aim

To understand the basic concepts of energy economics, sources of energy and importance of energy in economic development.

To analyse the extent and factors affecting energy demand, energy supply, energy markets and Environmental consequences of energy use and policies and regulatory Mechanism for the sector.

Evaluate performance on the basis of cost- benefit analysis.

Course Outcomes:

To learn about energy sources, efficient use pricing, planning and policies adopted for ensuring energy Efficiency and conservation for sustainable development.

UNIT-1: ENERGY CONCEPTS **12**

Concepts - Definitions - Sources and Categories of Energy - Energy Balance Tables - Energy Data Sources - Energy System - Energy - Economy Linkages - Green Energy - Forms of Energy - Electricity, Coal, Oil and Renewable Sources - Availability and Features of Different Sources of Energy - Management of Energy Resources - Energy and Environmental Sustainability.

UNIT-II: ENERGY SUPPLY AND DEMAND ANALYSIS **12**

Energy Supply Analysis: Availability and Supply of Different Sources of Energy - Supply Constraints - Role of Renewable Sources of Energy - Institutional Framework for Energy Supply in India - Supply Scenario and Investment Requirements - Alternative Energy Sources - Energy Imports - Trends and Issues - Policies of the Government - Energy Demand Analysis: Determinants of Energy Demand - Estimating Energy Demand - Methods of Estimation - Price and Income Elasticity - Demand Estimation under Administered Price Regimes - Demand - Supply Gap - Energy Shortage and Crisis - Need for Energy Demand Management - Renewable Energy Options.

UNIT -III: ENERGY PRICING

Need - Methods and Principles of Energy Pricing - Economic Efficiency and Equity - Considerations - Pricing Under Supply Constrained Framework - Energy Markets - Regulation - Issues and Challenges

UNIT-IV ENERGY EFFICIENCY AND CONSERVATION 12

Need - Principles and Methods - Energy Supply Side and Demand Side Management - Energy Efficiency - Institutional Machinery and Community Engagement - Estimation of Benefits - Energy Audit - Policy Alternatives.

UNIT-V ENERGY PLANNING AND POLICY 12

Approaches to Energy Planning - Principles and Components - Implementation Machinery - Decentralised Approach to Energy Planning - Planning for Energy Security - Integrated Energy Policy - Issues and Challenges - Alternative Energy Sources: Wind Energy – Solar Energy - Bio Mass Power - Waste-to-Power Small Hydro Power - Availability and Utilisation - Government Policies.

Books for Reference

1. Kneese, A. V. and Sweeny, J L. (1985): Handbook of Natural Resource and Energy Economics. North Holland.
2. Munasinghe, M & Meier P. (1993): Energy Policy Analysis and Modeling, Cambridge University Press, U K.
3. Paul Stevens (Ed,) (1997): The Economics of Energy Vol -I and Vol – Elgar.
4. Sankar, U. (1992): Public Sector Pricing: Theory and Applications, Indian Economic Association Trust for Research and Development, New Delhi.

Web Resources

https://archive.nptel.ac.in/courses/121/106/121106014/

https://ocw.mit.edu/courses/14-44-energy-economics-spring-2007/

https://nptel.ac.in/courses/103103206

https://onlinecourses.nptel.ac.in/noc22_ch27/preview

ECONOMETRICS

SUB.CODE: **3 1 0 4**

Subject Description:

This module covers the statistical tools needed to understand empirical economic research and to plan and execute independent research projects. Topics include statistical inference, regression, generalized least squares, instrumental variables and simultaneous equations models.

Aim

The student will have a deeper understanding of economic statistics, econometrics, and have greater confidence in its application.Students will learn the basics of ordinary least squares model estimation, with its advantages and disadvantages.Students will learn appropriate alternatives to ordinary least squares, when assumptions underlying the classical linear regression model are violated.

Course Outcome

This course helps the learners aboutbetter understanding of theskills to be utilised effectively and creatively for economic analysis and to give participants thefoundation for understanding specialized applications through self-study with confidence when needed.

UNIT-1: LINEAR REGRESSION MODEL **12**

Single Equation Methods (with independent and identically distributed errors) - K-variable Classical Linear Regression Model: specification, Estimation, Hypothesis testing, Prediction - Extension of CLRM: Qualitative Regressor - Dummy variables - Analysis of Stability.

UNIT-II: RELAXING ASSUMPTIONS **12**

Generalized Linear Regression Model - Heteroskedasticity: Consequence, Detection, Correction - Autocorrelation: Consequence, Detection, Correction - Multicollinearity: Consequence, Detection, Correction - Stochastic Regressor (distributed lags).

UNIT -III: SIMULTANEOUS EQUATION SYSTEM **12**

Problem of Identification: Structural Form and Reduced Form - -Observational Equivalence - Rank and Order Condition - Limited Information Estimation: Endogeneity problem - Instrumental Variable, Omitted Variable.

UNIT-IV STOCHASTIC TRENDS **12**

Time Series Data - Trend Stationary Process - Difference Stationary Process - Random Walk and Unit root -detection, correction – Co-integration and Error Correction Test for Causality

UNIT-VLIMITED DEPENDENT VARIABLES 12

Cross Section Data - Problem of Partial Observability- Truncation and Censoring Of Error Distribution - LPM, LOGT, PROBIT, TOBIT - Panel data models: Least Square Dummy Variable - Fixed Effect, Random Effect

BOOKS

1. Baltagi, Badi H (2008), Econometrics, Springer-Verlag, Berlin, 4th Edition.
2. Gujarati, Damodar N and Dawn C Porter (2009), Basic Econometrics, McGraw Hill,New York, 5th Edition.
3. Johnston, Jack and John Dinardo (1997), Econometric Methods, McGraw Hill, NewYork, 4th Edition.
4. Kementa, J (1986): Elements of Econometrics (2nd Edition), McMillan-Maxwell, NY;
5. Maddala, G S and Kajal Lahiri (2009), Introduction to Econometrics, John Wiley &Sons, England, 4th Edition.
6. Wooldridge, Jeffrey M (2009), Introductory Econometrics: A Modern Approach, SouthWestern Cengage Learning, USA, 4th Edition.

Web Soources

1. https://onlinecourses.nptel.ac.in/noc21_hs01/preview
2. https://nptel.ac.in/courses/130106001
3. https://indiaai.gov.in/article/six-best-online-resources-for-econometrics

INDUSTRIAL ECONOMICS

SUB.CODE: **3 0 0 3**

Course Objective

a) Students will be able to industrial organization & it provides a foundation for the study of many other fields related to industy.

b) Students will be able to understanding an interactions among firms in the economy, including business strategy, corporate finance, marketing, international trade, banking, and the economics of organizations.

c) It provide an overview of the historic evolution of industrial economies while focusing on recent developments in the study of firms' behavior

UNIT I: BASICS OF INDUSTRIAL ECONOMICS 12

Meaning of Industrialization - Role of Industry in Economic Development. Organisation of a Firm: Meaning - Concepts - Objectives -Characteristics. Classification of Industries: Small, Medium and Large Scale - Industries in India.

UNIT II: THEORIES OF INDUSTRIES AND LOCATION 12

Theories of Industry: Hoffman, Chenery and Gerschenkron.- Theories of Industrial Location: Weber, Sargant Florence – Factors Affecting Industrial Location –

UNIT III : INDUSTRIAL ECONOMICS AND MARKET STRUCTURE 12

Market Structure - Meaning - Different types of Market Structure - Sellers Concentration. Product Differentiation - Meaning of Product - Characteristics of Product - Entry Conditions - Economies of Scale - Meaning - Short and Long Economies of Scale- Profitability and Innovation.

UNIT IV: GROWTH OF THE FIRM 12

Growth of the Firm - Size and Growth - Growth and Profitability of the Firm - Constraints on Growth. Productivity: Meaning - Efficiency of Firm and Industry. Capacity Utilisation: Concept - Measurement - its importance. Industrial Policy: Industrial Policy in India - Industrial Performance after Independence. Public and Private Sectors: Meaning - Role - Characteristics - Importance of Public and Private Partnership in Developing Country - Limitations.

Unit V: INDUSTRIAL TECHNOLOGY 12

Industrial Technology: Role of Technology for Industrial Development - India as a Global Hub - Transfer of Technology - LPG - Recent Central Government Initiative to Encourage Industrial Sector.

Books for Reference

1. Clarke, Roger. 1985. Industrial Economics. New York: Basil Blackwell.
2. Barthwal, R.R. 1995. Industrial Economics. New Delhi: New Age International.
3. Smith, D.M. 1971. Industrial Location: An Economic and Geographic
4. Analysis. New York: John Wiley.
5. Ahluwalia, I. J. 1985. Industrial Growth in India. New Delhi: Oxford University

Web Resources

https://inomics.com/top/financial-economics/online-courses

https://archive.nptel.ac.in/courses/130/104/130104116/

https://onlinecourses.nptel.ac.in/noc22_hs72/preview

SEMESTER- IV

MACRO ECONOMICS-II

SUB.CODE: 4 0 0 4

Subject Description

Fundamental economic ideas and the operation of the economy on a national scale. Important components of the paper include, theory of inflation, business cycles, monetary policy, fiscal policy and product market and money market equilibrium.

Aim

This paper builds on concepts and models to study economic decisions and outcomes and the role of government in the national and international economy.

Course Outcome

Construct the aggregate demand and aggregate supply model of the macro economy and use it to illustrate macroeconomic problems and potential monetary and fiscal policy solutions.

UNIT-1: THEORY OF INFLATION 12

Classical, Keynesian and Monetarist Approaches to Inflation, Semi and Full inflation - Theory of Structural Inflation, Stagflation, Control of Inflation - Philips Curve Analysis – Short Run and Long Run Philip's Curve - The Natural Rate of Unemployment Hypothesis - Tobin 's Modified Philip Curve.

UNIT-II MEASURING INFLATION 12

Consumer price index and wholesale Price Index - What does it say about the state of the economy? - Real vs. nominal income and earnings - Real and Nominal rates of interest - Costs and causes of inflation

UNIT-III: BUSINESS CYCLES 12

Main Features of Business Cycles - Types of Business Cycle - Measures to Control Business Cycle - Theories of Business Cycles -Hawtrey's Monetary Theory of Trade - Cycle, Schumpeter's, Keynes and Hicks - Samuelson's, Friedman, Kaldor Model of Trade Cycle.

UNIT -IV: MONETARY POLICY AND FISCAL POLICY 12

Monetary Policy-Meaning of Monetary Policy, Instrument of Monetary Policy - Objective of Monetary policy, Limitations of Monetary Policy, Monetary Policy and Economic Development - Fiscal Policy – Meaning of Fiscal Policy, Instruments of Fiscal Policy - Objectives of Fiscal Policy, Fiscal Policy and Economic Growth,

Effectiveness of Fiscal Policy - Monetarism Vs Fiscalism – The Debate, Similarities between Monetary Policies and Fiscal Policies.

UNIT-V THE RATIONAL EXPECTATION HYPOTHESIS 12

Adaptive Expectations - Rational Expectations - The New Classical Macro Economics - Policy implications of New Classical Macro Economics - Supply Side Economics: - Main Features, Policy Prescriptions.

Books for Reference

1. Ackley, G. (1978), Macroeconomics: Theory and Policy, Macmillan, New York.
2. Begg, D. K. H. (1982), The Rational Expectation Revolution in Macro-Economics",Oxford, AllanBehaviour, Harvard University Press, Harvard.
3. Branson, W. (1989) – Macroeconomic Theory and Policy; (3rd Ed, Harper & Row)Cambridge)
4. Davidson, Paul (1994), Post Keynesian Macroeconomic Theory, Aldershot, Uk:
5. Dornbush, R. and S. Fischer (2004) – Macroeconomics (9th Ed, Tata-Mcgraw Hill)).
6. Duesenberry, J.S. (1949), Income, Saving and the Theory of Consumer
7. Edward Shapiro: Macroeconomics, McGraw Hill, New York. Dornbusch,
8. Fischer and Startz, Macroeconomics, Tata McGraw Hill, New Delhi.
9. Gurley, J and E.S. Shaw (1960), Money in a Theory of Finance, Brookings
10. India – A Central Banker's Perspective, UBSPD, New Delhi.
11. Jha, R. (1991)– Contemporary Macroeconomic Theory and Policy; (Wiley Eastern)
12. Keynes, J.M. (1936), The General Theory of Employment, Interest and Money,
13. Krugman and Wells, Eds., Macroeconomics 3rd. ed, Worth Publishers, 2012

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https://nptel.ac.in/courses/109/104/109104073/
https://onlinecourses.swayam2.ac.in/cec20_hs37/preview
http://mospi.nic.in/sites/default/files/press_release/PRESS%20NOTE%20SAE%2026-02-2021.pdf

FINANCIAL ECONOMICS

SUB.CODE: **4 0 0 4**

Subject Description

This course provides a rigorous introduction to the fundamentals of modern financial analysis and their applications to Basic Financial Calculations, Annuities and Equation of Value, Arbitrage, Contracts and Structure of Interest,Financial Markets, andTheory of Uncertainty.

Aim

This paper aims to get an economist's perspective to the learners about with how the system aidsresource allocation and economic growth.

Course Outcome

At the end this subject helps the learners to describe the main functions of the financial system; to solve present value problems; to derive key financial formulas; and explain how the stock and bond markets operate.

UNIT-1: BASIC FINANCIAL CALCULATIONS **12**

Financial Securities- Zero Coupon Bond, Fixed Interest, Index Linked Securities - The Time Value of Money - Nominal Vs. Real Interest - Deflationary Conditions; Accumulating Factors - Force of Interest, Compound Interest Functions

UNIT-II:ANNUITIES AND EQUATION OF VALUE **12**

Discounting and Accumulation - Discrete and Continuous Cash Flows - Level Annuities, Deferred and Increasing/Decreasing Annuities - Equation of Value and Yield on Transaction, Probability of Cash Flows - Higher Discount, Loan Schedules; Consumer Credit: Flat Rate and APRs.

UNIT -III: ARBITRAGE, CONTRACTS AND STRUCTURE OF INTEREST 12

Arbitrage, Forward Contracts, and Term Structure of Interest - Rationale for no arbitrage assumption; forward contracts - Forward Price for A Security with Known Dividend Yield; Hedging, Fixed Cash Income - Discrete Time and Continuous Time Rates; Continuous Time Spot Rates and Forward Rates, Forward Rates - Term Structure of Interest Rates; Yield Curve; Yields to Maturity; Convexity and Immunization

UNIT-IV FINANCIAL MARKETS **12**

Introduction to Financial Markets - Capital Markets, Consumption and Investments with and without Capital Markets - Market Places and Transaction

Costs and The Breakdown of Separation - Fisher Separation Theorem - The Agency Problem; Maximization of Shareholder's Wealth

UNIT-VTHEORY OF UNCERTAINTY 12

Axioms of Choice Under Uncertainty - Utility Functions; Expected Utility Theorem - Certainty Equivalence, Measures Of Risk-Absolute And Relative Risk Aversions - Stochastic Dominance-First Order, Second Order and Third Order - Measures of Investment Risk-Variance of Return, Semi-Variance of Return, Shortfall Probabilities.

Books for Reference

1. Baxter, M. and A. L. Rennie, Financial Calculus, Cambridge University Press,1996.
2. Brealey, R. and S. Myers, Principles of Corporate Finance, fifth edition, New York,McGraw Hill, 1997.
3. Copeland, T. E. and J. F. Weston, Financial Theory and Corporate Policy, AddisonWesley, 1992
4. Elton, E.J and M.J. Gruber, Modern Portfolio Theory & Investment Analysis, (fourthedition) John Wiley & Sons 1991.
5. Houthakker, H.S. and P.J. Williamson, Economics of Financial Markets, OxfordUniversity Press, 1996
6. Karatzas, L. and S.E. Shreve, Methods of Mathematical Finance,International Thomson Business Press, 1997
7. Martin, P.G. and B.Michael, Applied Financial Mathematics, Prentice Hall,Press, Norton, London, 1999
8. Ross, S.M., An Introduction to Mathematical Finance, Cambridge UniversitySpringer, 1998.
9. Watsham, T.J. and Perramore, K., Quantitative Methods in Finance,1991.

Web Sources

1. https://onlinecourses.nptel.ac.in/noc20_mg10/preview
2. https://www.mheducation.co.in/financial-institutions-and-markets-9789352605415-india
3. https://www.classcentral.com/course/edx-financial-institutions-and-markets-6260

RESEARCH METHODOLOGY

SUB.CODE: 4 0 0 4

Subject Description

This paper contains the basics of research methodology to conduct research in social science.Students of Economics may find it useful to develop a strong research foundation.

Aim

This paper is expected to provide an understanding of the basic principles and methods of research in Social Sciences.

Course Outcome

Equip students inclined to do research with the procedure and discipline of a research activity.

UNIT-1: INTRODUCTION TO RESEARCH METHODOLOGY 12

Meaning of Research-Definitions of Research- Research Foundations-Abstract and Concrete Knowledge - Objectives of research, Research methods versus methodology, Research approaches - Types of research- Descriptive vs. Analytical, Applied vs. Fundamental, Quantitative vs. Qualitative, Conceptual vs. Empirical - Other types of research - Qualities of a good researcher, Significance of research.

UNIT-II: RESEARCH PROCESS 12

Formulating the research problem: Sources of Ideas-Literature Review, Library and Web-sources. - Constructing Frameworks, Role of Theory Choosing a Research - Topic-Developing Research Questions (Hypothesis) Preparing the Research Design; Determining Sample Design - Collecting Data; Execution of The Project; Analysis of Data – Hypothesis Testing; Generalization and Interpretation - Preparation of the Report or Presentation of the Results.

UNIT -III: RESEARCH DESIGN 12

Features of research design, Concepts relating to research design - Types of research design -exploratory research design- descriptive - and diagnostic research design hypothesis-testing research design - Characteristics of a good research design - Case study Research-Sample Survey - Hypothesis and its testing.

UNIT-IV DATA COLLECTION 12

Sources of data: Primary Data -Methods of collecting primary data - Sources of secondary data- Published sources, Unpublished - sources - Questionnaire Drafting of questionnaire - Meaning and essentials of sampling- Sampling Methods - Statistical Laws: Law of Statistical Regularity, Law of Inertia of Large Numbers.

UNIT-V DATA PROCESSING AND ANALYSIS **12**

Statistical Analysis- Probability -Probability distribution –Binomial Distribution -Poisson Distribution -Normal Distribution - Testing of Hypothesis -Small Sample Large Sample Test, Chi-Square Test Statistical Applications. - Report Writing and Presentation- Structure and Components of Research Reports - Characteristics of a Good Report - Framework of a Report - Importance of Presentation of a Report

Books for Reference

1. Bhandarkar, P.L. and T.S. Wilkinson, Methodology And Techniques Of Social Research. Himalaya Publishing

2. Druckman , Daniel, Doing Research, Sage

3. Kothari, C.R., Research Methodology: Methods and Techniques, New Age International

Web source
https://onlinecourses.nptel.ac.in/noc23_ge36/preview
https://archive.nptel.ac.in/courses/127/106/127106227/
https://onlinecourses.swayam2.ac.in/cec20_hs17/preview

COMPUTATIONAL ECONOMICS

SUB.CODE: **4 0 0 4**

Subject Description

This paper is designed to impart the skills related to data analysis andcarrying out independent research activities. The course has potential to enhance the employability of students passing out from the department of Analytical and Applied Economics.

Aim

1. To teach different aspects and steps involved in undertaking a research work in social sciences.
2. To enable the students for using computers for data analysis and thesis writing.
3. To build capacity of the students on using two popular computational packages such as SPSS and STATAwidely used in industry.

Course Outcome

On successful completion of this paper, students will have:

1. Increased ability to observe social realities with the lens of a researcher;
2. Increased number of students opting for dissertation in the fourth semester; and
3. Increased employability of students in research organisations and corporate sector.

UNIT-IFUNDAMENTALS OF RESEARCH AND ACADEMIC ETHICS 12

Key Elements of Writing a Research Proposal - Review of Literature: Meaning, Objectives, Types, Sources, Stages and Precautions - Exercise on wiring a review of literature - Ethical Guidelines for Social Sciences research Plagiarism: Meaning and types; How to avoid Plagiarism

UNIT-II: **DATA ANALYSIS THROUGH SPSS 12**

Basics of SPSS - Descriptive Statistics in SPSS - Graphs and Charts in SPSS - Simple statistical Measures using SPSS - Regression Analysis using SPSS

UNIT -III DATA ANALYSIS THROUGH STATA 12

Basics of STATA - Descriptive Statistics in STATA - Graphs and Charts in STATA - Regression Analysis using STATA - Data Analysis Through STATA

UNIT-IV DATA ANALYSIS THROUGH EVIEWS 12

Basics of Eviews - Descriptive Statistics in Eviews - Graphs and Charts in Eviews - Regression Analysis using Eviews - Data Analysis Through Eviews

UNIT-VDATA ANALYSIS (R-STATISTICS OR GRETL) 12

Basics of R-Statistics/GRETL - Descriptive Statistics in RStatistics/GRETL -Graphs and Charts in in R Statistics/GRETL - Regression Analysis using R Statistics/GRETL - Open Source Softwires for Data analysis (R-Statistics or GRETL)

Books for Reference

1. David M. Levine et al, "Statistics for Managers using MS Excel' (6th Edition) Pearson, 2010 .
2. David R. Anderson, et al, 'An Introduction to Management Sciences: Quantitative approaches to Decision Making, (13th edition) South-Western College Pub, 2011.
3. William J. Stevenson, CeyhunOzgur, 'Introduction to Management Science with Spreadsheet', Tata McGraw Hill, 2009
4. Wayne L. Winston, Microsoft Excel 2010: Data **Analysis & Business Modeling, 3rd edition, Microsoft Press, 2011.**

WEBSITES:

1. https://www.researchoptimus.com/article/what-is-correlation.php
2. https://www.researchgate.net/publication/287275305_Data_Analysis_for_Effective_Decision_Making
3. https://www.slideshare.net/31mikaella/presentation-analysis-and-interpretation-of-data
4. **https://www.slideshare.net/MuhammadIbrahim15/data-analysis-using-spss**

Dissertation

Sub Code **4 0 0 4**

Presentation: 40 Marks **Hardcopy of Dissertation: 60 Marks**

OBJECTIVES

Students who complete their post-graduation in Economics are mentally equipped to pursueresearch in the same discipline. It is generally accepted that research is nothing but extension andapplication of knowledge in a certain specialized field. Therefore, students who do theirpost-graduation will be given an opportunity to get exposed to a few elements of social researchand also, they are expected to complete a research project/dissertation under the expert guidanceand supervision. Elementary knowledge of research methodology shall consolidate and deepentheir understanding of various branches of Economics. Preparing a dissertation is intended to trainthem in scientific thinking and art of systematic presentation. It is essentially a job-orientedexercise to enable them to take up the exciting field of social and economic research.

DISSERTATION: STRUCTURE AND EVALUATION

a) Students shall submit a dissertation of maximum 25,000 words in three copies to be submitted to the Department before the prescribed date.

b) The students have to appear before a closed viva voce conducted by a minimum of two members from the Economics Department and one external examiner.

INTERNSHIP

Sub Code **0 0 3 3**

The internship module aims to provide the student with:

- A practice-oriented and 'hands-on' working experience in the real world or industry, and to enhance the student's learning experience.
- An opportunity to develop a right work attitude, self-confidence, interpersonal skills and ability to work as a team in a real organisational setting.
- An opportunity to further develop and enhance operational, customer service and other life-long knowledge and skills in a real world work environment.
- Pre-employment training opportunities and an opportunity for the company or organisation to assess the performance of the student and to offer the student an employment opportunity after his/her graduation, if it deems fit.

COURSE OUTCOMES:

At the end of the course, a student will be able to

CO -1: Understanding the application of knowledge and skill sets acquired from the course and workplace in the assigned job function/s.

CO – 2: Applying real life challenges in the workplace by analyzing work environment and conditions, and selecting appropriate skill sets acquired from the course.

CO – 3: Create critical thinking and problem-solving skills by analyzing underlying issue/s to challenges.

CO – 4: Understanding the ability to harness resources by analyzing challenges and considering opportunities.

CO – 5: Understanding appreciation and respect for diverse groups of professionals by engaging harmoniously with different company stakeholders.