SRI VENKATESWARA UNIVERSITY: TIRUPATI

SVU COLLEGE OF ARTS
DEPARTMENT OF ECONOMETRICS

(Revised Scheme of Instruction and Examination, Syllabus etc., under CBCS Regulations -2016
is Amended as per NEP-2020)
(With effect from the batch admitted in the academic year 2021-22)

M.A. ECONOMETRICS

SEMESTER-I

S. No	Code	Title of the Course		Credit Hrs / Week	No. of Credits	Core / Elective	IA	SEE	Total Marks
1	EMT 101	Microeconomic Theory I		6	4	Core-Theory	20	80	100
2	EMT 102	Macroeconomic Theory I		6	4		20	80	100
3	EMT 103	Mathematical Methods		6	4		20	80	100
4	EMT 104	Practical I		6	4		20	80	100
5	EMT 105	A	Statistical Methods	6	4	CF	20	80	100
		B	Introduction to Econometrics						
		C	Agricultural Economics						
6	EMT 106	A	Entrepreneurship and Skill Development	6	4	EF	20	80	100
		B	Environmental Economics						
		Total		**36**	**24**		**120**	**480**	**600**
7	EMT 107	Human Values and Professional Ethics - I		**0**	**0**	Audit Course	**100**	**0**	**0**

- **All core papers are Mandatory**
- **Compulsory foundation – Choose any one**
- **Elective Foundation - Choose any one Paper**
- **Audit course – 100 Marks (Internal) – Zero Credit under self study**
- **** Interested student may register for MOOCS with the approval of DDC**

SEMESTER - II

S. No	Code	Title of the Course		Credit Hrs / Week	No. of Credits	Core / Elective	IA	SEE	Total Marks
1	EMT 201	Microeconomic Theory II		6	4	Core-Theory	20	80	100
2	EMT 202	Macroeconomic Theory II		6	4		20	80	100
3	EMT 203	Basic Econometrics		6	4		20	80	100
4	EMT 204	Practical II - Basic Econometrics and Mathematical Economics		6	4		20	80	100
5	EMT 205	A	Mathematical Economics	6	4	CF	20	80	100
		B	Actuarial Statistics						
		C	Women and Economic Development						
6	EMT 206	A	Public Finance	6	4	EF	20	80	100
		B	Industrial Economics						
		Total		**36**	**24**		**120**	**480**	**600**
7	EMT 207	Human Values and Professional Ethics - II		**0**	**0**	Audit Course	**100**	**0**	**0**

- **All core papers are Mandatory**
- **Compulsory foundation – Choose any one**
- **Elective Foundation - Choose any one Paper**
- **Audit course – 100 Marks (Internal) – Zero Credit under self study**
- **** Interested student may register for MOOCS with the approval of DDC**

SEMESTER-III

S. No	Code	Title of the Course		Credit Hrs / Week	No. of Credits	Core / Elective	IA	SEE	Total Marks
1	EMT 301	Advanced Econometrics		6	4	Core-Theory	20	80	100
2	EMT 302	Computer Applications and Data Analysis		6	4		20	80	100
3	EMT 303	A	Practical III - Advanced Econometrics, and Computer Applications and Data Analysis	6	4	Generic Elective	20	80	100
		B	Applied Econometrics						
		C	Economics of Development and Planning	6	4		20	80	100
		D	Financial Institutions and Markets						
4	EMT 304	Personality development and soft Skills		6	4	Skill Oriented	20	80	100
6	EMT 305	A	Indian Economy	6	4	Open Elective	20	80	100
		B	Economics of Insurance						
	Total			36	24		120	480	600

- **All core papers are Mandatory**
- **Generic Elective – Student has to choose any Two Paper**
- **Skill oriented Course is mandatory**
- **Open Elective are for the students of other Departments, Minimum one paper should be opted, extra credits may be earned by opting for more number of open electives depending on the interest of the student through self study**
- **** Interested student may register for MOOCS with the approval of DDC**

SEMESTER-IV

S. No	Code	Title of the Course		Credit Hrs / Week	No. of Credits	Core / Elective	IA	SEE	Total Marks
1	EMT 401	Time Series Econometrics		6	4	Core-Theory	20	80	100
2	EMT 402	Optimization in Economics		6	4		20	80	100
3	EMT 403	A	Practical IV - Time Series Econometrics and Optimization in Economics	6	4	Generic Elective	20	80	100
		B	International Trade and Finance						
		C	Indian Economy	6	4		20	80	100
		D	Project						
4	EMT 404	Freedom Movement In India, 1857 - 1947		6	4	*MDC	20	80	100
6	EMT 405	A	Optimization Techniques in Economics	6	4	Open Elective	20	80	100
		B	Data Base for the Indian Economy						
	Total			36	24		120	480	600

- **All core papers are Mandatory**
- **Generic Elective – Student has to choose any Two Paper**
- **Multidisciplinary Course/ Project work is Mandatory**
- **Open Elective are for the students of other Departments, Minimum one paper should be opted, extra credits may be earned by opting for more number of open electives depending on the interest of the student through self study**
- **** Interested student may register for MOOCS with the approval of DDC**

EMT 101: MICROECONOMIC THEORY- I

The microeconomic theory is to analyze how individual decision-makers, both consumers and producers, behave in a variety of economic environments. The common goal in all of these issues is to identify the incentives of the various participating agents and the trade-offs that they face. Microeconomics is a branch of economics that studies the behavior of individuals and firms in making decisions regarding the allocation of scarce resources and the interactions among these individuals and firms. Microeconomics shows conditions under which free markets lead to desirable allocations. The fundamental concepts of supply and demand, rational choice, efficiency, opportunity costs, incentives, production, profits, competition, monopoly, externalities, and public goods will help you to understand the world around you.

Course Objectives

The objective of this course is to provide the basic knowledge of decision making, production of products, different market structure and pricing structure of the firms with the study of the subject in a Master's programme.

Unit 1: Theory of Individual Decision Making

Theory of Demand - Consumer equilibrium under Indifference Curve Analysis – Applications of Indifference Curves - Slutsky Theorem – Revealed Preference Hypothesis - Choice under Uncertainty- Recent Developments in the Theory of Market Demand.

Unit 2: Theory of Production and Cost

Concepts of Production Function – Homogeneous Production Function - Least Cost Combinations of Factors – Cobb-Douglas and CES Production Functions – Frontier Production Function - Properties - Laws of Returns to Scale - Theory of Cost – Traditional and Modern theories of Cost.

Unit 3: Traditional Market Structures

Perfect Competition - Equilibrium, Short Run and Long Run considerations, Efficiency and Welfare – Monopoly – Price and output determination - Price Discrimination - Welfare and Output.

Unit 4: Modern Theories of Market

Monopolistic competition – Collusive and Non- Collusive Oligopoly: Cournot, Bertrand Stackelberg models - Nash equilibrium - Kinked Demand curve and Price Leadership models.

Unit 5: Limit Pricing and Managerial Theories of Firm

Bain's Limit Pricing: Recent developments – Sylos-Labini and Franco Modigliani Models - Baumol's Sales Maximisation: Static single product model with and without advertisements – Marris' model of Managerial Enterprise.

TEXT AND REFERENCE BOOKS:

1) J.M. Henderson and R.E. Quandt (2003) Micro-economic Theory: A Mathematical Approach, Tata McGraw Hill publishing company Ltd.
2) Hal R.Varian (1995), Intermediate Micro-econometrics: A Modern Approach, East West Press.
3) A. Deaton and J. Muellbauer (1987) Economics and Consumer Behaviour, Cambridge University Press.
4) A. Koutsoyiannis, (1979), Modern Micro-economics, London: Macmillan.

Learning Outcomes

After successfully completing the course MICROECONOMIC THEORY:

At the end of the programme, the students will the goal of microeconomics is to analyse the market mechanisms that establish demand structure of the goods, consumer preferences a select the goods, and demand structure in the market demand. The relative prices among goods and services and allocate limited resources among alternative uses. The concepts of production function, homogeneous production function, the Cobb-Douglas and CES Production Functions, Theory of Cost and traditional and modern theories of cost. The perfect Competition in the equilibrium, short run and long run considerations and price discrimination in the market. The major goals of microeconomic policy are efficiency, equity and growth. Economic growth is often treated as a macroeconomic issue, but it is closely related to the micro-behavior of the economy and the functioning of markets.

EMT 102: MACROECONOMIC THEORY-I

Macroeconomics refers to the study of the overall performance of the economy. While Microeconomics studies how individual people make decisions, macroeconomics deals with the overall aggregate effect of microeconomics. Macroeconomics is crucial for the government to understand and predict the long-term consequences of their decisions. The overarching goals of macroeconomics are to maximize the standard of living and achieve stable economic growth. The goals are supported by objectives such as minimizing unemployment, increasing productivity, controlling inflation, and more. The objectives are Full employment. Price stability. A high, but sustainable, rate of economic growth. Keeping the balance of payments in equilibrium.

Course Objectives

The objective of this course is to provide the basic knowledge of the study of the aggregate economy. The primary goals of macroeconomics are to achieve stable economic growth and maximize the standard of living. The basic concepts in macroeconomics and the concepts of National Income, measurement of National Income and factors determining national income and problems in Estimation of National Income. The theory of Employment, consumption Function, investment Multiplier and Accelerator, IS-LM model with Government sector, Monetary and Fiscal Policies and effect of IS and LM curves; Kinds of investment and determinations of investment; the monetary policy and fiscal policy are tools used by the government to control economic performance and reach macroeconomic goals.

Unit 1: Macro-Economics

Micro and Macroeconomics - Basic Concepts in Macroeconomics – Stocks and Flows - Statics, Comparative statistics and Dynamics – Micro Foundations of Macroeconomics -– Circular flow of National income.

Unit 2: National Income

Definition – Concepts of National Income – Measurement of National Income – Factors determining National income – National Income and Social Accounting - Methods of Estimation – Problems in Estimation of National Income – National Income and Economic Welfare.

Unit 3: Classical and Keynesian Economics

Classical Theory of Employment – Critique of Classical Theory – Basic Keynesian Model – Consumption Function – Investment Multiplier – Accelerator – Interaction between Multiplier and Accelerator - Integration of Monetary theory and Value theory – Don Patinkin theory – The Real Balance Effect – Pigou Effect.

Unit 4: Neo-Classical and Keynesian Synthesis

The IS-LM model – Extension of IS & LM model with government sector – Relative effectiveness of Monetary and Fiscal Policies –Shifts in IS and LM curves.

Unit 5: Savings &Investment

Kinds of investment – Determinations of investment - Investment demand and Output growth – Marginal Efficiency of Capital – Tobin's 'Q' Theory – Lags in Investment demand.

TEXT AND REFERENCE BOOKS:

1) Edward Shapiro, Macroeconomic Analysis, Galgotia Publications, New Delhi.
2) Keynes, J.M. 1936, General theory of Employment, Interest and Money.
3) Gardener Ackley, 1978, Macro-economic Theory - Theory and policy, Macmillan, New Delhi.

Learning Outcomes

After successfully completing the course MACROECONOMIC THEORY:

At the end of the programme, the students will the goal of macroeconomics is to analyze the concepts and measurement of National Income, factors determining national income and problems in Estimation of National Income. The theory of Employment, consumption Function, investment Multiplier and Accelerator, IS-LM model with Government sector, Monetary and Fiscal Policies and effect of IS and LM curves; Kinds of investment and determinations of investment; the monetary policy and fiscal policy are tools used by the government to control economic performance and reach macroeconomic goals. The overarching goals of macroeconomics are to maximize the standard of living and achieve stable economic growth. The goals are supported by objectives such as minimizing unemployment, increasing productivity, controlling inflation, and more. The macro economy of a country is affected by many forces, and as such, economic indicators are invaluable to assessing different aspects of performance.

EMT 103: MATHEMATICAL METHODS

Mathematical economics is a method of economics that utilizes math principles and tools to create economic theories and to investigate economic quandaries. Mathematics permits economists to construct precisely defined models from which exact conclusions can be derived with mathematical logic, which can then be tested using statistical data and used to make quantifiable predictions about future economic activity.

Course Objectives

The M.A in Econometrics includes two courses in basic mathematics – one in each semester of I and II semester. This is the first of these two courses.

✓ The course is designed to build the mathematical foundations of the students by equipping them with basic mathematical methods that are essential for learning and working with economic theories and models.

✓ This course also introduces the Mathematical tools such as Basic Algebra, Sets operations, functions which is more important in economic functional relations, differential equations and Matrices and Determinants.

Unit 1: Basic Concepts and Set Theory

Exponents – Polynomials – Factorization of Equations —— Sets - Meaning, Definition, Types of sets, set operations – Ordered Sets – Linear Point Sets - Cartesian product – Relation – Functions.

Unit 2: Functions and Limits

Functions - Type of Functions – Increasing and Decreasing – Implicit and Explicit – Constant, Linear, Quadratic, Logarithmic and Exponential functions – Graphical Representations of Functions – **Economic Applications of Functions** - **Limits:** Concepts of a Limit of a Function –Theorems on Limits of Functions – Evaluations of Limits in Simple Cases – Limits and Continuity of Functions.

Unit 3: Differential Calculus and Economic Applications (One Variable)

Differential Calculus: Meaning – Process of Differentiation – Rules of Differentiation – Differentiation of Logarithmic and Exponential Functions – Higher Order Derivatives – Maximum and Minimum Points – Points of Inflection - **Economic Applications:** Marginal concepts, Price and cross Elasticity of demand – Relationship among Total, Marginal, Average concepts – Optimizing Economic functions.

Unit 4: Integration and Economic Applications

Concept of an Indefinite Integral – Standard Integral Formula – Rules of Integration – Methods of integration – Concept of a Definite Integral – Area under a Curve – Fundamental theorem of Calculus – Properties of Definite Integral – Area between Curves; **Economic Applications:** Total Functions from Marginal Function – Consumer's and Producer's Surplus.

Unit 5: Matrices and Determinants

Matrices: Concept of a Matrix – Types of Matrices – Matrix Operations – **Determinants:** Properties of Determinants – Minors and Co-Factors – Evaluation of Determinants of Second and Third Order - Inverse of a Matrix – Solutions of Simultaneous Linear Equations involving two or three Variables by Matrix Inverse Method and Cramer's Rule – Characteristic roots and equations – Concept of a Quadratic form – Rank of a Matrix – Concept of g-inverse and c- inverse.

TEXT AND REFERENCE BOOKS:

1) Allen, RGD : Mathematical Analysis for Economists
2) Mehta, BC and Madanani GMK: Mathematics for Economists, Sultan Chand and Sons, Delhi
3) Taro Yamane: Mathematics for Economists (An Elementary Survey), Prentice Hall of India Private Ltd, New Delhi
4) Alpha C. Chang: Fundamental Methods for Mathematical Economics
5) Barry Bressler: A Unified introduction of Mathematical Economics.
6) Dowing, Edward T: Introduction to Mathematical Economics, (2/ed.), Schaum's Outlines, Mc. Graw Hill, 1980
7) Bose, D : An Introduction to Mathematical Economics, Himalaya Publishing Company, Delhi.

Learning Outcomes

After successfully completing the course the graduate is able to:

Formulate mathematical models describing the dynamics of economic systems solve independently primary analytical tasks based on non-trivial econometric analysis of underlying data use with erudition advanced econometric tools and techniques for processing relevant data assess critically the adequacy of using econometric and statistical tools and techniques in economy and other scientific disciplines.

EMT 104: PRACTICAL – I:
MATHEMATICS AND STATISTICS

Statistics and mathematics are everything to economics. in fact, Statistics and Mathematics, the economic field wouldn't even exist. Economist need statistics to represent data, to track and store information, to identify trends, to attribute value and mathematics to calculate those figures.The versatility of statistical methods opens the door for graduates into the world of financial economics or business economics. Students may profile their specialization within the selection of thesis topic and supervisor. Graduates are well prepared for the further study of contemporary economic theory based on advanced quantitative methods.

Course Objectives

This is a course on Practical approach of the Mathematical and statistical methods for economics. The main objectives of the course follow;

✓ The main objective of this study programme is thus to promote the analytical skills of the practical knowledge of calculating descriptive statistics. These knowledge scan be used to solve complex analytical tasks based on statistical analysis of the underlying socio-economic data.
✓ To solve the tasks of formulating and estimating economic models using statistical methods such as Correlation and Regression.
✓ This course an underlaying of practical knowledge of Probability, and Testing of Hypothesis.

This course is extension of practical practices of Mathematical and Statistical methods what we mentioned in the courses of EMT103 and EMT 105

Concepts are covered in this Practical course follows;

➢ Descriptive Statistics: Mean, Median, Mode, Range, Quartile Deviation and Standard Deviation and Coefficient of Variation.
➢ Probability: Binomial, Poisson, Normal and Log-Normal Distribution
➢ Correlation and Regression Analysis
➢ Testing of Hypothesis: Small sample tests based on t, F and Chi-square distributions.
➢ Matrices: Inverse of a Matrix, System of Simultaneous Linear Equations and Cramer's Rule method.

Learning Outcomes

After successfully completing the course the graduate is able to:

After completing this course student can solve system of linear equations. Statistics is the core around which economic inferences are built. Student can identify the relationship between the economic variables and test their significance which are key factor for economic analysis and policy making or business decisions.

EMT 105(A) STATISTICAL METHODS

The Statistical Methods in Economics study programme offers students a superior knowledge of the primary quantitative tools and techniques used in economics and a very good knowledge of current trends of microeconomic and macroeconomic modelling. Attention is also paid to the development of skills in data mining and other advanced applied statistics techniques.

Course Objectives

This is a course on statistical methods for economics. It begins with some basic concepts and terminology that are fundamental to statistical analysis and inference. The main objectives of the course follow;

✓ The main objective of this study programme is thus to cultivate the analytical skills that can be used to solve complex analytical tasks based on a non-trivial statistical analysis of the underlying data.
✓ To solve the tasks of formulating and estimating economic models using statistical methods.
✓ This course an underlying of descriptive statistics, Probability, Sampling methods, Correlation and Regression Analysis and Testing of Hypothesis.

Unit 1: Basics:

Measures of Central Tendency – Measures of Dispersion – Coefficient of Variation, Skewness and Kurtosis – Numerical problems.

Unit 2: Probability and Distributions:

Probability: Concept of Probability – Axioms of Probability – Addition and Multiplication theorems – Bayes's Theorem - **Distributions:** Random Variables – Distribution Function – Probability Density Function - Mathematical Expectation – Binomial, Poisson, Normal and Lognormal distributions – Mean and Variance - Chief characteristics of Normal Distribution.

Unit 3: Estimation and Testing of Hypothesis:

Estimation: Introduction – Point and Interval Estimation - Estimators and their Properties: Consistency, Unbiasedness, Efficiency and Sufficiency - Method of estimation – Method of Least Squares and Method of Maximum Likelihood. **Tests of Hypothesis:** Statistical Hypothesis – Critical Region – Best Critical region – The Most Powerful Test - Types of errors - Large sample tests for means and proportions - Small sample tests based on t, F and Chi-square distributions.

Unit 4: Sampling Theory:

Need for sampling – Census Vs. Sampling - Types of sampling – Simple random sampling – Stratified random sampling – Systematic sampling – Two Stage sampling.

Unit 5: Correlation and Regression:

Simple Correlation – Computation – Properties - Rank Correlation - Regression Lines - Numerical problems – Concept of Partial and Multiple Correlations.

TEXT AND REFERENCE BOOKS:

1) S.C. Gupta and V.K. Kapoor: Elements of Mathematical Statistics.
2) Wonnacott & Wonnacott: Introduction to Statistical Methods.
3) Alexander M.Mood, Franklin A. Graybill and Duance C. Boes: Introduction to the Theory of Statistics. Third Edition. McGraw-hill Statistics Series, 1988.
4) S.P. Gupta: Introduction to Statistical Methods.
5) S.P. Gupta: Elements of Statistics.

Learning Outcomes

After successfully completing the course the graduate is able to:

After completing this course student can formulate Statistical Methods describing the dynamics of economic systems such as production function analysis and solve econometric

analysis of underlying data use with knowledge advanced econometric tools and techniques can solve easily.

EMT 105(B): INTRODUCTION TO ECONOMETRICS

Ragnar Frisch, along with Jan Tinbergen, pioneered development of mathematical formulations of economics. He coined the term econometrics for studies in which he used statistical methods to describe economic systems. Econometrics is the use of statistical methods using quantitative data to develop theories or test existing hypotheses in economics or finance. Econometrics relies on techniques such as regression models and null hypothesis testing. Econometrics can also be used to try to forecast future economic or financial trends. By taking this introduction to econometrics you will gain an overview of what econometrics is about, and develop some "intuition" about how economic things work.

Course Objectives

The objective of this course is to provide the basic knowledge of econometrics that is essential equipment for any serious economist or social scientist, to a level where the participant would be competent to continue with the study of the subject in a Master's programme.

✓ This course is designed to define Econometrics, Steps in Empirical Economic Analysis, Different types of data involved in econometric Analysis.
✓ The courses involved Simple and Multiple Linear regression model and Functional forms of Non-Linear Regression models.
✓ Basic concept of Auto regressive distributed lag model (ARDL) developed which will be helpful for future research work with time series data.

Unit 1: Nature of Econometrics and Economic Data

Definition of Econometrics – Steps in Empirical Economic Analysis - Econometric Model – The Role of Measurement in Economics – The Structure of Economic Data: Cross-Sectional data, Time Series data, Pooled Cross Section data, Panel Data.

Unit 2: Simple Regression Model

Two Variable Linear Regression Model: Assumptions, Estimation of Parameters, Tests of Significance and Properties of Estimators – Functional forms of Regression models – Log-linear models, Semi log- models and Reciprocal models – Choice of Functional Form.

Unit 3: The General Linear Model

Review of Assumptions, Estimation and Properties of Estimators: Un-biasness, BLUEs and Tests of significance of estimates – Analysis of Variance - **Dummay variables -** Nature of Dummy variables – Use of Dummy Variables – Errors in Variables and its consequences.

Unit 4: Auto-regressive and Distributed Lag Models

Introduction – Types of Lag schemes - Koyck's lag model, Almon's Lag scheme, Partial Adjustment and Expectations models - Causality in Economics – The Granger Causality Test.

Unit 5: Simultaneous Equation Models

Specification – Simultaneous Bias – Inconsistency of OLS Estimators - The concept of Identification, Rank and Order conditions for Identification – Indirect Least Squares - Two stage Least Squares (without proof), Problems.

TEXT AND REFERENCE BOOKS:

1. Johnston,J: Econometric Methods, McGraw-Hill Book Co., New York.
2. Maddala, G.S: Econometrics, McGraw-Hill Book Co., New York, 3rd Rd.
3. Gujarathi, D.N: Basic Econometrics, Fourth Edition, Tata McGraw-Hill, New Delhi.
4. Tintner,G: Econometrics, John Wiley & Sons, New York.
5. Wooldridge, Jeffery M: Econometrics, Cengage Learning India Pvt. Ltd, New Delhi.

Learning Outcomes

After successfully completing the course Introduction to Econometrics the graduate is able to:

At the end of the programme, the students will have adequate competency in the frontier areas of economic theory and methods. Formulation and estimation of a multiple regression model. Decision about the statistical significance of individual explanatory variable and also over all model. Impacts for the violation of one of the important assumptions for application of OLS regression. The students will acquire additional specialization topics are estimation of system of equations, estimation of panel data models, generalized method of moments, discrete response models, censored regression models and estimation of average treatment effects.

EMT 105 (C) AGRICULTURAL ECONOMICS

To import knowledge on role of agriculture sector in Economic development and structural changes and contribution of Agriculture sector to the country economy. Understanding the need for improvement in Agricultural Productivity – various programmes adopted by the Government for the improvement of Agricultural productivity.

Course objectives

i.   Provide orientation to the students regarding Development of Agriculture sector during post-independence period, Targets and achievement during five year plans and India's position in World Agriculture.
ii.   Expose the students to the factors determine Growth Capital formation in Agricultural Sector and inflow of credit to Agricultural Sector.
iii. To import knowledge on Government initiation and development of Agriculture.
iv.   Enhancing expertise in improving the performance of the marketing institutions and layers in marketing of Agricultural commodities.

Unit –I: Agriculture and Economic Development

Definition, Nature and Scope of Agricultural Economics – Role of Agriculture sector in Economic Development – Structural changes and Contribution of Agriculture Sector — Modernisation of Agricultural Production Systems – Global Hunger Index – Achieving Zero Hunger – Re-orientation of Agricultural Development- Sustainable Agriculture- Role of Women in Agricultural Development.

Unit –II: Agriculture Sector in India

Development of Agriculture sector during Post-Independence Period –Green Revolution - Trends in Growth of Gross Cropped Area and Gross Irrigated Area – Decreasing Size of Average Land Holdings – Area, Production and Yields of Principal Crops- Targets and Achievements during Five Year Plans – India's Position in World Agriculture.

Unit –III. Investments in Agriculture Sector in India

Factors Determining Gross Capital Formation in Agriculture Sector – Trends during Five Year Plans – Share of Public and Private Sectors – Budgetary expenditure on Agriculture sector – Inflow of FDI into Agriculture sector- Sources and Trends in flow of Credit to Agriculture – Kisan Credit Cards – Credit for Rain fed Areas – Indebtedness of Agricultural Households .

Unit – IV: Government Initiatives and Development of Agriculture

Need for Improvement in Agricultural Productivity- Government Initiatives – National Food Security Mission (NFSM)- National Mission for Sustainable Agriculture (NMSA) and Agricultural Extension and Technology – National Crop Insurance Programme – PradhanMantri FasalBimaYojana- RashtriyaKrishiVikasYojana – Rain fed Area Development Programme.

Unit- V: Agricultural Marketing and Trade in India

Determinants of Marketable and Marketed Surplus – Structure of Agricultural Markets – Primary and Secondary Wholesale Markets- Terminal Markets – Retail Markets – Fairs – Nature of Markets – Group Marketing- Cooperative Marketing – Direct Marketing – Warehousing in Rural areas – Physical and Financial Performance of GrameenBhandaranYojana – Role of AGMARK and AGMARKNET- Exports and Imports of Agricultural Commodities

REFERENCES:

1. Bilgrami, S.A.R. (1996) Agricultural Economics, Himalaya Publishing House, New Delhi
2. FAO (2002) World Agriculture Towards 2015/30: Summary Report, Rome
3. FAO (2015) The State of Agricultural Commodity Markets : Trade and Food Security, Rome.
4. FAO (2015) The State of Food Insecurity in the World., Rome
5. Global AgriSystem Private Limited: Evaluation and Impact Assessment for the Central Sector
6. Scheme of GrameenBhandaranYojna, Submitted by Global AgriSystem Private Limited to Directorate of Marketing and Inspection, Department of Agriculture and Cooperation, Ministry of Agriculture, Government of India.
7. Government of India (2012) Twelfth Five Year Plan (2012–2017) Economic Sectors,Volume II Agriculture, Planning Commission, New Delhi, Published by Sage Publications.
8. Government of India (2015) Annual Report-2014, Ministry of Agriculture and Cooperation, New Delhi
9. Government of India (2015) Agricultural Statistics at a Glance 2014, Ministry of Agriculture
10. Department of Agriculture & Cooperation Directorate of Economics & Statistics, New Delhi, Oxford.
11. Government of India (2015) Pocket Book of Agricultural Statistics-2015.

Learning Outcomes

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

Understanding scope of Agriculture Economics – Role of Agriculture in Economic Development- changes and contribution of Agriculture sector and Role of Women in Agricultural Development. Understanding the development of Agriculture Sector Post independence period – trends in area production and productivity and India's position in World Agriculture. Understanding the disbursement of institutional finance to primary sector, credit management and risk management. Other agencies – reasons for indebtedness in Agricultural Households

EMT-106(A) ENTREPRENEURSHIP AND SKILL DEVELOPMENT

Entrepreneurship and skill development   course outcome study of concepts,functions and types of entrepreneurship. Women entrepreneurship and economic development. Role of national and state level organizations in the development of entrepreneurship. Objectives, methods and content of project report.

Course objectives

To make students develop and can systematically apply an entrepreneurial way of thinkingTo import knowledge on organisations for Skill Development. Development of communication skills and skill development

Unit I: Entrepreneurship

Concepts of Entrepreneurship - Functions and Types of Entrepreneurs - Motivation and Competency –Entrepreneurship - Women Entrepreneurship and Economic Development.

Unit Ii: OrganizationsFor Entrepreneurship Development

Programmes for the Development of Entrepreneurship - National and State Level Organizations - Entrepreneurship Development Institute of India (EDII) - National Institute for Entrepreneurship and Small Business Development (NIESBUD) - National Science and Technology Entrepreneurship Development Board (NSTEDB) - National Institute of Small Industry Extension and Training (NISIET).

Unit Iii:Identification And Preparation Of Project Report

Identification of Project – Objectives of Project – Methods and Contents of Project Report – Formulation and Appraisal of Project Report.

Unit Iv: Development Of Skills

Need for the Development of Skills –Communication Skills – Verbal and Non-Verbal Communication – Barriers to Communication – Individual Interaction Skills – Basic Interaction Skills - Leadership Skills - Working Individually and as a Team - Personality Development – Intra and Inter-personal Communication Skills.

Unit V: Organizations For Skill Development

Skill Development Mission – PM's National Council on Skill Development – National Skill Development Coordination Board – National Skill Development Corporation – SIKSHAM-National Skill Foundation of India(NSFI) – Skill Development Initiative (SDI) - KaushalVikasYojana (KVY) – AP State Skill Development Board.

REFERENCES:

1. Kent G. A, 1982, Encyclopedia of Entrepreneurship, Prentice Hall, USA
2. Markcassion, 2000, Enterprise and Leadership, Edward Elgar., UK
3. Michael and et al, 1998, Educating Entrepreneurs for Wealth creation, Aghgate Publisher, Hampshire, U.K.
4. Patel V.G., 1987, Entrepreneurial Development Programmes in India and its relevance to Developing Countries, WorId Bank.
5. Samuddin, 1990, Entrepreneurial Development in India, Mittal Publications,New Delhi.
6. Steneson et al, 1986, Importance of Entrepreneurship and Eco-nomic Development.
7. Rajiv K Misra, Personality Development, Rupa& Co.
8. Govt. of India (2012) XI Plan Document.
9. Govt. of India (2014) Economic Summary.
10. M.Gangadhar Rao. et al, 1993, Industrial Economy Part-I,Kanishka Publishing House, New Delhi.
11. Katar Singh, 1994, Rural Development Principles, Policies and Management, Sage Publication India, New Delhi.
12. Development Commissioner: Annual Reports, Small Scale Industries, New Delhi.
13. UDAl PAREEK and T. VenkateswaraRao, Developing Entre-preneurship - A Hand Book Learning Systems, New Delhi.
14. Deshpande, M.U., Entrepreneurship of Small Scale Industries, Deep and Deep Publications, New Delhi.
15. D.L. Narayana, 1972, Entrepreneurship and Economic Development, Madurai University Press, Madurai.

Learning Outcomes

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

To familiar the student with the basic concepts function and type of entrepreneurs. To import knowledge on programs for the Development of Entrepreneurship. Provide orientation on identification and to assess the feasibility of the project. To make students develop and can systematically apply an entrepreneurial way of thinking.

The main objective of environmental economics is to maintain a balance between economic development and environmental quality. In order to achieve it, environmental economists have to explore the various socio-economic possibilities to reduce pollution and uplift the standard of living of the people. Environmental economics is a distinct branch of economics that acknowledges the value of both the environment and economic activity and makes choices based on those values. The goal is to balance the economic activity and the environmental impacts by taking into account all the costs and benefits.

Environmental economics was a major influence on the theories of natural capitalism and environmental finance, which could be said to be two sub-branches of environmental economics concerned with resource conservation in production, and the value of biodiversity to humans, respectively. The main objective of environmental economics is to maintain a balance between economic development and environmental quality. In order to achieve it, environmental economists have to explore the various socio-economic possibilities to reduce pollution and uplift the standard of living of the people.

Course Objectives

The objective is to develop a good understanding of market failure and externalities, Pareto efficiency, maximum social welfare and perfect competition, measures to control pollution and externalities, Pigouvian tax and subsidies, Compensation criterion, social choice and justice, property rights and Coase theorem. Environmental economics will help you understand some important and controversial issues – such as climate change policy, nuclear power, recycling policy, and traffic congestion charging. This is an exciting field of economics to study, and very much at the heart of many public debates and controversies.

The objective of this course is to provide the basic knowledge of Nature and Scope of Environmental Economics, Environmental Degradation and Resource Depletion, Sources and Effects of Pollution, Environmental Principles and Policies and Environmental Laws and Management Strategies, with the study of the subject in a Master's programme.

Unit 1: Nature and Scope of Environmental Economics
Nature and Scope of Environmental Economics – Economic Growth and Environmental degradation – Environmental Kuznets Curve - Limits to Economic Growth - Sustainable Development – Environmental Quality and Economic Development.

Unit 2: Environmental Degradation and Resource Depletion
Natural Resources – Renewable and Non-renewable Resources – Approaches to the use of Natural Resources – Theories of Natural Resources - Depletion of Natural Resources – Tragedy of Commons – Causes of Environmental Degradation.

Unit 3: Sources and Effects of Pollution
Sources and Types of Pollution – Soil, Air, Water Pollution - Industrialization and Environmental Pollution – Urban Solid-waste and other sources of Pollution – Aqua Culture, Coastal and Marine Pollution - Economic Effects of Pollution.

Unit 4: Environmental Principles and Policies
Environmental Regulation and Control of Pollution – Polluter Pays Principle - Hedonic Pricing Principle – Pigovian Analysis of taxes and Subsidies - Pollution Permits – Environmental Institutions - Environmental Policy – Objectives – National Environmental Policy of 2006 - Pollution Control Policies in India.

Unit 5: Environmental Laws and Management Strategies
Environmental Laws and Regulations – The Air Act, The Water Act, The Environmental Protection Act, The Wildlife Protection Act in India - Environment Management Strategies – Development of Clean Production Technologies - Forest Conservation, Management and Conservation of Common Property Resources and Environmental Education – Social Forestry – Community Participation.

TEXT AND REFERENCE BOOKS:

1) Bhattacharya, R.N. (Ed), 2001, Environmental Economics; An Indian Perspective, Oxford University press, New Delhi.
2) Sankar,U. (Ed), 2001, Environmental Economics, Oxford University press, New Delhi.
3) Baumol, W.J. and W.E. Oates, 1998, the theory of Environmental policy, (2nd Edition), Cambridge University press, Cambridge.
4) Anil Kumar, 1990 Environmental Protection and Industrial Development, Ashish Publishing House, New Delhi;
5) Mussen, A.M. 1999, Principles of Environmental Economics, Rutledge, London
6) Kolstad, C.D., 1999, Environmental Economics, Oxford University press, Baltimore.
7) Sengupta, R.P.2001, Ecology and Economics: An approach to sustainable development, Oxford University press, New Delhi.

Learning Outcomes

After successfully completing the course Indian economy the graduate is able to:

Analyse theoretical and empirical research in environmental and natural resource economics. Prepare an analytical policy report that develops knowledge and practical implementation of relevant economic theory in understanding and addressing an environmental or natural resource issue. Environmental Studies (EVS) at the primary stage envisages exposing children to the real situations in their surroundings to help them connect, be aware of, appreciate and be sensitized towards the prevailing environmental issues (natural, physical, social and cultural).

Environmental economists study the economics of natural resources from both sides - their extraction and use, and the waste products returned to the environment. They also study how economic incentives hurt or help the environment, and how they can be used to create sustainable policies and environmental solutions. Learning outcomes are statements that describe the knowledge or skills students should acquire by the end of a particular assignment, class, course, or program, and help students understand why that knowledge and those skills will be useful to them.

EMT 107: HUMAN VALUES AND PROFESSIONAL ETHICS – I

Human values are the virtues that guide us to take into account the human element when we interact with other human beings. It is with those human values that one becomes truly able to put into practice his/her ethical values, such as justice, integrity, and refusal of violence and ban to kill – even in a crisis situation. To create an awareness on Management Ethics and Human Values. To inspire Moral and Social Values and Loyalty. To appreciate the rights of others. The prime objective of the Professional Ethics is to develop ability to deal effectively with moral complexity in students. To understand the moral values that ought to guide the Engineering profession, (b) To resolve the moral issues in the profession, and (c) To justify the moral judgment concerning the profession.

Course Objectives

This is a course on human values and professional ethics. The main objectives of the course is nature of ethics, relation to Religion, Politics, Business, Legal, Medical and Environment; Nature of Values- Good and Bad, analysis of basic moral concepts- right, ought, duty, obligation, justice, responsibility and freedom; the Ahimsa (Non- Violence), Satya (Truth), Brahmacharya (Celibacy), Asteya (Non-possession) and Aparigraha(Non-stealing). Purusharthas(Cardinal virtues)-Dharma (Righteousness), Artha(Wealth), Kama(Fulfillment Bodily Desires). Moksha(Liberation); the Four Noble Truths and Gandhian Ethics; and lastly crime and Theories of punishments are reformative, retributive and Deterrent.

REFERENCES:

1) John S Mackenjie: A manual of ethics.
2) The Ethics of Management" by Larue Tone Hosmer. Richard D. Irwin Inc.
3) "Management Ethics' integrity at work' by Joseph A. Petrick and John F. Quinn. Response Books: New Delhi.
4) "Ethics in Management" by S.A. Sherlekar, Himalaya Publishing House.
5) Harold H. Titus: Ethics for Today
6) Maitra, S.K: Hindu Ethics
7) William Lilly: Introduction to Ethics
8) Sinha: A Manual of Ethics
9) Manu: Manava Dharma Sastra or the Institute of Manu: Comprising the Indian System of Duties: Religious and Civil (ed.) G.C.Halighton.
10) SusrptaSamhita: Tr.KavirajKunjanlal, KunjalalBrishagratha. Chowkarnba Sanskrit series. VolLlI and Ill, Varnasi, Vol I 00,16'20,21-32 and 74-77 only.
11) CarakaSamhita :Tr.Dr. Ram Karan Sarma and VaidyaBhagavan Dash, Chowkambha Sanskrit Series office. Varanasi I, 11.111 VolIPP 183-191.
12) Ethics, Theory and Contemporary Issues. Barbara Mackinnon Wadsworth/Thomson Learning, 2001.
13) Analyzing Moral.Issues, Judith A. Boss. May Field Publishing Company - 1999.
14) An Introduction to Applied Ethics (Ed.) John H.Piet and Ayodhya Prasad. Cosmo Publications
15) Text Book for Intermediate First Year Ethics and Human Values. Board of Intermediate Education- Telugu ~ Akademi, Hyderabad.
16) I.C Sharma Ethical Philosophy of India. Nagin& co Julundhar

Learning Outcomes

After successfully completing the course the graduate is able to:

Honesty, open disclosure and sincerity are all characteristics of ethical behavior. Many organizations include a commitment to ethical behavior in their code of conduct. The professionals can adopt a personal code of conduct and make the same commitment on an individual basis. Professional ethics are accepted standards of personal and business behavior, values and guiding principles. The codes of professional ethics are established by professional organizations to help to guide members in performing their job functions according to sound and consistent ethical principles. The principles are beneficence, non-malfeasance, autonomy, justice; truth-telling and promise-keeping.

SEMESTER - II
EMT 201: MICROECONOMIC THEORY- II

The microeconomic theory is to analyze how individual decision-makers, both consumers and producers, behave in a variety of economic environments. The factor prices are land, labour, capital and organization, determination of factor prices, pricing of factors; Ricardian theory of Rent, wage determination under perfect competition, classical theory of interest, theories of Profit; static and dynamic equilibrium, Walrasian System of General Equilibrium, Existence and Stability of General Equilibrium, externalities and Allocative Efficiency; Adam Smith, Bentham, Pigou, Kaldor-Hicks Compensation Criteria.The Fundamental concepts of supply and demand, rational choice, efficiency, opportunity costs, incentives, production, profits, competition, monopoly, externalities, and public goods will help you to understand the world around you.

Unit 1: Factor Markets
Factor Pricing: Marginal Productivity Theory of determination of Factor prices - Factor shares and the 'Adding up' problem - Euler's theorem - Pricing of factors under Imperfect Competition.

Unit 2: Functional Distribution
Theories of Rent: Concept of Rent – Ricardian theory of Rent – Quasi Rent, Theories of Wages: Wage determination under Perfect competition, Monopsony and Collective bargaining Bilateral Monopoly), Theories of Interest: Classical theory of interest – Loanable fund theory – Keynes liquidity preference theory of interest, Theories of Profit: Profit as dynamic surplus – innovations and profits – risk uncertainty and profits

Unit 3:Economics of Information
Basic Concepts of Economics of Information - Economic Value of information - Role of information in Economic theory – Information, a measure of risk - Bayes' Rule - Classical Paradoxes - Choice under Risk - Risk Allocation in Exchange Economies Model - Monopolist Insurer - Perfect Competition - Adverse Selection - Monopolistic Screening, Competition and Market Breakdown - Public Intervention - Brief introduction to Game theoretic approach to information use.

Unit 4: General Equilibrium
Meaning of Partial and General Equilibrium – Static and Dynamic Equilibrium – Stable and Unstable Equilibrium –Walrasian System of General Equilibrium - Existence and Stability of General Equilibrium - Externalities and Allocative Efficiency.

Unit 5: Welfare Economics
Welfare Economics – Criteria of Social Welfare – Adam Smith, Bentham, Pigou, and Cardinal school – Pareto Optimality in Consumption, Production and Distribution – Kaldor-Hicks Compensation Criteria- Bergson Social Welfare Function - Social Choice Theory, Coase and Sen.

TEXT AND REFERENCE BOOKS:

1. J.M. Henderson and R.E. Quandt (2003) Microeconomic Theory: A Mathematical Approach, Tata McGraw Hill publishing company Ltd.
2. Hal R.Varian(1995), Intermediate Micro econometrics: A Modern Approach, East West Press.
3. A. Deaton and J. Muellbauer(1987) Economics and Consumer Behaviour, Cambridge University Press.
4. A. Koutsoyiannis, (1979), Modern Microeconomics, London: Macmillan.
5. Macho-Stadler, I and D. PerezCastrillo (1997): "An Introduction to the Economics of Information", Oxford University Press.
6. J. Hirshleifer and J. Riley (1992): "The Analytics of Uncertainty and Information", Cambridge University Press
7. J.-J. Laffont (1989): "The Economics of Uncertainty and Information", MIT Press
8. L. Phlips (1988): "The Economics of Imperfect Information", Cambridge University Press
9. T. Van Zandt (2006): "Introduction to the Economics of Uncertainty and Information"
10. K. Binmore (2011): "Rational Decisions", Princeton University Press
11. M. Osborne: "An Introduction to Game Theory", Oxford University Press.

Learning Outcomes

After successfully completing the course microeconomic theory the graduate is able to:

The factor prices are land, labour, capital and organization, determination of factor prices, pricing of factors; Ricardian theory of Rent, wage determination under perfect competition, classical theory of interest, theories of Profit; static and dynamic equilibrium, Walrasian System of General Equilibrium, Existence and Stability of General Equilibrium, externalities and Allocative Efficiency; Adam Smith, Bentham, Pigou, Kaldor-Hicks Compensation Criteria. Microeconomics shows conditions under which free markets lead to desirable allocations. The major goals of microeconomic policy are efficiency, equity and growth. Economic growth is often treated as a macroeconomic issue, but it is closely related to the micro-behaviour of the economy and the functioning of markets.

EMT 202: MACROECONOMIC THEORY – II

Macroeconomics refers to the study of the overall performance of the economy. While microeconomics studies how individual people make decisions, macroeconomics deals with the overall aggregate effect of microeconomics. Macroeconomics is crucial for the government to understand and predict the long-term consequences of their decisions. The overarching goals of macroeconomics are to maximize the standard of living and achieve stable economic growth. The goals are supported by objectives such as minimizing unemployment, increasing productivity, controlling inflation, and more. The objectives are Full employment. Price stability. A high, but sustainable, rate of economic growth. Keeping the balance of payments in equilibrium.

OBJECTIVES:

- Macroeconomics refers to the study of the aggregate economy.
- The primary goals of macroeconomics are to achieve stable economic growth and maximize the standard of living.
- Economic indicators are a good source of information to track macroeconomic performance.
- Monetary policy and fiscal policy are tools used by the government to control economic performance and reach macroeconomic goals.

Unit 1: Demand for and Supply of Money

The Classical View- Neo-classical view-Quantity Theory of Money – Keynes and the Demand for Money - Post Keynesian theories of demand for money - Baumol, James Tobin and Friedman – Concept of Money Supply – Components of Money Supply – RBI approach to Money supply – High Power Money and Money Multiplier – Determinants of Supply of Money.

Unit – 2: Macro Theories of Distribution

Functional Versus Personal Distribution of Income - MicroversusMacro-theories of Distribution **-** Marxian, Ricardian, Kelecki Theories of Distribution **-** Alternate theories of distribution – Kaldor.

Unit 3: Trade Cycles

Meaning and Types of Trade Cycles – Different theories of Trade Cycles – Samuelson`s Model of Trade Cycle – Hicks' Theory Cycle – Kaldor`s Model of Trade Cycle – Control of Business Cycle – Monetary and Fiscal Policies.

Unit 4: Theories of Inflation

Meaning and Types of Inflation – Demand-Pull inflation – Cost-Push Inflation – The Phillips curve – The Inflation – Unemployment trade-off - The Monetarists Accelerationists' Hypothesis – Rational Expectations Hypothesis – New-classical and Real Business cycles Theorem – Post-Keynesians - Implications for Stabilization Policies.

Unit 5: Macroeconomic policies

Objectives of Macroeconomic policies – Objectives of Monetary policy – The policy of Activists arguments – The policy of Non-activists arguments - Fiscal policy – objectives and tools - Automatic stabilizers – Problems of using of Fiscal policies – Effectiveness of Monetary and Fiscal policies –The concept of Open Economy macroeconomics.

TEXT AND REFERENCE BOOKS:

1. Ackley, G. Macroeconomic theory, Macmillan
2. Edward Shapiro, Macroeconomic Analysis, 5th edition, New-Delhi Galgotia publications.
3. Branson, W.B., Macro Economic Theory and Policy.
4. Gupta, S.B., 1983, Monetary Economics, Chand and Co.
5. Hicks, J.R., Mr. Keynes and the Classicals; A suggested Interpretation, Econometrics,
6. Laidler, D.E.W., Demand for money.
7. Friedman, M. (ed), The quantity theory of money – A Restatement of studies in the quantity theory of money.
8. Patinkin, Don., Money, Interest and Prices.
9. Rosalind Levacic and Alexander Rebthann, 1982, Macroeconomics; The English Language Book Society and Macmillan.
10. Rongar L. Miller and Robert Pulsinelli, Macroeconomics.

Goals of Macroeconomics

The overarching goals of macroeconomics are to maximize the standard of living and achieve stable economic growth. The goals are supported by objectives such as minimizing unemployment, increasing productivity, controlling inflation, and more. The macro economy of a country is affected by many forces, and as such, economic indicators are invaluable to assessing different aspects of performance.

EMT 203: BASIC ECONOMETRICS

Ragnar Frisch, along with Jan Tinbergen, pioneered development of mathematical formulations of economics. He coined the term econometrics for studies in which he used statistical methods to describe economic systems. Econometrics is the use of statistical methods using quantitative data to develop theories or test existing hypotheses in economics or finance. Econometrics relies on techniques such as regression models and null hypothesis testing. Econometrics can also be used to try to forecast future economic or financial trends. By taking this introduction to econometrics you will gain an overview of what econometrics is about, and develop some "intuition" about how economic things work.

Course Objectives

The objective of this course is to provide the basic knowledge of econometrics that is essential equipment for any serious economist or social scientist, to a level where the participant would be competent to continue with the study of the subject in a Master's programme.

✓ This course is designed to define Econometrics, Steps in Empirical Economic Analysis, Different types of data involved in econometric Analysis.
✓ The courses involved Simple and Multiple Linear regression model and Functional forms of Non-Linear Regression models.
✓ Basic concept of Auto regressive distributed lag model (ARDL) developed which will be helpful for future research work with time series data.

Unit 1: Nature of Econometrics and Economic Data
Definition of Econometrics – Steps in Empirical Economic Analysis - Econometric Model – The Role of Measurement in Economics – The Structure of Economic Data: Cross-Sectional data, Time Series data, Pooled Cross Section data, Panel Data.

Unit 2: Simple Regression Model
Two Variable Linear Regression Model: Assumptions, Estimation of Parameters, Tests of Significance and Properties of Estimators – Functional forms of Regression models – Log-linear models, Semi log- models and Reciprocal models – Choice of Functional Form.

Unit 3: The General Linear Model
Review of Assumptions, Estimation and Properties of Estimators: Un-biasness, BLUEs and Tests of significance of estimates – Analysis of Variance - **Dummay variables -** Nature of Dummy variables – Use of Dummy Variables – Errors in Variables and its consequences.

Unit 4: Auto-regressive and Distributed Lag Models
Introduction – Types of Lag schemes - Koyck's lag model, Almon's Lag scheme, Partial Adjustment and Expectations models - Causality in Economics – The Granger Causality Test.

Unit 5: Simultaneous Equation Models
Specification – Simultaneous Bias – Inconsistency of OLS Estimators - The concept of Identification, Rank and Order conditions for Identification – Indirect Least Squares - Two stage Least Squares (without proof), Problems.

TEXT AND REFERENCE BOOKS:
1) Johnston,J: Econometric Methods, McGraw-Hill Book Co., New York.
2) Maddala, G.S: Econometrics, McGraw-Hill Book Co., New York, 3rd Rd.
3) Gujarathi, D.N: Basic Econometrics, Fourth Edition, Tata McGraw-Hill, New Delhi.
4) Tintner,G: Econometrics, John Wiley & Sons, New York.
5) Wooldridge, Jeffery M: Econometrics, Cengage Learning India Pvt. Ltd, New Delhi.

Learning Outcomes

After successfully completing the course Basic Econometrics the graduate is able to:

At the end of the programme, the students will have adequate competency in the frontier areas of economic theory and methods. Formulation and estimation of a multiple regression model. Decision about the statistical significance of individual explanatory variable and also over all models. Impacts for the violation of one of the important assumptions for application of OLS regression. The students will acquire additional specialization topics are estimation of system of equations, estimation of panel data models, generalized method of moments, discrete response models, censored regression models and estimation of average treatment effects.

EMT 204 PRACTICAL – II
BASIC ECONOMETRICS AND MATHEMATICAL ECONOMICS

Econometrics is a set of research tools used to estimate and test economic relationships. The aim of this course is to provide you with the practical skills helpful in filling the gap between being "a student of economics" and being "a practicing economist." The emphasis of this course will be on understanding the tools of econometrics and applying them in practice. Graduates are well prepared for the further study of contemporary economic theory based on advanced quantitative methods.

Course Objectives

This course explores Practical approach of the Mathematical and Econometric methods for economics. The main objectives of the course follow;

➢ The course designed about Practical knowledge of mathematical concepts specially related to Input-output analysis and Linear Programming which are most important in economic decisions.
➢ This course covered Practical knowledge of OLS Method.
➢ The course involved practical approach of Multiple Linear Regression Model.
➢ Identify, Inconsistency of OLS Estimators.

This course is extension of practical practices of Basic Econometrics and Mathematical Economics what we mentioned in the courses of EMT 203 and EMT 205

Concepts are covered in this Practical Approach follows;

➢ Constrained Optimization with Lagrange Multipliers
➢ Input-Output analysis
➢ Linear Programming: Graphical method, Simplex method
➢ Simple Linear Regression Analysis.
➢ Multiple Linear Regression model.
➢ Identification, Rank and Order conditions for Identification, Indirect Least Squares method and Two stage Least Squares method.

Learning Outcomes

After successfully completing the course the graduate is able to:

Students who successfully complete EMT 204 should be comfortable with practical knowledge of Basic Econometrics and Mathematical Economics. Students can Identify Inter industrial relationships using Input-output analysis, also analyse maximization of profits and minimization of costs can evaluate using Linear Programming, which are covered in Mathematical Economics. Moreover, the student can gain knowledge of Different types of data, and analyse relationship of economic variables using simple and multiple regression models which are covered in basic Econometrics. who successfully completes this course will be able to estimate and interpret linear regression models and be able to distinguish between economic and statistical importance? They should be able to critique reported regression results in applied academic papers and interpret the results for someone who is not trained as an economist.

EMT 205(A): MATHEMATICAL ECONOMICS

Mathematics Economics helps economists to perform quantifiable experiments and create models for predicting future economic growth. Advances in computing power, large-data techniques, and other advanced mathematical technologies have played a major role in making quantitative methods a fundamental aspect of economics. All of these elements are supported by scientific methods which advance the study of economics. The course is designed for the M.A. Econometrics. This course is the second part of a compulsory two-course sequence. This part is to be taught in Semester II following the first part in Semester I. The objective of this sequence is;

Course Objectives

The M.A in Econometrics includes two courses in basic mathematics – one in each semester of I and II semester. This is the second of these two courses.

➢ This course also introduces the Mathematical tools such as Differential Calculus and Economic Applications (Two or More Variables), Differential Equations and Economic Applications.
➢ This course explores Input-output analysis and Linear programming which is most important in the area of Inter industrial dependency and maximization of the profits and minimization of the cost of the firms.

Unit 1: Differential Calculus and Economic Applications (Two or More Variables)
Differential Calculus: Functions of two or more variables and Partial Derivatives – Rules of Partial Differentiation – Second-Order Partial Derivatives – Optimization of Multivariable Functions – Constrained Optimization with Lagrange Multipliers – Significance of Lagrange Multiplier – Differentials – Total and Partial Differentials – Homogeneous Functions – Euler's Theorem – Partial Elasticities; **Economic Applications:** Maximization of Utility – Minimization of Cost – Maximization of Cost, Profit – Elasticity of Substitution

Unit 2: Differential Equations and Economic Applications
Definitions and Concepts – Linear Differential Equations of the First and Second Order with constant coefficient – Non-linear Differential equations of First-Order and First Degree – Variable Separable Case, Differential Equations with homogeneous equations - Economic Applications of Differential Equations – Dynamic Multiplier – Harrod-Domar Model.

Unit 3: Difference Equations and Economic Applications
Definitions and Concepts – Homogeneous Linear Difference Equations with Constant Coefficients – Particular Solution of Non-homogeneous Linear Equations – Linear First Order and Second Order Difference Equations with constant coefficients – Cobweb Model – Market model with Stocks – Dynamic Multiplier – Multiplier Acceleration Model : Harrod Domar Model – Multiplier's Accelerator Interaction Model of Samuelson.

Unit 4: Input-Output Analysis
Assumptions - Technological Co-efficient Matrix – Closed and open Model – Solution of Open Model – Hawkins-Simon Conditions – Dynamic Input-Output Model – Production Function Approach to Input Output Model.

Unit 5: Linear Programming
Basic Concepts – Formulation of LPP – Basic and Feasible Solutions – Graphical Solution - Simplex Method – Duality in Linear Programming – Elements of Data envelop Analysis and its Applications.

TEXT AND REFERENCE BOOKS

1) Allen, RGD: Mathematical Analysis for Economists.
2) Mehta, BC and Madanani GMK: Mathematics for Economists, Sultan Chand and Sons, Delhi.
3) Taro Yamane: Mathematics for Economists (An Elementary Survey), Prentice Hall of India Private Ltd, New Delhi.
4) Alpha C. Chang: Fundamental Methods for Mathematical Economics.
5) Barry Bressler: A Unified introduction of Mathematical Economics
6) Dowing, Edward T: Introduction to Mathematical Economics, (2/ed.), Schaum's Outlines, McGraw Hill, 1980.
7) Bose, D: An Introduction to Mathematical Economics, Himalaya Publishing Company, Delhi.

Learning Outcomes

After successfully completing the Mathematical Economics the graduate is able to:

Students can deal Mathematical calculation of static optimization, Application of Lagrange's method and also student can evaluate Differential Equations and with Economic Applications. who successfully complete this course will be able to estimate and interpret Inter industrial relationships using Input-output analysis, also analyse maximization of profits and minimization of costs of the firms using Linear Programming method.

EMT 205(B): ACTUARIAL STATISTICS

Actuarial analysis uses statistical models to manage financial uncertainty by making educated predictions about future events. Insurance companies, banks, government agencies and corporations use actuarial analysis to design optimal insurance policies, retirement plans and pension plans and to analyze investment risks.

Course Objectives

The objective of the course is to provide knowledge on Actuarial Statistics. Actuarial analysis is an essential task performed by insurance companies to analyze data and estimate the probability of an insurance claim being filed for a given event. This work allows insurance companies to predict with areas on able degree of accuracy the amount of claims they will pay out, which helps them determine what premiums they must charge to remain profitable.

➢ This course describes theory of Interest rates, Basic Annuities Certain, Concepts of different annuities and Varying annuities.
➢ This course covered Insurance and Utility Theory, Models for individual claims, Application to Insurance, Survival function, Accurate future Life time, Force of Mortality.
➢ In this course student will learn Life Table and its Relation with Survival Function, Deterministic Survivorship group, Recursion formulas, Assumptions for traditional ages, Analytical Laws of Mortality.
➢ This course explore Life Insurance models; Level benefit insurance, Endowment insurance, Deferred insurance and Varying benefit insurance.

Unit -1 Theory of Interest rates, Rate of Interest, Nominal rate of interest. Accumulation factors. Force of interest, present values, Stoodley formula for the force of interest, Present value of cash flows, Valuing cash flows - Basic Annuities Certain, Present values and accumulation, Concepts of different annuities, Continuously payable annuities, Varying annuities.

Unit- 2 Utility Theory, Insurance and Utility Theory, Models for individual claims and their sums, Approximations for the distribution of the sum - Application to Insurance - Survival function, time until death for a person age X, Accurate future Life time, Force of Mortality.

Unit-3 Life Table and its Relation with Survival Function – Examples - The Deterministic Survivorship group, Recursion formulas, Assumptions for traditional ages, Analytical Laws of Mortality, Select and Ultimate tables.

Unit – 4 Life Insurance: Insurance payable at the moment of death and at the end of the year of death – Level benefit insurance, Endowment insurance, Deferred insurance and Varying benefit insurance. Life Annuities. Single payment, Continuous Life annuities, Discrete life Annuities - life annuities with monthly payments, Complete annuities – Immediate and Apportionable annuities – due.

Unit 5: Multiple life functions, Joint life and Last Survivor status, Insurance and Annuity benefits through multiple life function, Evolution for Special Mortality laws - Multiple decrement models, associated single decrement tables, Central of multiple decrement, Central force assumptions for multiple decrements. Uniform distribution assumption for multiple decrements.

TEXT AND REFERENCE BOOKS:
1) Bowes, N.L., Gerber, H.U., Hickman, J.C, Jones, D.A., and nesbitt, C., J .(1986). Actuarial Mathematics. Society of Actuaries, Lthaca, lllins, U/S.A. 2nded(1997) C.H.1,2,3,4,5,9&10.
2) McCutchheon, J.J. and Scott, W.F., An introduction to Mathematics of finance.
3) Spurgeoin,E.T .(1972). Life Contingencies. Cambridge University Press.
4) Nall, A (1977), Life Contingencies. Heinemann.

Learning Objectives

After successful completion of this course students will be able to:

➢ Describe, explain and apply the fundamental theories of actuarial science as they apply in life insurance, general insurance and superannuation;
➢ Assess the suitability of actuarial, financial and economic models in solving actuarial problems; and Interpret and critically evaluate articles in the actuarial research literature.
➢ Students Demonstrate creativity and initiative in application of knowledge to problem solving and innovation.

EMT 205(C): WOMEN AND ECONOMIC DEVELOPMENT

To make the students to understand the role of Women in India's Economic Development To assess the status of women in India in terms of such key indicators as literacy rates, education, work participation rates, income, wealth and political power To evaluate the impact of various development and welfare programmes implemented in India on women development and women empowerment

UNIT- I: Women and Economic Developmentin India
Women Population in India - Rural and Urban Women Population – Fertility Rates – Women Labour Force and Work Force Participation Rates – Role of Women in Economic Development.

UNIT – II: Women and Human Development
Human Development – Gender Gap – Gender Inequality Index - Gender Development Index – Gender Empowerment – Measures – Women and Literacy, Life Expectancy –Access to Health Care – Income Inequalities.

UNIT – III: Women and Labour Markets
Gender division of labour –Participation rates in rural and urban employment markets in India - Factors affecting women entry into labour markets in Agriculture, Industry and Service sectors - Women in Organized and Unorganized Sectors

UNIT – IV: Governance for Women Development
Role and functions of Ministry of Women and Child Development - Social Welfare Boards: National and State level Commissions of Women. Women's Development Corporation. National Institute of Entrepreneurship and Small Business Development (NIESBUD) – NABARD -Small Industries Development Bank of India (SIDBI).

UNIT – V: Welfare Programmes and Women Development
Role of Non-Government Organizations in Women's welfare - Kasturba Gandhi BalikaVidyalayas (KGBV) – National Programme for Adolescent Girls (NPAG) – National Mission for Empowerment of Women – STEP – Micro Credit Groups – SWADHAR – DHANALAKSHMI – RashtriyaMahilaKhosh (RMK) – Indira Gandhi MatrutvaSahayogYojana – MGENREGA – Hostels for Working Women – KishoriBalikaPathakam – Indira KranthiPatham – JananiSurakshaYojana - BangaruTalli Programme – Jana DhanYojana – SuknyaSamrudhiYojana.

REFERENCE:

1. Boserup, E (1970), Women's Role in Economic Development, George Allen andUnwin, London.
2. Desai, N and Raj, M.K. (Eds)(1970), Women and Society in India, Research Centre forWomen Studies, SNDT University, Bombay.
3. Krishnaraj, M, Sudharshan, R.M. and Shariff, A (1999), Gender, Population and Development, Oxford University Press, New Delhi.
4. Seth, M (2000), Women and Development: The Indian Experience, Sage Publications, New Delhi.
5. Wazir, R (2000), The Gender Gap in Basic Education: NGOs as Change Agents, Sage Publications, New Delhi.
6. Ramachandrudu, G. (1991), Demographic Methods, AU Press, Visakhapatnam.
7. Various issues of Economic Survey, Government of India.
8. Annual Reports of Ministry of Women and Child Development, Government of India.
9. Annual Reports of Ministry of Rural Development, Government of India.
10. Survey on Employment and Unemployment 2012-13, Ministry of Labour, Government of India.

Learning outcomes

Understand and explain the key concepts like fertility rates, work participation rates and the role of women in economic development of the country. Explain the vast gender gaps existing in India in literacy, life expectancy, health care and income levels between men and women. Illustrate the flaw in the existing gender division of labor and the reasons for the low levels of work participation rates among women in India Analyze the status of women in politics and administration and the role of various institutional agencies in the development of women Critically evaluate impact of various poverty alleviation and development programmes implemented in ameliorating the conditions of women in India.

EMT 206(A): PUBLIC FINANCE

The objectives of public finance are achieved by managing and drafting policies pertaining to key areas such as taxation, management of public revenue and expenditure, raising and servicing public debt, fiscal administration at various levels. Public Finance deals with the financial activities of government concerning revenue, expenditure and debt operations and their effects on the economy. It tries to analyze the impacts of these financial activities of government on individuals and corporate bodies.

Course Objectives

The objective of this course is to provide the basic knowledge of public finance and relationship with other Sciences, principles of public finance; difference between Public and Private Expenditure, reasons for growth of Public Expenditure, effects of Public Expenditure, controls and accountability of Public expenditure in India; sources of Public Revenue, principle of public revenue, characteristics of Good Tax system in India, taxable Capacity, classification of Public Debt, causes of public debt - public debt Management and public Debt in India; and budgetary deficit and Fiscal deficit, functions of Finance Commission.

Unit 1: Scope and Structure of Public Finance
Nature, Scope and Importance of Public Finance - Public Finance and relationship with other Sciences - Distinction between Public and Private Finance - Principles of Public Finance- Principle of Opportunity Cost in Public Finance - Theory of Public Goods and Merit Goods - Role of Public Finance in Developing Economies and Underdeveloped Countries.

Unit 2: Public Expenditure
Introduction - Difference between Public and Private Expenditure - Reasons for growth of Public Expenditure - Classification and Canons of Public Expenditure - Effects of Public Expenditure - Wagner's Law of Increasing State Activities - Peacock and Wiseman Hypothesis - Controls and Accountability of Public expenditure in India

Unit 3: Public Revenue and Taxation
Sources of Public Revenue - Classification of Public Revenue - Principle of Public Revenue - Effects and significance of Public Revenue - Characteristics of Good Tax system in India - Canon of Taxation - Classification of Taxation - Benefit (Modern) theories of Taxation - Ability to Pay Theory - Taxable Capacity - Value Added Taxation **(VAT)** and GST Principle and Issues – Indian Tax Structure – Incidence and Effects of Taxation.

Unit 4: Public Debt
Classification of Public Debt - Causes of Public Debt - Objectives of Public Debt - Effects of Public Debt - Burden of Public Debt - Public debt Management - Public Debt in India.

Unit 5: Budget and Federal Fiscal Systems
Introduction –Definitions of Primary deficit, Revenue deficit, Budgetary deficit and Fiscal deficit - Budget classification - Zero Base Budgeting - Fiscal Deficit and Budgetary Deficit in India – FRBM -Centre-State Financial relations in India –Functions of Finance Commission - Recommendations of 13th and 14th Finance Commissions.

TEXT AND REFERENCE BOOKS:

1. B.P.Tyagi, Public Finance, Jai Prakash& Company, Meerut, 2008.
2. Bhargava .R.N, the Theory and Practice of Union Finance in India, Chaitanya Publishers, Allahabad, 1998.
3. Dalton.H, Principle of Public Finance, Allied Publishers, Bombay, 1992.
4. Dwevedi.P.N, Reading in Indian Public Finance, Chanakya Publications, New Delhi, 2006.
5. Lakadawala.D.T, Union State Financial Relations, Lalwani Publishers House, Mumbai, 1986.
6. Mathew.T, Tax Policy, Some Aspects of Theory and Policy, Chanakya Publications, New Delhi, 2001.
7. Mundle.Sudipto.(ed), Public Finance, Policy Issues for India, OxfordUniversity, Press, 1999.
8. Musgave.R.A, The Theory of Public Finance- A Study of Public Finance, McGraw hill company, Tokyo, 1999.
9. R.K.Lekhi, Public Finance, Kalyani Publishers, New Delhi, 2007.

Learning Outcomes

`Public finance is the study of the role of the government in the economy. It is the branch of economics that assesses the government revenue and government expenditure of the public authorities and the adjustment of one or the other to achieve desirable effects and avoid undesirable ones.reasons for growth of   Public Expenditure, accountability of Public expenditure in India, sources of Public Revenue, principle of public revenue, characteristics of Good Tax system in India, taxable Capacity, classification of Public Debt, causes of public debt - public debt Management and public Debt in India; and budgetary deficit and Fiscal deficit, functions of Finance Commission.

EMT 206(B): INDUSTRIAL ECONOMICS

Industrial Economics is the study of firms, industries, and markets. It looks at firms of all sizes – from local corner shops to multinational giants such as WalMart or Tesco. And it considers a whole range of industries, such as electricity generation, car production, and restaurants

Course objective

Familiarise the students with basic concepts of Industrialization and Economic Development To make students understand the theory of firm and forms of Industrial organization. To familiarise students with industrial location importance and theories of industrial location To make students understand the native and investment decision. To help students to understand industrial management and role of Science and Technology in Industrial Development

Unit 1: Industry and Economic Development
Industrialization and Economic Development-Factors Promoting Industrialization-
Strategies of Industrialization in Developing Countries.

Unit 2: Firm and Forms of Industrial Organization
The Theory of the Firm – Objectives – Size-Growth of the Firm-Optimum Firm-Factors Determining Optimum Firm - Forms of Industrial Organization.

Unit 3: Theories of Industrial Location
Factor Influencing Industrial Location–Theories of Industrial Location: Alfred Weber, Sargeant Florence, August Losch, Walter Isard–Melvin Greenhut.

Unit 4: Investment Decisions
Nature and Types of Investment Decisions–Time Preparation–Profile of Project–Project Evaluation/Appraisal–Cost-Benefit Analysis-Different Rates of Return Methods - Pay Back Method - Accounting Rate of Return Method - Net Present Value Method and Internal Rate of Return Method-Break-Even Analysis.

Unit 5: Industrial Management
Industrial Productivity–Rationalization–Automation–Industrial Efficiency–Role of Science and Technology in Industrial Development-Industrial Policies of 1956 and 1991.

REFERENCES:

1. Ahulwalia I.J., Industrial Growth in India-Stagnation Since the Mid Sixties, Oxford University, New Delhi, 1985.
2. Barthwal R.R., Industrial Economics, Wiley Eastern Ltd., New Delhi, 1985.
3. Cherunilam, F., Industrial Economics: Indian Perspective (3rd Edition), Himalaya Publishing House, Mumbai, 1994.
4. Dasgupt P.S., Marglin and A. Sen, Guideline for Project Evaluation , UNIDO Publications, New York, 1972.
5. Desai B., Industrial Economy in India (3rd Edition), Himalaya Publishing House, Mumbai, 1999.
6. Divine P.J. and R.M. Jones (et.al), An Introduction to Industrial Economics, George Allen and Unwine Ltd, London, 1976.3
7. Fog B., Industrial Pricing Policies, North Holland, Amsterdam, 1959.
8. GangadharaRao M., HeggadeOdeyar D. and Yadapadithya., Industrial Economy: Trends, Problems and prospects, Part-II, Kanishka Publishing House, New Delhi, 1993.
9. Hay D. and D.J. Morris., Industrial Economics: Theory and Evidence, Oxford University Press, New Delhi, 1993.
10. Jalan B., India's Economic Policy, Viking, New Delhi, 1996.
11. KuchhalS.C., Industrial Economy of India, Chaitanya Publishing House,Allahabad (Latest Edition).
12. Patel S.J., Technological Transformation in the Third World, AldershotAvebury, 1993.

13. Sivayya K.V. and Das V.B.S., Indian Industrial Economy, S.Chand& Company Ltd., Ram Nagar, New Delhi (Latest Edition).
14. Sandesara J.C., Industrial Policy and Planning 1947-1991: Tendencies, Interpretations and Issues, Sage Publication, New Delhi, 1999.
15. Smith D.M., Industrial Location: An Economic Geographic Analysis, John Wiley & Sons, New York, 197

Learning Outcomes

Understanding industrialization and economic development strategies of industrialization in developing countries. Study the theory of the firm – optimum firm – factors determine optimum firm, Understanding factor influencing Industrial location and theories of Industrial location Study the nature and types of investment decisions. Profile for project, project evaluation and cost benefit analysis Understanding Industrial Management, role of Science and Technology in Industrial Development and Industrial Policies.

207: HUMAN VALUES AND PROFESSIONAL ETHICS – II

Human values are the virtues that guide us to take into account the human element when we interact with other human beings. ... It is with those human values that one becomes truly able to put into practice his/her ethical values, such as justice, integrity, and refusal of violence and ban to kill – even in a crisis situation. To create awareness on Management Ethics and Human Values. To inspire Moral and Social Values and Loyalty. To appreciate the rights of others. The prime objective of the Professional Ethics is to develop ability to deal effectively with moral complexity in students.To understand the moral values that ought to guide the Engineering profession, (b) To resolve the moral issues in the profession, and (c) To justify the moral judgment concerning the profession.

Course Objectives

This course explores of the Human values and professional ethics for economics. The main objectives of the course is the value Education, concept of human values, self-introspection, self-esteem, family valuesand responsibilities of family, threats of family life - status of women in familyandsociety; The   medical ethics, responsibility of medicalpractitioners. ethical issues; business ethics immoral and illegal practices, ethical abuses and work ethics; environmental ethics, ecological crisis; social ethics and ethics of media.

Unit-I: Value Education- Definition - relevance to present day - Concept of Human Values - self introspection – Self-esteem - Family values-Components, structure and responsibilities of family- Neutralization of anger - Adjustability - Threats of family life - Status of women in familyandsociety - Caring for needy and elderly - Time allotment for sharing ideas and concerns.

Unit-II: Medical ethics- Views of Charaka, Sushruta and Hippocratus on moral responsibility of medicalpractitioners. Code of ethics for medical and healthcare professionals. Euthanasia, Ethical obligation to animals, Ethical issues in relation to health care professionals and patients. Social justice in health care, human cloning, problems of abortion. Ethical issues in genetic engineering and Ethical issues raised by new biological technology or knowledge.

Unit-III: Business ethics- Ethical standards of business-Immoral and illegal practices and their solutions.Characterics of ethical problems in management, ethical theories, causes of unethical behavior, ethical abuses and work ethics.

Unit-IV: Environmental ethics- Ethical theory, man and nature- Ecological crisis, Pest control, Pollutionand waste, CI imate change, Energy and population, Justice and env iron mental health.

Unit-V: Social ethics- Organ trade.Human trafficking.Human rights violation and social disparities, Feminist ethics.Surrogacy/pregnancy. Ethics of media- Impact of Newspapers, Television, Movies and Internet.

REFERENCES:

1. John S Mackenjie: A manual of ethics.
2. The Ethics of Management" by Larue Tone Hosmer. Richard D. Irwin Inc.
3. "Management Ethics' integrity at work' by Joseph A. Petrick and John F. Quinn. Response Books: New Delhi.
4. "Ethics in Management" by S.A. Sherlekar, Himalaya Publishing House.
5. Manu: Manava Dharma Sastra or the Institute of Manu: Comprising the Indian System of Duties: Religious and Civil (ed.) G.C.Halighton.
6. SusrptaSamhita: Tr.KavirajKunjanlal, KunjalalBrishagratha. Chowkarnba Sanskrit series. VolLlI and Ill, Varnasi, Vol I 00,16'20,21-32 and 74-77 only.
7. CarakaSamhita :Tr.Dr. Ram Karan Sarma and VaidyaBhagavan Dash, Chowkambha Sanskrit Series office. Varanasi I, 11.111 VolIPP 183-191.
8. Ethics, Theory and Contemporary Issues. Barbara Mackinnon Wadsworth/Thomson Learning, 2001.

9. Analyzing Moral.Issues, Judith A. Boss. May Field Publishing Company - 1999.
10. An Introduction to Applied Ethics (Ed.) John H.Piet and Ayodhya Prasad. Cosmo Publications
11. Text Book for Intermediate First Year Ethics and Human Values. Board of Intermediate Education- Telugu ~ Akademi, Hyderabad.
12. I.C Sharma Ethical Philosophy of India. Nagin& co Julundhar

Learning Outcomes

After successfully completing the Human values and professional ethics the graduate is able to:

The value Education, concept of human values, self-introspection, self-esteem, family valuesand responsibilities of family, threats of family life - status of women in familyandsociety; The medical ethics, responsibility of medical practitioners. ethical issues; business ethics immoral and illegal practices, ethical abuses and work ethics; environmental ethics, ecological crisis; and social ethics, ethics of media. Honesty, open disclosure and sincerity are all characteristics of ethical behaviour. Many organizations include a commitment to ethical behaviour in their code of conduct. Professionals can adopt a personal code of conduct and make the same commitment on an individual basis. Professional ethics are accepted standards of personal and business behaviour, values and guiding principles. Codes of professional ethics are established by professional organizations to help to guide members in performing their job functions according to sound and consistent ethical principles. The principles are beneficence, non-malfeasance, autonomy, justice; truth-telling and promise-keeping.

SEMESTER - III
EMT 301: ADVANCED ECONOMETRICS

Economists apply econometric tools in a variety of specific fields (such as labor economics, development economics, health economics, Business and finance) to shed light on theoretical questions. They also use these tools to inform public policy debates, make business decisions, and forecast future events. The primary objective of this course is to provide an advanced treatment of econometric methods including Qualitative and Limited Dependent Variables Models and Simultaneous Equation Models.

Course Objectives

The objective of this course is to provide the knowledge of OLS assumptions that is essential equipment for any serious economist or social scientist, to a level where the participant would be competent to continue with the study of the subject in a Master's programme.

➢ Concepts of Heteroscedasticity, Multicollinearity and Autocorrelation
➢ Possible reasons behind the presence of Heteroscedasticity, Multicollinearity & Autocorrelation. various tests to understand the presence of Heteroscedasticity and multicollinearity. Possible remedial measures to overcome such problems
➢ This course explores Qualitative and Limited Dependent Variables Models; LPM, Probit, Logit and Tobit Models.
➢ Basic knowledge about Simultaneous Equation Models;Maximum likelihood estimation, Three stage Least Square method.

Unit 1: Multicollinearity and Heteroscadasticity
<u>Multicollinearity</u>: Source and Consequences, Tests for Multicollinearity and solutions for Multicollinearity. <u>Heteroscadasticity</u>: Sources and Consequences, Tests for Heteroscadasticity, Generalized Least Squares Method of Estimation.

Unit 2: Autocorrelation
Sources of Autocorrelation - first order Autoregressive scheme - Consequences of Autocorrelation - Tests for Autocorrelation – Durbin-Watson test - Methods of estimation of Autocorrelation coefficient -Estimation from d- statistic and Cochran-Orcutt iterative method.

Unit 3: Qualitative and Limited Dependent Variables Models
Binary Choice Models: Linear Probability Model, Probit Model and Logit Models – Censored and Truncated regression models.

Unit 4: Simultaneous Equation Models: Estimation Methods
Two stage Least Squares, Limited Information Maximum Likelihood, K-class Estimators, Three Stage Least Squares and Full Information Maximum Likelihood Methods – Numerical Problems.

Unit 5: Panel Data Regression Models and Time Series Econometrics
Panel Data – Estimation of Panel Data Regression Models - Fixed and Random Effects – Estimation – Introduction to Time Series Econometrics - Stationary and Non-Stationary Stochastic Process – Integrated Stochastic Process – Unit roots – Co-integration – Test for co-integration, Co-integration and error correction mechanism.

TEXT AND REFERENCE BOOKS:

1. Maddala, G.S: Econometrics, McGraw-Hill Book Co., New York, 3rd Rd.
2. Johnston,J: Econometric Methods, McGraw-Hill Book Co., New York.
3. Gujarathi, D.N: Basic Econometrics, Fourth Edition, New Delhi.
4. Maddala, G.S: Limited-Dependent and Qualitative Variables in Econometrics, Cambridge University Press.

Learning Outcomes

After successfully completing the course Advanced Econometrics the graduate is able to:

At the end of the course the students will acquire additional specialization through the Advanced Econometrics courses. Skill to judge the reliability of estimation in case of violation of basic assumptions for the application of ordinary linear regression method. Besides, students will be able to execute in-depth analysis of Binary choice models. Student can perform Simultaneous Equation Models; Maximum likelihood estimation, Three stage Least Square method.

EMT 302: COMPUTER APPLICATIONS AND DATA ANALYSIS

A computer has high speed of calculation, diligence, accuracy, reliability, or versatility which has made it an integrated part in all business organizations. One main reason for the use of computers in economic analysis and forecasting is the widespread availability of in expense, convenient microcomputers. Computer applications can perform various financial analyses more easily and quickly. The end result is increased productivity.

Course Objectives

The objective of this course is to provide the basic knowledge of computer and importance of Data Analysis. Data analysis is a process of inspecting, cleansing, transforming, and modeling data with the goal of discovering useful information, informing conclusions, and supporting decision-making. Data analysis has multiple facets and approaches, encompassing diverse techniques under a variety of names, and is used in different business, science, and social science domains. In today's business world, data analysis plays a role in making decisions more scientific and helping businesses operate more effectively. SPSS is short for Statistical Package for the Social Sciences, and it's used by various kinds of researchers for complex statistical data analysis. The SPSS software package was created for the management and statistical analysis of social science data. It was originally launched in 1968 by SPSS Inc., and was later acquired by IBM in 2009.

➢ The course provides fundamentals Knowledge of computers and MS-Office helps simplify basic office tasks and improve work productivity. Each application is designed to address specific tasks, such as word processing, data management, making presentations and organizing emails.

➢ The main objective of the course is Data Analysis, for this simply we are using MS-Excel, here easily perform basic statistical analysis using data analysis pack, and also visualize the data using charts.

➢ This course explores SPSS Package. The SPSS software package was created for the management and statistical analysis of social science data.

➢ Finally, the course offered R-Programming, which is most preferable Language of Advanced analysis through programming Language. At present almost all business organizations were used R-programming for policy making.

Unit 1: Computer Fundamentals

Definition - Components of a computer-block diagram – Evolution of computer – Generations – input/output devices – storing information in computer – types of computers – Hardware and Software – Compilers and Assemblers – Low level and high-level languages – Operating systems and the graphic user interface – Microsoft Windows operating system.

Unit 2: MS-WORD

Creating, opening and saving files - editing and formatting text - spell and grammar check – auto correct- hyphenation – creating of tables and columns - mail merge - equation editor – concept of a macro - print preview.

Unit 3: MS-EXCEL

Work sheet – entering data – creation of worksheets and workbooks – opening and saving workbooks - editing and formatting - sorting, filtering and pivot tables - Creating graphs and charts - mathematical and statistical functions -Data analysis pack in Excel - Descriptive statistics, tests of hypothesis, ANOVA, Correlation and Regression, Random Number Generation.

Unit 4:Data Handling Using SPSS

Opening Excel files in SPSS - Variables, labels and values, Analysis tools - Descriptive statistics - Selection of variables in multiple linear regression - Stepwise, forward and backward procedures - Factor analysis and Discriminant analysis (Stress on procedures and syntax only).

Unit 5: Data Analysis using R

R environment – Workspace, Getting help, Packages and Built-in data - Assigning values, performing vectorized arithmetic - Creating objects, vectors, lists, matrices, arrays and data frames - Conditional selection, sorting and indexing data frames, implicit looping - Importing data - Branching and looping statements - plotting data – Bar plots, Pie charts, Histogram, Box plots - Summary statistics - Generating samples from discrete and continuous distributions - Simple correlation and regression - Testing hypothesis of mean and variance, Analysis of variance.

TEXT AND REFERENCE BOOKS:

1. Shelly and Hunt, Computers and Common Sense, Prentice Hall of India, New Delhi.
2. Rajaraman V, Fundamentals of Computers, Prentice Hall of India, New Delhi.
3. Peter Dalgaard (2008): Introductory Statistics with R, 2nd Edition, Springer, New York. (Chapters 1, 2, 3,4,5,6 and 7).
4. Peter Norton's Introduction to computers, Tata McGraw Hill Publishing Co., New York.
5. Foster,J.J.(2001), Data Analyzing using SPSS For Windows 8.0 – 10.0, A Beginner's Guide.
6. M. Crawley, Basic Statistics: An Introduction using R.
7. B.S. Everitt& T. Hothorn, A Handbook of Statistical Analyses Using R (2nd Ed.).
8. J. Maindonald& J. Braun, Data Analysis and Graphics Using R: An Example-based. Approach.
9. P. Murrell, R Graphics (2nd Ed.).

Learning Outcomes

After successfully completing the course students must demonstrate the following:

➢ At the end of this course student will gain Examine spreadsheet concepts and explore the Microsoft Office Excel environment. Import and export data. Work with pivot tables and charts. Create and edit charts. Learn to use functions and formulas. Perform analysis tasks using Data analysis pack

➢ Student gained and evaluate Econometric Methods such as OLS, LPM, Logistic regression analyses and conclude using SPSS Package

➢ Finally, student will be able to write programme for Simple statistical analyse and interpret through R-programming.

EMT 303(A): PRACTICAL-III
ADVANCED ECONOMETRICS, AND COMPUTER APPLICATIONS AND DATA ANALYSIS

The course EMT 303 is to provide the Practical knowledge of Data Analysis, which is useful information, informing conclusions, and supporting decision-making for business leaders.

Course Objectives

The objective of this course is to provide knowledge of data analysis through the domains of MS-Excel, SPSS and R-programming. In today's business world, data analysis plays a role in making decisions more scientific and helping businesses operate more effectively. SPSS is short for Statistical Package for the Social Sciences, and it's used by various kinds of researchers for complex statistical data analysis.

➤ The course provides Practical Knowledge of Data Analysis, for this simply we are using MS-Excel, here easily perform basic statistical analysis using data analysis pack, and also visualize the data using charts such as Histogram, Bar, Pie Line and scatter diagrams
➤ This course explores SPSS Package, using this package student will learn OLS regression model, multiple regression model and prepare correlation matrix and their significance, etc.
➤ Finally, the course offered R-Programming, which is most preferable Language. This can be use Advanced Econometric Analysis through R-programming Language.

Concepts are covered in this Practical Approach follows;

➤ **MS-Excel;**Pivot tables, Charts-Histogram, Bar, Pie, Scatter diagrams, Data Analysis Pack-Descriptive Statistics, Correlation Matrix, Simple and Multiple Regression analysis and Testing of Hypothesis.
➤ **SPSS;**Descriptive Statistics, Correlation Matrix, Simple and Multiple Regression analysis and Testing of Hypothesis.
Using SPSS Testing of Multicollinearity, Heteroscedasticity and Autocorrelation, LPM and Logistic regression models
➤ **R-programme;**Descriptive Statistics, Correlation Matrix, Simple and Multiple Regression analysis and Testing of Hypothesis, LPM and Logistic Regression Models.

Learning Outcomes
After successfully completing the course students must analyse the following:

➤ At the end of this course student will gain Examine spreadsheet. Work with pivot tables and charts. Create and edit charts. Learn to use functions and formulas. Perform analysis tasks using Data analysis pack.
➤ Student gained and evaluate Econometric Methods such as OLS, LPM, Logistic regression analyse and conclude using SPSS Package
➤ After complete this course student will able to test of Multicollinearity, Heteroscedasticity and Autocorrelation.
➤ Finally, student will be able to write programme for Simple statistical analyse and interpret through R-programming.

EMT 303(B): APPLIED ECONOMETRICS

The main aim of the Applied Econometrics, problem solving through the application of appropriate economic theories, principles, and the econometric analysis of data. Ability to synthesize ideas, theories and data in developing solutions to economics problems. Ethical approaches to research and practice.

Course Objectives

The objective of this course is to provide the basic knowledge of an advanced theoretical understanding of consumer behaviour and decision-making. To develop a theoretical understanding of strategic behaviour of economic agents.

➢ The course discovers demand analysis; demand functions (single equation), Engel Functions and curves.
➢ The course covered Consumer analysis and production analysis which is more important in economic ground.
➢ This course can explore Macro econometric models; Klein-Goldberger Model for USA, Agarwal, K. Krishna Murthy and N.V. A. Narasimhan Models.
➢ This course covered Applications of Single and Simultaneous Equation Models; Models of Money Demand and Supply, Application in Industrial Organization, Labour Economics and Health Systems.

Unit 1: Demand Analysis
Demand functions – Restrictions to be satisfied by Demand functions - Single Equation models, Engel Functions and Curves, Specification of Functional forms and Estimation – Linear Expenditure System - Review of Empirical Studies.

Unit 2: Consumption Function
Theories of Consumption Function – Alternative specifications – Absolute Income Hypothesis, Relative Income Hypothesis, Life Cycle Hypothesis, Permanent Income Hypothesis – Problems of Estimating the Consumption Function – Review of some empirical studies.

Unit 3: Production Functions
Single Equation Estimation of production functions - Cobb-Douglas, CES, Translog – Specifications and Estimation issues – Review of Empirical studies – Functional forms and Estimation of Cost Functions - Estimation of Factor demand Equations - Empirical Studies.

Unit 4: Macro Econometric Models
Nature ofSimultaneous Macro Econometric Models – Klein-Goldberger Model for USA - Brookings Model – Macro Econometric models for India – Agarwal, K. Krishna Murthy and N.V.A. Narasimhan Models.

Unit 5: Other Applications of Single and Simultaneous Equation Models
Models of Money Demand and Supply – Estimation of Demand for Money Function – Application in Industrial Organization, Labour Economics and Health Systems – Review of Empirical Studies.

TEXT AND REFERENCE BOOKS:

1. Intriligator, M. D. (1978) Econometric Models, Techniques and Applications, North-Holland.
2. ICSSR Survey of Economics – Vol.7 (Econometrics) Allied Publishers
3. Deaton A. and John Muellbauer, Economics and Consumer Behaviour –Cambridge University Press, 1987
4. Killingsworth Mark R.- Labour Supply, Cambridge University Press 1985
5. MeghnadJ.Desai 1973 – Macro-economic models for India: A Survey – Sankhya series-B 85 – PP 169-205

Learning Outcomes

➢ On successful completion of the course, a student will be able to develop a sound understanding of the core microeconomic concepts that economists use to understand the process of decision-making by an economic agent(s).

➢ The student should be able to apply mathematical tools and techniques to study behaviour of economic agents. Besides students will be able to identify strategic behaviour of economic agents and formulate them in a game theoretic framework.

➢ They will be able to identify and analyse strategic interactions and explain negotiation and exchange between economic agents in game theory models.

EMT 303(C): ECONOMICS OF DEVELOPMENT AND PLANNING

The six major objectives of planning in India, i.e., (a) Economic Growth, (b) Attaining Economic Equality and Social Justice, (c) Achieving Full Employment, (d) Attaining Economic Self-Reliance, (e) Modernization of Various Sectors, and (f) Redressing Imbalances in the Economy. The aim of economic development is to improve the material standards of living by raising the absolute level of per capita incomes. Raising per capita incomes is also a stated objective of policy of the governments of all developing countries.

Course Objectives

An economic development plan helps you realize your community's economic vision and take control of your economic future. The course objectives are concepts and Measurement of Economic Growth and Development, Growth and Development, Domestic Factors in Economic Development, Trade and Development and lastly planning Techniques and Planning in India. The economic development plan provides a comprehensive overview of the economy, sets policy direction for economic growth, and identifies strategies, programs, and projects to improve the economy.

Unit 1: Concepts and Measurement of Economic Growth and Development

Economics of Development and Growth - Problems and Causes of Underdevelopment and Development -Factors of Economic Growth - Obstacles to Economic Development - Vicious Circle of Poverty - Characteristics of Modern Economic Growth - Measures of Economic Growth and Economic Development, HDI and PQLI.

Unit 2: Theories of Growth and Development

Classical, Karl Marx and Schumpeter - Joan Robinson Golden Age model, Harrod-Domar model, Rostow Stages of Growth - Lewis theory of Surplus Labour - Rodan's Big Push theory - Nurkse Balanced Growth theory - Hirschman's Unbalanced theory – Ranis - Fei Model – Dependency Theory of Development.

Unit 3: Domestic Factors in Economic Development

Capital Formation and Economic Development- Role of Agriculture and Industry in Economic Development – Population Growth and Economic Development - Human Capital Formation and Man Power Planning – Entrepreneurship in Economic Development – Role of Technology in Economic Development.

Unit 4: Trade and Development

Role of Foreign Trade in Economic Development – Trade as an Engine of Economic Growth - Two Gap Model – Objectives and Role of Monetary and Fiscal Policies in Economic Development - Commercial Policy and Economic Development - Price Policy and Economic Development.

Unit 5: Planning Techniques and Planning in India

Capital-Output Ratio - The Choice of Techniques and Appropriate Technology - Investment Criteria – Elements of Cost-Benefit Analysis - Poverty, Unemployment and Economic Inequalities in India – Role of Public Sector in India - Role of Foreign Aid and Foreign Capital in India.

TEXT AND REFERENCE BOOKS:

1. Kindleberger.C.P, Economic Development, McGraw Hill Company, New York, 1988.
2. Lewis.W.A, The Theory of Economic Growth, George Allen and Unwin, London, 1998.
3. Michel.P.Todero& Stephen C.Smith, Economic Development, Pearson Education (Singapore) Limited, New Delhi, 1998.
4. S.K.Misra and V.K. Puri, Economics of Development and Planning, Himalaya Publishing House, New Delhi, 2006.
5. Solow.R.M, Growth Theory: An Exposition, Oxford University Press, New York, 2000.

Learning Outcomes

When planning for economic development, the goal is to create and maintain a strong, vibrant local economy. The economic development plan provides a comprehensive overview of the economy, sets policy direction for economic growth, and identifies strategies, programs, and projects to improve the economy. The aim of economic development is to improve the material standards of living by raising the absolute level of per capita incomes. Raising per capita incomes is also a stated objective of policy of the governments of all developing countries. One of the most important functions of economic planning is to achieve consistency among different economic objectives. Some desirable goals are likely to conflict with others.Development planning objectives overall objective of a development plan is to encourage continuous learning, performance improvement and personal growth, but it also has other, more specific objectives, namely to improve employees' performance in their current jobs. Five basic stages are traditional society, preconditions for take-off, take-off, drive to maturity, and age of high mass consumption), there exists no clear definition for the stages of economic development.

EMT 303(D): FINANICIAL INSTITUTIONS AND MARKETS

Buyers and sellers compete for the best price determined through supply and demand. This exchange makes it possible for companies from the United States and around the world to raise funds, while enabling millions of investors to profit from their growth. Role of Financial Institution in Financial Markets. Financial Institution is an entity of the financial system that facilitates the flow of money from savers to borrowers. Financial Institutions are known for offering a wide range of financial services that are more than useful to businesses and consumers alike.

Course Objectives

All however, share the following goals and objectives: to reduce global poverty and improve people's living conditions and standards; structure of financial system, financial system and economic development; instruments of money market, commercial Bills, market for commercial papers, discount and finance house of India (DFHI); Government Securities Market and Long Market, Objectives, Functions and performance of Securities and Exchange Board of India (SEBI), Bombay Stock Exchange (BSE), Objectives and Functions of Commercial Banks, Functions and Performance of Industrial Finance Corporation of India (IFCI), Small Industrial Development Bank of India, Mutual Funds, Performance of Life Insurance Corporation (LIC), Unit Trust of India (UTI), advantages and Disadvantages of Foreign Capital.

Unit 1: Financial System
Evolution of Financial System – Structure of Financial System – Functions of Financial System – Financial System and Economic Development.

Unit 2: Money Market
Features of Money Market – Instruments of Money Market: Call Money Market – Treasury Bills Market – Commercial Bills – Market for Commercial Papers – Certificate of Deposits – Discount and Finance House of India (DFHI) – Securities Trading Corporation of India (STCI) – Deficiencies and Recent Developments in Indian Money Market.

Unit 3: Capital Market
Industrial Securities Market: Primary and Secondary Markets – Government Securities Market and Long Market – Objectives, Functions and performance of Securities and Exchange Board of India (SEBI) – Over the Counter Exchange of India (OCTCEI) – Functions of Stock Exchanges – Bombay Stock Exchange (BSE) – National Stock Exchange (NSE) – Reforms in Capital Market.

Unit 4: Banking and Financial Institutions
Banking: Central Banking: Objectives and Functions - Commercial Banks, Functions and Growth - Process of Credit Creation – Growth and Control of Non-banking Financial Institutions - Functions and Performance of Industrial Finance Corporation of India (IFCI) – Industrial Development Bank of India (IDBI) – Industrial Credit and Investment Corporation of India (ICICI) – Small Industrial Development Bank of India (SIDBI) – State Financial Corporations (SFCs) – Mutual Funds.

Unit 5: Investment Institutions and Foreign Capital
Functions and Performance of Life Insurance Corporation (LIC) – General Insurance Corporation (GIC) and Unit Trust of India (UTI) – Forms of Foreign Capital – International Financial Instruments – Trends in Foreign Capital Inflows to India – Advantages and Disadvantages of Foreign Capital.

TEXT AND REFERENCE BOOKS:

1. M.Y. Khan, Indian Financial System, Tata McGraw Hill, New Delhi.
2. L.M.Bhole, Financial Institutions and Markets, Tata McGraw Hill, New Delhi.
3. V.A.Avadhani, Indian Capital Market, Himalaya Publishing House, Bombay.
4. H.R.Machiraju, International Financial Markets and India, Wheeler Publishing Company, New Delhi.
5. Vasant Desai, Indian Financial System, Himalaya Publications, Bombay.
6. Peter.S. Rose, Money and Capital Market: Financial Institutions and Instruments, Tata McGraw Hill, London.
7. S.C.Kucchal, Corporation Finance, Chaitanya Publishing, Allahabad.
8. S.L.N.Sinha, Capital Market in India, Vora& Co, Bombay.
9. Hendrik.S. Houthakker, The Economics of Financial Markets, Oxford University Press, New Delhi.

Learning Outcomes

All however, share the following goals and objectives: to reduce global poverty and improve people's living conditions and standards; structure of financial system, financial system and economic development; instruments of money market, commercial Bills, market for commercial papers, Securities and Exchange Board of India (SEBI), Bombay Stock Exchange (BSE), Commercial Banks, Functions Industrial Finance Corporation of India (IFCI), Life Insurance Corporation (LIC)Unit Trust of India (UTI) and Foreign Capital.A financial system densely interconnected network of financial intermediaries, facilitators, and markets that allocates capital, shares risks, and facilitates intertemporal trade. Is a densely interconnected network of intermediaries, facilitators, and markets that serves three major purposes: allocating capital.The Financial system helps efficiently direct the flow of savings and investments in the economy. Here financial institutions like banks play a major role. ... These savings are then channelized by the banks to provide credit to different business entities, which are involved in production and distribution.

PAPER -304: PERSONALITY DEVELOPMENT AND SOFT SKILLS

In these "*Personality Development and Soft Skills* ", we will develop inter personal skills and be an effective goal oriented team player, develop professionals with idealistic, practical and moral values, develop communication and problem solving skills, re-engineer attitude and understand its influence on behavior.

Objectives

Develop effective communication skills (spoken and written).

Develop effective presentation skills. Conduct effective business correspondence and prepare business reports which produce results. Become self-confident individuals by mastering inter-personal skills, team management skills, and leadership skills. Develop all-round personalities with a mature outlook to function effectively in different circumstances. Develop broad career plans, evaluate the employment market, identify the organizations to get good placement, match the job requirements and skill sets. Take part effectively in various selection procedures adopted by the recruiters.

Unit – I	Foundations of personality development: Concept of Personality – Dynamics - Trait theory of personality: Personality Determinants: Physical, social, educational, family, intellectual and emotional determinants; Causes for sick personality and healthy Personality. (Theory only)
Unit-II	Self-awareness skills: self-awareness and management- Communicating: Sending inter personal messages – Listening and reading non-verbal messages - Providing feedback. (Theory only)
Unit- III	Motivating: Goal setting – Coaching, Counseling and Mentoring – Empowering people through delegation - Leading: Politicking – Persuading - Applying leadership styles – Managing Change. (Theory only)
Unit- IV	Teaming: Working with teams – Running meetings – Valuing diversity: Problem solving: Ethical decision making - Creative problem solving – Resolving conflicts – Negotiation. (Theory only)
Unit- V	Self-esteem: Characteristics – Causes of low self-esteem – Steps to build Positive self-esteem; Attitude: Steps in building positive attitude; Interpersonal skills; Steps in developing a positive Personality. (Theory only)

REFERENCE BOOKS:

1. Elizabeth B.Hurlock, Personality Development, Tata McGraw Hill, New Delhi-2009.
2. Stephen P.Robbins and Philip L Hunsaker, Training in interpersonal skills, person Education, New Delhi.
3. Shiv Khera, You can wing, Macmillan Publications, New Delhi.
4. Robert M. Sherfield. Rhonda J.Montgomery, Patrica G.Moody, Developing soft Skills, Person education, New Delhi, 2009
5. Biswajit Das Ipseeta Satpathy, Business Communication & Personality Development, Excel Publication, New Delhi.

Learning outcomes

Soft skills provide students with a strong conceptual and practical framework to build Develop and manage teams. They play an important role in the development of the Students' overall personality, thereby enhancing their career prospects. This paper provides strong practical orientation to the students and helps them in building and improving their skills in communication, the effective use of English, business correspondence, presentations, team building, leadership, time management, group discussions, interviews, and inter-personal skills. This paper also helps students in career visioning and planning, effective resume writing and dealing with placement consultants and headhunters and also to create interesting, and interactive manner, which gives ample scope for the students to interact with each other and face a wide variety of issues, topics, and situations that they are likely to come across as entry-level.

EMT 305(A): INDIAN ECONOMY

Indian economy is termed as the developing economy of the world. Some features like low per capita income, higher population below poverty line, poor infrastructure, agriculture based economy and lower rate of capital formation, tagged it as a developing economy in the world.Today, India is considered a mixed economy: the private and public-sectors co-exist and the country leverages international trade. India, as a developing country, features a mixed economy in the world. The major characteristics of developing economy are low per capita income, overpopulation, maximum population below the poverty line, poor infrastructure, agro-based economy and a lower rate of capital formation.The secondary sector is the backbone of the Indian economy. There is a promising future for this sector with more development and growth in the coming years. The Tertiary sector is similar to the secondary sector in terms that it too adds to the value of the products.

Course Objectives

The objective of this course is to provide the basic knowledge of Indian economy Structure of the Indian Economy, Agricultural Sector, Industrial Sector, Tertiary and Foreign Sectors and Planning and Development of the Indian economy that is with the study of the subject in a Master's programme.

Unit 1: Structure of the Indian Economy

Indian Economy on the Eve of Independence- Basic Characteristics of the Indian Economy as Developing Economy- Major issues of Development in Indian Economy- Growth and Structural Changes in the Indian Economy- Population-Poverty –Measurement of Poverty, Anti PovertyProgrammes - Inequality- Natural Resources-Infrastructure- Human Development in India-Prices, Price Policy and Economic Growth- Balanced Regional Development-Unemployment in India.

Unit 2: Agricultural Sector

Role Agriculture in Indian Economy- Share of Agriculture - Interrelationship between Agriculture and Industry –Land Tenure System - Farm Size and Productivity -Institutional and Technological Aspects- New Agricultural Policy-Food Security in India-Rural Credit-Agricultural Marketing- Regional Disparities in Indian Agriculture- Irrigation and other Agricultural Inputs.

Unit 3: Industrial Sector

Industrial Structure and Economic Growth- Large and MSMEs - Industrial Labour Problems and Labour Policy -Industrial Sickness Causes and Remedial Measures- Economic Reforms and Industrial Growth-Pattern of Industrialization-Public and Private Industrial Finance in India- Unorganized Sector and Informalisation of the Indian Economy.

Unit 4: Tertiary and Foreign Sectors

Service Sector - Role, Growth and Structure of Service Sector in India –Growth, Composition and Direction of India's Foreign Trade – Trade Policy and its Reforms in India – India's Balance of Payments - WTO and Indian Economy.

Unit 5: Planning and Development

Objectives and Strategy of Planning- Public Sector and Indian Planning- Re-Organization of Planning Commission (NITI Aayog) - Privatization and Globalization and its impact on India-Government Subsides in India **-** Problems of Capital Formation- Foreign Capital, Foreign aid and Economic Development in India.

TEXT AND REFERENCE BOOKS:

1. Ghosh. Alak, Indian Economy –Its Nature and Problems, A New Look Indian Economics, Calcutta, The World Press Private Limited, 1989.
2. Jalan.B, The Indian Economy Problems and Prospects, Viking Publications, New Delhi, 2006.
3. RuddarDatt and Sundaram. K.P.M, S.Chand and Company, New Delhi, 2008.
4. S.K.Misra and V.K. Puri, Indian Economy, Himalaya Publishing House, New Delhi, 2006.
5. Sen R.K and B.Chatterjee, Indian Economy-Agenda for 21st Century, Deep and Deep Publications, New Delhi, 2001.
6. Uma Kapila, Indian Economy Since Independence, Agricola Publications Academy, New Delhi, 1998.

Learning Outcomes

After successfully completing the course Indian economy the graduate is able to:

At the end of the programme, the students will have knowledge of structure of the Indian Economy, Agricultural Sector, Industrial Sector, Tertiary and Foreign Sectors and Planning and Development of the Indian economy that is with the study of the subject in a Master's programme. Here we detail about the six major objectives of planning in India, i.e., (a) Economic Growth, (b) Attaining Economic Equality and Social Justice, (c) Achieving Full Employment, (d) Attaining Economic Self-Reliance, (e) Modernisation of Various Sectors and (f) Redressing Imbalances in the Economy. The objectives of industrial policy were: a high growth rate, national self-reliance, reduction of foreign dominance, building up of indigenous capacity, encouraging small scale industry, bringing about balanced regional development, prevention of concentration of economic power, reduction of income inequalities.

EMT 305(B): ECONOMICS OF INSURANCE

Insurance is one of the main and important fields of the economy. The main aim of the insurance is to protect people from risks and from dangers. As we know in modern period there are too many accidents, bad events and unexpected dangers. People always think about this problem, how to escape from these risks. Insurance generates significant impact on the economy by mobilizing domestic savings. ... Insurance enables to mitigate loss, financial stability and promotes trade and commerce activities those results into economic growth and development. Thus, insurance plays a crucial role in sustainable growth of an economy. Insurance turn accumulated capital into productive investments. Insurance also enables mitigation of losses, financial stability and promotes trade and commerce activities those results into sustainable economic growth and development. Thus, insurance plays a crucial role in the sustainable growth of an economy. The function of insurance is to safeguard against financial loss by having the "losses of the few" paid by "contributions of the many" that are exposed to the same risk. Insurance companies invest premium dollars collected annually in a wide range of investments.

Course Objectives

Generally, households or firms with insurance make regular payments, called premiums. The insurance company prices these premiums based on the probability of certain events occurring among a pool of people. Members of the group who then suffer a specified bad experience receive payments from this pool of money.The objective of this course is to provide the basic knowledge of Economics of Insurance, Element of Risk and Risk Management, Life and Health Insurance, Risk and Insurance, General and Other Types of Insurance and Regulation of Insurance are explained.

Unit 1: Element of Risk and Risk Management
Fundamental of Risk and Uncertainty – Classification of Risk – Risk Pooling and Risk Transfer - Concept of Risk Management – Essentials and Elements of Risk Management – Risk Assessment and Risk Control.

Unit 2: Risk and Insurance
Definition of Insurance – Role and Functions of Insurance – General and Specific Principles of Insurance Contract – Insurance and Economic Development – Insurance as Financial Intermediaries and Investment Institutions – Classification of Insurance - The Concept of Re-insurance.

Unit 3: Life and Health Insurance
Fundamental Principles of Life and Health Insurances – Functions of Life and Health Insurances – Plans of Life and Health Insurance – The Process of Underwriting Life and Health Insurance- Group Insurance

Unit 4: General and Other Types of Insurance
Definition of General Insurance – Marine, Motor Vehicular, Fire and other types of Insurances –Physical and Moral Hazards in General Insurance – The General Insurance Corporation (GIC Re) and General Insurance Companies, NOUN – Growth of General Insurance business in India.

Unit 5: Regulation of Insurance
Organization and Growth of LIC - Monopoly of LIC - Need for Insurance Regulation in India - Functions and Duties of Insurance Regulation and Development Authority (IRDA) of India — Entry of Private and Foreign Insurance Companies – Implications – Prospects of Insurance Companies.

TEXT AND REFERENCE BOOKS:

1. Misra, M. N. and V. K. Puri, (2008), Insurance Principles and Practice, New Delhi: S. Chand.
2. Periasamy, P. (2007), Principles and Practice of Insurance, Mumbai: Himalaya Publishing House.
3. Palande, P. S., Shah, R. S. andLunawal, M. L. (1983), Insurance in India, Changing Policies and Emerging Opportunities, New Delhi: Response Books, A Division of Sage Publications.
4. Bhole, L. M. (1990), The Indian Financial System, New Delhi: Tata McGraw Hill.
5. Black, K. Jr. and H. D. (2000), Life and Health Insurance, New Jersey: Prentice Hall.
6. Bailey, R. (1999), Underwriting and Life and Insurance, Atlanta: LOMA.
7. Bickelhaupt. D. L. (1992), General Insurance, Burr Bridge: Irwin Inc.
8. Hedad, G. L. AND HornI.I. (1991), Essentials of Risk Management, Vol. I Insurance Institute of America.

Learning Outcomes

After successfully completing the course Economics of Insurance the graduate is able to:

Generally, households or firms with insurance make regular payments, called premiums. The insurance company prices these premiums based on the probability of certain events occurring among a pool of people. Members of the group who then suffer a specified bad experience receive payments from this pool of money. Insurance generates significant impact on the economy by mobilizing domestic savings.Insurance enables to mitigate loss, financial stability and promotes trade and commerce activities those results into economic growth and development. Thus, insurance plays a crucial role in sustainable growth of an economy. Insurance is an instrument of social policy. By providing significant social benefits, such as compensation for injuries at work and rebuilding property after catastrophes, insurance contributes to the rebuilding of people's livelihoods, as well as to the economy as a whole. Its aim is to reduce financial uncertainty and make accidental loss manageable. It does this substituting payment of a small, known fee—an insurance premium—to a professional insurer in exchange for the assumption of the risk a large loss, and a promise to pay in the event of such a loss.

EMT 401: TIME SERIES ECONOMETRICS

Time series Econometrics can be useful to see how a given asset, security, or economic variable changes over time. It can also be used to examine how the changes associated with the chosen data point compare to shifts in other variables over the same time period.

Course Objectives

The objective of the course is to provide knowledge on Econometric applications of Economic theory Especially time series econometrics.

➢ This course explains concepts of Panel data regression models and what are the challenges faced during the Time series analysis.
➢ This course describes the concept of Stationarity and non-stationary stochastic process and their test. Discuss about Spurious regression.
➢ This course explores the concept of Co-integration, Vector Error correction Model (VECM), Granger Causality test.
➢ The course discovers Linear time series Models; MA, AR, ARMA and ARIMA models, also discuss VAR Models.

Unit 1: Basic concepts

Introduction – Stationary Stochastic Process – Non-stationary Stochastic Process; Unit root Stochastic Process, Integrated Stochastic Process, tests of Stationarity.

Unit 2: Co-integration

Integrated Variables, Unit root tests - Dickey-Fuller tests; Co-integration and error correction mechanism – Engle–Granger, Johansen and Juselius Co-integration tests – ARDL Co-integration Tests.

Unit 3: Forecasting

Nature and uses of Forecasts – Forecasting with a single-equation linear regression model - Forecasting with a multi-equation econometric model - Evaluation of the forecasting power of a model – Conditional and Unconditional Forecasting – Single and Double exponential smoothing – Box-Jenkins Model.

Unit 4: Linear Time Series Models

Univariate Time Series Models - Moving Average Models - Auto Regressive Models - Mixed Auto Regressive Moving Average Models – ARIMA models.

Unit 5: Vector Auto-regressions and Models for Volatility

Estimation and Forecasting with VAR, VAR and Causality, Some problems with VAR Modeling, Measuring Volatility - The ARCH (p) models – ARCH tests – GARCH (p, q) model – Asymmetric GARCH models.

TEXT AND REFERENCE BOOKS:

1. Gujarathi, D.N, Basic Econometrics, Fourth Edition, Tata McGraw Hill, New Delhi, 2004.
2. Koutsoyiannis, A, Theory of Econometrics, The Macmillan Press Ltd., Hong Kong, Second Edition, 1983.
3. Robert S.Pindyck and Daniel L. Rubinfeld, Econometric Models and Economic Forecasts, McGraw Hill Book Company, 1988
4. Francis Diebold, Elements of Forecasting, South Western College Publishing, 1998.
5. Newbold and Bos, Introductory Business and Economic forecasting (second edition), South Western College Publishing, 1994.
6. William H. Green, Econometric Analysis, Pearson's Education, fifth Edition, 2003.
7. Hamilton, J.D, Time Series Analysis, Princeton, N.J., Princeton University Press, 1994.

Learning Objectives

After successfully completing the course Time Series Econometrics the graduate is able to:

At the end of the course the students will acquire additional specialization through the Time series Econometrics Analysis. Skill to judge the reliability of estimation in case of Stationarity and Non-Stationarity test, Co-integration test. Students will be able to execute in-depth analysis of VECM model and Granger Causality test. Student can perform the Forecasting with a single-equation linear regression model, and Forecasting with a multi-equation econometric model. Student can evaluate Univariate Time Series Models like MA, AR, ARMA and ARIMA models. Finally, student will be able to calculate VAR model which most important in macro-economic models.

EMT 402: OPTIMIZATION IN ECONOMICS

The purpose of optimization is to achieve the "best" design relative to a set of prioritized criteria or constraints. These include maximizing factors such as productivity, strength, reliability, longevity, efficiency, and utilization, this decision-making process is known as optimization.

Course Objectives

The objective of the course is to provide knowledge on Optimization in Economic. Optimization techniques are very crucial activities in managerial decision-making process. **Expressing relationships through equations** is very useful in economics as it allows the usage of powerful differential technique, in order to determine the optimal solution of the problem.

➢ This course explains concepts of Transportation Problem which is most important for the feasible Solution.
➢ This course describes the concept of Assignment Problem and Game theory.
➢ This course explores the concept of Techniques of Inventory control with known demand, the fundamental Problem of Economic Order Quantity (EOQ), the Problem of EOQ with Uniform Demand, and The Problem of EOQ with Finite Rate of Replenishment

Unit 1: Transportation Problem
Nature and Matrix form of TP – Transportation Table – Types of Transportation Problem – Balanced Transportation Problem, Unbalanced Transportation Problem – Methods to solve Transportation Problem - The Initial Basic Feasible solution: North-West Corner Rule and Vogel's Approximation method – Moving towards optimality, the Transportation Algorithm.

Unit 2: Assignment Problem:
Assignment problem, Transportation problem and Linear Programming – Types of Assignment problem – Properties of Optimal Solution – Solving the Assignment Problem by Hungarian Algorithm – The Auction Algorithm for Assignment Problem – Branch and Bond Techniques for Assignment Problem.

Unit 3: Game Theory:
Basic concepts -Two–person Zero Sum Games - The Maximum Minimax Principle – Games without Saddle Points – Mixed Strategies – Graphical solution of 2 x n and m x 2 Games – Dominance property – The Modified Dominance Property – Reducing the Game Problem as a Linear Programming Problem.

Unit 4: Inventory Management
Introduction - Inventory control - Techniques of Inventory control with known demand - Economic Lot Size Problems –The fundamental Problem of Economic Order Quantity (EOQ), The Problem of EOQ with Uniform Demand, and The Problem of EOQ with Finite Rate of Replenishment - Problem of EOQ with Shortage.

Unit 5: Simulation
Introduction – Elements of a Simulation Model – Event – Types of Simulation – Generation of Random Phenomena – Monte Carlo Technique – Generation of Uniform (0,1) Random Observations – Simulation languages.

TEXT AND REFERENCE BOOKS:

1. KantiSwarup, P.K.Gupta and Man Mohan: Operations Research, Sultan Chand and sons, New Delhi.
2. Panneerselvam, R: Operations Research, Eastern Economy Edition, Prentice Hall of India, New Delhi, 2007.
3. Srinivasan, G., Operations Research _Principles and Applications, Second Edition, Prentice Hall of India, New Delhi, 2012.
4. Richard, Brown and Govindaswamy, N., Schaum's Outlines Series Operations Research, Second Edition, 2012.
5. Gupta, P.M. and D.S.Hira: Operations Research, Sultan Chand and Sons, New Delhi.
6 Harven, Wagner: Operations Research.
7 Starr and Miller: Inventory Control.

Learning Outcomes

After successfully completing the course Optimization in Economics the graduate is able to:

At the end of the course the students find the values of decision variables that result in a maximum or minimum of a function called objective function, the objective function which is used as a measure of effectiveness of a decision. Students can make the process of making a trading system more effective by adjusting the variables used for technical Optimization analysis.

EMT 403(A): PRACTICAL-IV

TIME SERIES ECONOMETRICS AND OPTIMIZATION IN ECONOMICS

The course EMT 403 to provide the Practical knowledge of Time Series Analysis and Optimization, which is useful information, research conclusions, and supporting decision-making for business leaders.

Course Objectives

The course has a strong focus on Practical skills and train students in the collection and analysis of the data using their software skills Especially, EViews for Time series analysis. The entire Practical course divided into two parts first part can made Time series analysis through EViews software and second part will be covered Optimization technique in Economics.

➢ The First part; course describes Practical Knowledge of Time series Analysis, Mainly, focus on Unit root [ADF] test, Co-integration test.
➢ This course explores practical approach of Spurious Regression, Johanson Co-integration test, Granger Causality test, and VECM model.
➢ The course offered ARMA and ARIMA models, also discuss VAR Models.
➢ The second part of the course describes Optimization techniques, such as Transportation problem and Assignment problem.

Concepts are covered in this Practical Approach follows;

➢ Unit root test [ADF-Augmented Dicky-Fuller test].
➢ Spurious Regression.
➢ Co-integration Test.
➢ Vector Error Correction Mechanism [VECM].
➢ Granger Causality test.
➢ VAR Model.
➢ ARMA and ARIMA Model.
➢ Optimization-Transportation problem; Balanced Transportation Problem, Unbalanced Transportation Problem North-West Corner Rule.
➢ Assignment problem; Hungarian Algorithm Branch and Bond Techniques for Assignment Problem.

Learning Outcomes

*After successfully completing the course **students must have practical reveal the following:***

➢ At the end of this course student will gain practical knowledge of Time Series Analysis by using EViews.
➢ Student gained and evaluate Stationarity test by using ADF Test.
➢ After complete this course student will able to test of Spurious Regression, Co-integration test and Granger Causality test.
➢ Finally, student will be able to made feasible solution in optimization.

EMT 403(B): INTERNATIONAL TRADE AND FINANCE

The objectives of this course are: To Gain understanding of the basic concepts and principles of International trade, role of the government through its policy, balance of payment accounts and BOP crisis. To help in understanding EXIM policy, FDI regulations, role of trade credit agencies and FEMA. The Standard international trade models universally consider maximizing the availability of inexpensive goods as the objective of international trade. They then go on to show that tariffs and other impediments to trade cause a loss of economic efficiency.

Course Objectives

The course has a strong focus on International trade and the accompanying financial transactions are generally conducted for the purpose of providing a nation with commodities it lacks in exchange for those that it produces in abundance; such transactions, functioning with other economic policies, tend to improve a nation's standard of living. All however, share the following goals and objectives: to reduce global poverty and improve people's living conditions and standards; to support sustainable economic, social and institutional development; and. to promote regional cooperation and integration.

Unit 1: Old and New Theories of International Trade
Comparative advantage in Ricardian, Haberler and Heckscher–Ohlin Theories – Factor Price Equalization Theorem - Intra Industry Trade – Neo-Chamberlin and Neo-Heckscher-Ohlin Theorems - Product Cycle and Technology Gap and Strategic Trade theories.

Unit 2: Free Trade and Protection
Free Trade vs. Protection – Theory of Tariffs –The Political Economy of Non-tariff Barriers - Terms of Trade – Secular Deterioration (Singer-Prebisch) Thesis -Immiserizing Growth- The Concept of Customs Union - Regional Trade Agreements - EU and SAARC.

Unit -3: Balance of Payments and adjustment Mechanism
Balance of Payments Accounts –Adjustment of Deficit in Balance of Payments – Traditional Elasticity and Absorption Approaches - Theories of policy mix - BOP adjustments with capital mobility – Foreign Trade Multiplier.

Unit 4: Theories of Exchange rate determination
Exchange rate under free market – Spot and Forward Rates -Exchange rate adjustments under capital mobility - Floating Rates and their implications for developing countries - Currency Boards - Import and Exchange Controls and Multiple Exchange Rates.

Unit 5: Global Institutions
The Bretton Woods System - IMF and World Bank – Collapse of Bretton Woods System – New International Monetary Order – WTO – Issues at the recent WTO ministerial Conferences-Multinational Corporations - Implications for Developing countries.

TEXT AND REFERENCE BOOKS:

1) Paul Krugman& Maurice Obstfeld (6[th]ed.) International Economics, (Chapters 2-11) Addison Wesley, 2003.
2) Caves, R. and Jones, R. World trade and payments (chapters 4, 6, and 7). Boston: Little, Brown and Company, 1977.
3) Sodersten, B. and Reed, G. International economics (chapters 1-11, 13-16, 19, 20, 22-24, 26 & 27). Macmillan Company, 1994.
4) Pilbeam, K. International finance (chapters 4-15). Macmillan, 1994.
5) Turnovsky, S. J. Macroeconomic analysis and stabilization policy (chapters 9-12). Cambridge University Press, 1977.
6) Dixit, A. and Norman, V. The theory of international trade. Cambridge University Press, 1980.
7) Grossman, G. M. and Rogoff, K., eds. Handbook of international economics. Vol III. Elsevier, 1995.

8) Kierzkwoski, H., ed. Protection and competition in international trade. New York: Blackwell, 1987.
9) Bhagwati, J, ArvindPanagariya, & T.N. Srinivasan: Lectures on International Trade, 2nd ed. MIT Press 2001.
10) Grossman, G. M. and Rogoff, K., eds. Handbook of international economics. Vol III. Elsevier, 1995.

Learning Outcomes

After successfully completing the course **students must have practical reveal the following:**

To reduce global poverty and improve people's living conditions and standards; to support sustainable economic, social and institutional development; and. to promote regional cooperation and integration. The elements of international trade. They are Balance of payments, Visible trade, Invisible trade, Trade gap, Correcting a deficit, Exchange rates and Why countries trade. Standard international trade models universally consider maximizing the availability of inexpensive goods as the objective of international trade. They then go on to show that tariffs and other impediments to trade cause a loss of economic efficiency.

EMT 403(C): INDIAN ECONOMY

Indian economy is termed as the developing economy of the world. Some features like low per capita income, higher population below poverty line, poor infrastructure, agriculture based economy and lower rate of capital formation, tagged it as a developing economy in the world. Today, India is considered a mixed economy: the private and public-sectors co-exist and the country leverages international trade. India, as a developing country, features a mixed economy in the world. The major characteristics of developing economy are low per capita income, overpopulation, maximum population below the poverty line, poor infrastructure, agro-based economy and a lower rate of capital formation. The secondary sector is the backbone of the Indian economy. There is a promising future for this sector with more development and growth in the coming years. The Tertiary sector is similar to the secondary sector in terms that it too adds to the value of the products.

Course Objectives

The objective of this course is to provide the basic knowledge of Indian economy Structure of the Indian Economy, Agricultural Sector, Industrial Sector, Tertiary and Foreign Sectors and Planning and Development of the Indian economy that is with the study of the subject in a Master's programme.

Unit 1: Structure of the Indian Economy
Indian Economy on the Eve of Independence- Basic Characteristics of the Indian Economy as Developing Economy- Major issues of Development in Indian Economy- Growth and Structural Changes in the Indian Economy- Population-Poverty –Measurement of Poverty, Anti PovertyProgrammes - Inequality- Natural Resources-Infrastructure- Human Development in India-Prices, Price Policy and Economic Growth- Balanced Regional Development-Unemployment in India.

Unit 2: Agricultural Sector
Role Agriculture in Indian Economy- Share of Agriculture - Interrelationship between Agriculture and Industry –Land Tenure System - Farm Size and Productivity -Institutional and Technological Aspects- New Agricultural Policy-Food Security in India-Rural Credit-Agricultural Marketing- Regional Disparities in Indian Agriculture- Irrigation and other Agricultural Inputs.

Unit 3: Industrial Sector
Industrial Structure and Economic Growth- Large and MSMEs - Industrial Labour Problems and Labour Policy -Industrial Sickness Causes and Remedial Measures- Economic Reforms and Industrial Growth-Pattern of Industrialization-Public and Private Industrial Finance in India- Unorganized Sector and Informalisation of the Indian Economy.

Unit 4: Tertiary and Foreign Sectors
Service Sector - Role, Growth and Structure of Service Sector in India –Growth, Composition and Direction of India's Foreign Trade – Trade Policy and its Reforms in India – India's Balance of Payments - WTO and Indian Economy.

Unit 5: Planning and Development
Objectives and Strategy of Planning- Public Sector and Indian Planning- Re-Organization of Planning Commission (NITI Aayog) - Privatization and Globalization and its impact on India-Government Subsides in India - Problems of Capital Formation- Foreign Capital, Foreign aid and Economic Development in India.

TEXT AND REFERENCE BOOKS:

1. Ghosh. Alak, Indian Economy –Its Nature and Problems, A New Look Indian Economics, Calcutta, The World Press Private Limited, 1989.
2. Jalan.B, The Indian Economy Problems and Prospects, Viking Publications, New Delhi, 2006.
3. RuddarDatt and Sundaram. K.P.M, S.Chand and Company, New Delhi, 2008.
4. S.K.Misra and V.K. Puri, Indian Economy, Himalaya Publishing House, New Delhi, 2006.
5. Sen R.K and B.Chatterjee, Indian Economy-Agenda for 21st Century, Deep and Deep Publications, New Delhi, 2001.
6. Uma Kapila, Indian Economy Since Independence, Agricola Publications Academy, New Delhi, 1998.

Learning Outcomes

After successfully completing the course Indian economy the graduate is able to:

At the end of the programme, the students will have knowledge of structure of the Indian Economy, Agricultural Sector, Industrial Sector, Tertiary and Foreign Sectors and Planning and Development of the Indian economy that is with the study of the subject in a Master's programme. Here we detail about the six major objectives of planning in India, i.e., (a) Economic Growth, (b) Attaining Economic Equality and Social Justice, (c) Achieving Full Employment, (d) Attaining Economic Self-Reliance, (e) Modernisation of Various Sectors, and (f) Redressing Imbalances in the Economy. The objectives of industrial policy were: a high growth rate, national self-reliance, reduction of foreign dominance, building up of indigenous capacity, encouraging small scale industry, bringing about balanced regional development, prevention of concentration of economic power, reduction of income inequalities.

EMT 403(D): PROJECT

A project objective describes the desired results of a project, which often includes a tangible item. An objective is specific and measurable, and must meet time, budget, and quality constraints. ... A project may have one objective, many parallel objectives, or several objectives that must be achieved sequentially.

Project objectives are what you plan to achieve by the end of your project. This might include deliverables and assets, or more intangible objectives like increasing productivity or motivation. Your project objectives should be attainable, time-bound, specific goals you can measure at the end of your project.

Goals and objectives are statements that describe what the project will accomplish, or the business value the project will achieve. Goals are high level statements that provide overall context for what the project is trying to achieve, and should align to business goals. In brief, project management objectives are the successful development of the project's procedures of initiation, planning, execution, regulation and closure as well as the guidance of the project team's operations towards achieving all the agreed upon goals within the set scope, time, quality and budget standards.

Learning Outcomes

The use effectively oral, written and visual communication. identify, analyze, and solve problems creatively through sustained critical investigation. integrate information from multiple sources. Demonstrate an awareness and application of appropriate personal, societal, and professional ethical standards. The value of any project cannot be measured without defining success. It requires focus on outcomes. Outcomes are the events, occurrences, or changes in conditions, behavior, or attitudes that indicate progress toward a project's goals. Outcomes are specific, measurable, and meaningful. Good outcome statements are specific, measurable, and realistic." Think carefully about what you can realistically accomplish given the groups you want to reach and the scope of your resources. Develop outcomes as follows: Outcomes should describe what you want to happen after your activity is completed.

EMT 404: FREEDOM MOVEMENT IN INDIA, 1857-1947

The Indian national movement was undoubtedly one of the biggest mass movements modern Society has ever seen, It was a movement which galvanized millions of People of all classes and ideologies into political action and brought to its knees a mighty colonial empire. Consequently, along with the British, French, Russian, Chine, Cuban and Vietnam revolutions, it is of great relevance to those wishing to alter the existing political and social structure.

Course objectives

After reading this lesson you will be able to: identify the causes that led the rise of Nationalism in India trace the emergence of Indian National Congress discuss the various stages of the National Movement in India list the names of prominent leaders of the Indian National Movement discuss the role of Gandhi in this Movement

Unit I	Nationalism : Its meaning and different interpretations – Factors leading to growth of Nationalism- Emergence of Indian National Congress- Moderates and Militant Nationalists-Swadeshi and Home Rule Movements
Unit II	Emergence of Gandhiji : Non- Violence and Satyagraha- Rowlat and Khilafat issues- Non- cooperation Movement- Swarajists - Civil disobedience Movement- Ministries at Provincial level and Second World War
Unit III	Revolutionary Nationalists: Bhagath Singh- Growth of Capitalist class and its role – Growth of left Ideology and peasant and Working class movement. Kisan Mahasabha
Unit IV	Growth of Communal Ideology and politics: Factors leading to Communalism- Formation of Muslim League and Hindu Mahasabha- National issues, Role of Congress and Muslim League, Cripps proposals and Quit India Movement, Cabinet Mission, the Partition and attainment of Independence
Unit V	Freedom Struggle in Princely states: Socio, Political and Administrative conditions- Origin of Nationalism- Impact of Freedom Struggle of British India over Native States, Haripura Resolution, 1938- Growth of Popular Movements- Lapse of Paramountacy- Join India Movement- Vallabhai Patel and Integration.

Suggested Readings

1. Anil Seal, Emergence of Indian Nationalism
2. Bipan Chandra, Communalism in Modern India, Vikas, Delhi, 1987
3. Bipan Chandra, Nationalism in Modern India, Orient Longman, Delhi, 1981
4. Bipan Chandra, (ed), India's Struggle for Independence, 1857-1947
5. Brass, Paul, Plitics in India since Independence, Delhi, 1994
6. Brown, Judith, Gandhi's rise to Power in Indian Politics, 1915-22, OUP, 1972
7. Desai, A.R., Peasant Struggle in India, OUP, Delhi, 1979
8. Desai, A.R., Social Backgroud of Indian Nationalism, Mumbai, 1986
9. Guha, Ranajit, Elementary Aspects of Peasant Insurgency in Colonial India, OUP, Delhi, 1983
10. Jones, K., Social and Religious Reform Movement in Modern India, New Cambridge History, 1989
11. Low, D.A.(ed), Congress and the Raj : Facts of the Indian Struggle 1917-1947, Delhi, 1977
12. Ravinder Kumar, Social History of Modern India, OUP, Delhi, 1985
13. Sarkar, Sumit., Modern India, 1885-1947, Macmillan, 1985
14. Stokes, Eric, Peasant and Raj : Studies in Agrarian Society and Peasant Rebellion in Colonial India, Delhi, Vikas, 1978
15. Ganshyam Shah, Social movements in India, A review of Literature, Sage, Delhi, 2004

Course outcomes

This paper helped to **strengthen Indian nationalism**, as it led to a sense of patriotism among people across India. In fact, supporters of the Indian Independence Movement began to argue that India's role in World War The revolt of 1857 was an unprecedented event in the history of British rule in India. It united, though in a limited way, many sections of Indian society for a common cause. Though the revolt failed to achieve the desired goal, it sowed the seeds of Indian nationalism.

EMT 405(A) OPTIMIZATION TECHNIQUES IN ECONOMICS

The purpose of optimization is to achieve the "best" design relative to a set of prioritized criteria or constraints. These include maximizing factors such as productivity, strength, reliability, longevity, efficiency, and utilization, this decision-making process is known as optimization.

Course Objectives

The objective of the course is to provide knowledge on Optimization in Economic. Optimization techniques are very crucial activities in managerial decision-making process. Expressing relationships through equations is very useful in economics as it allows the usage of powerful differential technique, in order to determine the optimal solution of the problem.

➢ This course explains concepts of Transportation Problem which is most important for the feasible Solution.
➢ This course describes the concept of Assignment Problem and Game theory.
➢ This course explores the concept of Techniques of Inventory control with known demand, the fundamental Problem of Economic Order Quantity (EOQ), the Problem of EOQ with Uniform Demand, and The Problem of EOQ with Finite Rate of Replenishment

Unit 1: Transportation Problem

Nature and Matrix form of TP – Transportation Table – Types of Transportation Problem – Balanced Transportation Problem, Unbalanced Transportation Problem – Methods to solve Transportation Problem - The Initial Basic Feasible solution: North-West Corner Rule and Vogel's Approximation method – Moving towards optimality, the Transportation Algorithm.

Unit 2: Assignment Problem:
Assignment problem, Transportation problemand Linear Programming – Types of Assignment problem – Properties of Optimal Solution – Solving the Assignment Problem by Hungarian Algorithm – The Auction Algorithm for Assignment Problem – Branch and Bond Techniques for Assignment Problem.

Unit 3 : Game Theory:
Basic concepts -Two–person Zero Sum Games - The Maximum Minimax Principle – Games without Saddle Points – Mixed Strategies – Graphical solution of 2 x n and m x 2 Games – Dominance property – The Modified Dominance Property – Reducing the Game Problem as a Linear Programming Problem.

Unit 4 : Inventory Management

Introduction - Inventory control - Techniques of Inventory control with known demand - Economic Lot Size Problems –The fundamental Problem of Economic Order Quantity (EOQ), The Problem of EOQ with Uniform Demand, and The Problem of EOQ with Finite Rate of Replenishment - Problem of EOQ with Shortage.

Unit 5: Simulation

Introduction – Elements of a Simulation Model – Event – Types of Simulation – Generation of Random Phenomena – Monte Carlo Technique – Generation of Uniform (0,1) Random Observations – Simulation languages.

TEXT AND REFERENCE BOOKS:

1. KantiSwarup, P.K.Gupta and Man Mohan: Operations Research, Sultan Chand and sons, New Delhi.
2. Panneerselvam, R: Operations Research, Eastern Economy Edition, Prentice Hall of India, New Delhi, 2007.
3. Srinivasan, G., Operations Research _Principles and Applications, Second Edition, Prentice Hall of India, New Delhi, 2012.
4. Richard, Brown and Govindaswamy, N., Schaum's Outlines Series Operations Research, Second Edition, 2012.
5. Gupta, P.M. and D.S.Hira: Operations Research, Sultan Chand and Sons, New Delhi.
6 Harven, Wagner: Operations Research.
7 Starr and Miller: Inventory Control.

Learning Outcomes

After successfully completing the course Optimization in Economics the graduate is able to:

At the end of the course the students find the values of decision variables that result in a maximum or minimum of a function called objective function, the objective function which is used as a measure of effectiveness of a decision. Students can make the process of making a trading system more effective by adjusting the variables used for technical Optimization analysis.

EMT 405(B): DATA BASE FOR THE INDIAN ECONOMY

DBIE is a data warehouse of the Department of Statistics and Information Management (DSIM), under the Reserve Bank of India. The entire statistics have been presented in seven subject areas - Real Sector, Corporate Sector, Financial Sector, Financial Market, External Sector, Public Finance, Socio-Economic Indicators. The new website launched by the Reserve Bank of India on macroeconomic indicators of the Indian economy, is aimed at providing useful and relevant information to researchers, analysts and general users. It includes significant data on the financial and real sectors, markets, and public and corporate finance.

Unit 1: Census – Demographic Indicators – Definitions – schedules – Dissemination – Database – Tpes – Other data sets from Census – Economic census – Education census – Agricultural census – Major Results of Recent Census Data in India.

Unit 2: National Income Accounting – Base year – Methods of Estimation – Types of Reporting – Balance of Payments (BOP) and National Income) (NI) – State Domestic Product – District Domestic Product - District Census Handbooks.

Unit 3: NSSO – Large and Small samples – NSSO Rounds on Consumption Expenditure, Employment and Unemployment Status in India – Major Findings of Recent NSS reports on Poverty,Inequality and Unemployment – Annual Survey of Industries (ASI) – Coverage – Definition of Terms – price and wage statistics Major Findings of Recent reports – Socio-economic statistics – National Family Health Survey (NFHS) – Health and Morbidity Data.

Unit 4: RBI – Balance sheet approach – Financial and Banking statistics – Money supply Indicators and Statistics on Money Supply in India – Foreign Exchange Reserves – Exchange rate – Stock Market Statistics – Non-banking Financial Institutions data.

Unit 5: Govt. and International data – Ministry of Commerce Data on Exports and Imports – Data in Annual Economic Surveys from the Ministry of Finance - Data from World bank, IMF, ILO, WTO, UNCTAD, UN and other international agencies – Specific data bases such as World Value Surveys – Penn World Tables - Gallop Poll.

BOOKS FOR REFERENCE:

1. Websites and reports of respective ministries and organizations, like Directorate of Census Operations, CSO, NSSO, GOI, SEBI, RBI.
2. Reports of Statistics Departments in State Governments.
3. Reports of UN Organisations.
4. Annual Economic Surveys, Minstry of Finance, Government of India.
5. http://www.commerce.nic.in/eidb/iecnttopn.asp

Learning Outcomes

After successfully completing the course Data Base for Indian Economy the graduate is able to:

On completion of the course students will be able to: CO1. Develop ideas of the basic characteristics of Indian economy, its potential on natural resources. CO2. Understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development. Learning outcomes are statements that describe the knowledge or skills students should acquire by the end of a particular assignment, class, course, or program, and help students understand why that knowledge and those skills will be useful to them. These three types of learning include: Creating new knowledge (Cognitive) Developing feelings and emotions (Affective) Enhancing physical and manual skills (Psychomotor) Learning objectives can also be scaffolded so that they continue to push student learning to new levels in any of these three categories.