SEMESTER- I

CORE III – QUANTITATIVE TECHNIQUES FOR ECONOMICS

Code: 17PECC13	Hours / Week :6	Hrs / Semester: 90	Credits :4

Objective:

The main objective of this paper is to train the students to use the techniques of mathematical and statistical analysis, which are commonly applied to understand and analyze economic problems.

UNIT-1 FUNCTIONS AND DIFFERENTIATION   20 Hrs

Concept of function and types of functions; Multivariable functions - Interpretation of revenue, cost, demand, supply and production functions - Limit, Continuity and derivatives - Rules of differentiation - Elasticity and their types - Rules of Partial differentiation and interpretation of partial derivatives.

UNIT II   MATRIX AND DETERMINANT   15 Hrs

Concept of Matrix and Determinant – their types, simple operations on matrices, matrix inversion and rank of matrix; Solution of simultaneous equations through Cramer's rule and Matrix inverse method- Introduction to input-output analysis

UNIT III   PROBABILITY   15 Hrs

Basic concepts and definitions of probability; Laws of addition and multiplication; Conditional probability; Bay's theorem (statement); Binomial, Poisson and Normal distribution

UNIT IV   STATISTICAL ANALYSIS PROCEDURES   20 Hrs

Types of data and statistical analysis procedures: Univariate, Bivariate and Multivariate (only overview); Hypothesis Testing procedure based on Z, t, x^2 and F-test and one-way ANOVA.

Basic concepts of sampling- random and non-random sampling

UNIT V   LINEAR PROGRAMMING   20 Hrs

Linear programming – Basic concept, Nature of feasible, basic and optimal solution; Solution of linear programming problem through graphical and simplex method - Concept of a game; Two person Zero sum game; value of a game; strategies- simple and mixed; Dominance rule; Solution of a game by linear programming.

Reference Books:

☐ Quantitative Methods by D.R. Agarwal

☐ Basic Mathematics for Economists by R.C. Joshi, New Academic Publishing

☐ Croxton, F. E., D. Cowden and S. Kliein, Applied General Statistics, Prentice Hall, New Delhi.

☐ Gupta S.C. and V.K. Kapoor, Fundamentals of Applied Statistics, S. Chand and Sons New Delhi.

☐ Gupta S. C. Fundamentals of statistics, Himalaya Publishing house, New Dehlhi.

☐ Gupta S.P. and Gupta M. P. Business statistics, Sultan chand and sons, New Delhi.

SEMESTER – I
CORE IV – MODERN BANKING

Code: 17PECC24	Hours / Week: 6	Hrs / Semester: 90	Credits: 5

Objective:

To enable the students to learn the basic concepts of banking law and practice and help to the students to solve the problem while enhancing banking system

UNIT – I – INTRODUCTION

Origin of banks – Types of banks – Unit banking – Branch banking – Merits & Demerits. Modern banking – Meaning – Importance

UNIT– II BANKING INSTRUMENTS

Cheques – Meaning – Types – Crossing – Draft – Meaning – Comparison between Cheque and Draft – Endorsement – Meaning – Types

UNIT – III COLLECTING BANKER

 Meaning- Duties – Paying Banker – Responsibilities – Bank lending – Principles of sound lending policy

UNIT – IV ELECTRONIC BANKING

Traditional banking vs Modern banking- E Banking – Meaning – Activities – Advantages and limitations- E-Banking in India

UNIT – V TRENDS IN E – BANKING

Online banking – Concept and meaning – Credit card & Debit card- Meaning, uses & Difference between Credit card & Debit card. Mobile banking – Virtual Banking – E Payments – Electronic Fund Transfer (EFT) – automatic Teller Machine (ATM) – Uses – Electronic Money Transfer – Uses of EMT.

Text Book: Banking Theory law and Practice – Prof. E.Gordon & Natarajan
Reference Books:

 1.Banking Theory, law & Practice – P.N .Varshey.

2. Banking Theory& Practice – P.K. Srivastava.

3. E- Business – C.S. Rayudu.

SEMESTER- I
CORE ELECTIVE I – MICRO FINANCE AND RURAL DEVELOPMENT

Code: 17PECE11	Hours / Week :6	Hrs / Semester: 90	Credits :4

Objectives: This Paper gives an idea to the students regarding rural economy, their features, the problems of rural persons and artisans and their need for credit. It also explains the sources of rural credit.

UNIT-I: ROLE OF MICRO FINANCE 15Hrs

Concepts and definition of micro finance - History of micro finance - Role of Micro Finance in Economic Development - Micro Finance Institution – structure and functions of micro finance institution in India –micro credit-merits and demerits– impact of micro finance.

UNIT – II RURAL CREDIT INSTITUTIONS 20Hrs

Rural credit - institutional credit - Commercial Bank, Co-operative Bank, RRB, NABARD – Problems of Co-operative Credit society – Problems of Non institutional credit – Need for Micro Finance.

UNIT – III MICRO FINANCE AND POVERTY ALLEVIATION 15Hrs

Reasons for poverty in rural area – Role of micro finance in agriculture, entrepreneurial development, Employment generation and income enhancement – Problems of Micro Finance.

UNIT – IV MICRO FINANCE AND SELF HELP GROUP 20Hrs

Concept and meaning of SHG's – origin of SHG's – objectives – structure and nature of SHG's – functions of SHG's – production and marketing of the products of SHG's – SHG's and women empowerment – NGO's and SHG' - Evaluation of SHG's.

UNIT – V CURRENT AND FUTURE SCENARIO OF MICRO FINANCE 20Hrs

Experience of micro finance practices in developed and developing countries – Different phase of micro finance in India – SWOT of Micro Finance case studies - Growth of micro finance in Bangladesh, Highlights of Self Employed Women's Association (SEWA), Kalanjiam.

REFERENCE BOOKS:

1. Karmakar, K.G. (2000), "Rural Credit Self Help Group; Micro finance Need and Concepts in India Sage pub, New Delhi.

2. Lalitha (2003), "Main steraming Micro finance" Mohit Pub, New Delhi.

3. Lalitha (2003), "Microfinance and Rural Development Dominant Pub, New Delhi.

SEMESTER- II
ELECTIVE – II – (IDE) - MANAGERIAL ECONOMICS

Sub. Code: 17PHRE21	Hours/ Week :6	Hours/ Semester: 90	Credits: 4

Objectives:

To impart a basic knowledge of the concept and tools of Economics analysis as relevant for managerial decision making and to provide a fair understanding of the aggregate economic system within a firm operates.

UNIT – I: ROLE AND SCOPE OF MANAGERIAL ECONOMICS   20Hrs

Meaning, Nature and scope of Managerial Economics- Difference between Economics and Managerial Economics in Decision Making

UNIT – II: DEMAND, SUPPLY ANALYSIS AND FORECASTING   15Hrs

Demand- Law of Demand – Elasticity of Demand, Supply – Law of Supply- Demand forecasting – Techniques and Methods

UNIT – III: PRODUCTION, COST AND REVENUE ANALYSIS   20Hrs

Production function – Types – Returns to scale, Law of variable proportions, Cost – Types of cost, Revenue – Types of revenue.

UNIT – IV: MARKET STRUCTURE AND PRICING   20Hrs

Price and output decision under different markets – Perfect competition – Imperfect competition(Monopoly and Monopolistic Competition only)- Various types of pricing – Price strategy and policy.

UNIT – V: PROFIT PLANNING AND CAPITAL BUDGETING   15Hrs

Profit – Planning and strategies – Profit maximization conditions – Process – Capital Budgeting – Cost of capital, Capital rationing and profitability index.

Text Book: Mithani - Managerial Economics

Reference Books:
1. Joel Dean: Managerial Economics (Prentice Hall)
2. R.P.Maheswari and A.N.Gupta: Business Government and Society (Vikas, New Delhi)

	Semester –I			
Core - I	**ADVANCED MICROECONOMIC ANALYSIS- I**			
Course Code: 21PECC11	**Hrs / Week: 6**	**Hrs / Semester : 90**		**Credits : 4**

Objectives:
- To understand the basic concepts of microeconomics.
- To focuses on analyzing the manner in which markets resolve the problem posed by a scarcity of resources.
- To analyze the behavior of consumers in terms of the demand for products,
- To analyze the performance of firms under different market structures,

Course Outcome:

CO. No	Upon Completion of this course students will be able to	PSO addressed	CL
CO - 1	identify and apply relevant terminology and concepts to economic issues and problems.	3	Ap
CO - 2	compare and contrast the market system of economics with other systems	4	Ap
CO - 3	use demand and supply models in the analysis of real world issues.	2	Kn
CO - 4	use market structure models to explain and to predict business firm behavior	6	Ap
CO - 5	use the theory of consumer choice to explain and to predict consumer behaviour.	5	Kn
CO - 6	evaluate the consequences of economic activities and institutions for individual and social welfare.	7	Ev
CO - 7	identify the basic features of alternative representations of human behaviour in economics.	4	Ev
CO - 8	analysis of the economic behaviour of individuals, firms and markets.	1 , 3	Ap

Semester –I			
Core - I	ADVANCED MICROECONOMIC ANALYSIS- I		
Course Code: 21PECC11	Hrs / Week: 6	Hrs / Semester : 90	Credits : 4

UNIT I: Introduction and Basic Concepts   **15 Hrs**

Basic Economic Problem - Choice and Scarcity - Micro and Macro Analysis -
Inductive and Deductive methods of Analysis - Positive vs. Normative Economics
- Static and Dynamic Analysis - Partial vs. General Equilibrium Analysis

UNIT II: Demand Analysis   **20 Hrs**

  Theories of Demand - Demand and Supply Equilibrium - Elasticity of Demand
- Price, Cross and Income Elasticity of Demand - Measurement of Elasticity of Demand

UNIT III: Hicksian Analysis and Recent Developments in Demand Analysis   **15 Hrs**

Indifference Curve (Income and Substitution effects - Hicks Vs Slutsky) -
Revealed Preference Theory - Revision of Demand theory by Hicks - Cobweb
Theorem

UNIT IV: Theory of Production and Costs   **20 Hrs**

Production Function - The Law of Variable Proportions - Returns to Scale -
Isoquant - Least Cost Combination and Producer's Equilibrium - Cobb - Douglas
and CES production functions - Traditional and Modern theories of Costs - Cost
output relation.

UNIT V: Price and Output Determination   **20 Hrs**

 Marginal analysis - Short - run and Long - run equilibrium of firm and industry
- Monopoly - Price discrimination - Monopoly control and regulation -
Monopolistic Competition - General Approach and Chamberlin Approach -
Selling Costs - Product Differentiation - Oligopoly – Cartels – Kinked demand
curve – Price Leadership Models

Text Book:

Ahuja, H.L. *Advanced Economic Theory*. New Delhi: Sultan Chand and Co. 2006

 Books for Reference
 1. Koutsoyiannis.A. *Modern Microeconomics.* London:Macmillan Press2nd edition 2008
  2. Sen.A. *Micro Economics Theory and Applications.* New Delhi: Oxford
University Press,1999
 3. Stigler.G. *Theory of Price*. New Delhi: Prentice Hall of India, 4th edition 1996
 4. Varian.H. *Microeconomic Analysis*.New York: W.W. Norton, 2000

Semester –I				
Core - II	**ADVANCED MACROECONOMIC ANALYSIS- I**			
Course Code: 21PECC12	**Hrs / Week: 6**	**Hrs / Semester : 90**		**Credits : 4**

Objectives:
- To identify the determinants of various macroeconomic aggregates
- To evaluate the determinants of international trade and financial flows.
- To provide students with a broad overview of the aggregate economy.
- To expose the theories of economic growth and theories of the business cycle.

Course Outcome:

CO. No	Upon Completion of this course, students will be able to	PSO addressed	CL
CO - 1	analysis of the establishment of the functional relationship between the large aggregates.	7	Ap
CO - 2	understand the macroeconomic theoretical structure that is considered essential for the proper comprehension of the different issues and policies.	3	Ev
CO - 3	study of Macroeconomics and analysis of body of empirical economic knowledge.	6	Ap
CO - 4	understand the systemic facts and latest theoretical developments for empirical analysis.	5	An
CO - 5	identify the determinants of various macroeconomic aggregates such as output, unemployment, inflation, productivity and the major challenges associated with the measurement of these aggregates.	4	Un
CO - 6	discuss the linkages between financial markets and the real economy, and how these linkages influence the impact of economic policies over differing time horizons.	7	An
CO - 7	describe the main macroeconomic theories of short term fluctuations and long term growth in the economy.	1	Ap
CO - 8	critically evaluate the consequences of basic macroeconomic policy options under differing economic conditions within a business cycle.	3	Re

Semester –I			
Core - II	**ADVANCED MACROECONOMIC ANALYSIS- I**		
Course Code: 21PECC12	**Hrs / Week: 6**	**Hrs / Semester : 90**	**Credits : 4**

UNIT-I: National Income and Accounts   **15 Hrs**

Circular Flow of Income in two, three and four sector economy - Different forms of national income accounting - Social accounting - Input - Output accounting - Flow of funds accounting and Balance of payments accounting

UNIT-II: Classical Model of Employment   **15 Hrs**

Classical macroeconomics - Say's Law – Classical Model – Criticism

UNIT-III: Consumption Function   **20 Hrs**

Keynes' Psychological law of consumption-Implications of the law - short-run and long-run consumption function; Empirical evidence on consumption function - Income consumption relationship - Absolute income, relative income, life cycle and permanent income hypotheses

UNIT-IV: Investment Function   **20 Hrs**

Marginal efficiency of investment and level of investment - Marginal efficiency of capital and investment - Long run and short run factors - The accelerator and investment behavior - Influence of policy measures on investment

UNIT-V: Neo-Classical and Keynesian Views on Interest   **20 Hrs**

The IS-LM model; Extension of IS-LM model with government sector - Relative effectiveness of monetary and fiscal policies

Text Book:
Maria John Kennedy. *Macro Economic Theory*. New Delhi: PHI Learning, 2012.
Books for Reference:
 1. Glahe Fred.R. *Macro Economics: Theory and Policy*, New York: Harcourt Brace JovanovichInc, 2000.
 2. Laidler.D.E.W. *Demand for Money Theory and Evidence*. New York:Dum-Don Valley,1999.
3. Romer. D.L. *Advanced Macro Economics*. New York: McGraw Hill Company Limited, 2ndedition 1996
4. Shapiro.E. *Macro Economic Analysis*. New Delhi: Galgotia Publications1998
5. Ackley.G. *Macro Economics: Theory and Policy*. New York: Macmillan Publication, 2ndedition 1996.

Semester– I			
Core - III	**STATISTICS FOR ECONOMISTS- I**		
Course Code: 21PECC13	**Hrs/Week: 6**	**Hrs/ Semester: 90**	**Credits: 4**

Objectives:
- To introduce statistical methods and provide an insight into their uses in economics.
- To demonstrate application of a range of statistical techniques to economic problems.
- To understand that they will need to make informed decisions using data.
- To understand of the limitations of statistical inference and of the ethics of data analysis and statistics.

Course Outcome:

CO. No	Upon Completion of this course, students will be able to	PSO Addressed	CL
CO - 1	increase the skills in describing, analysing and interpreting statistical data	1	Le
CO - 2	make basic statistical calculations and critically evaluate the basis for these calculations;	8	Le
CO - 3	use graphical and numerical methods to calculate and illustrate descriptive statistics	2	Kn
CO - 4	identify the statistical concepts in questions about economic models	6	Ap
CO - 5	identify common problems which may affect regression analyses	4	Le
CO - 6	identify the appropriate regression model to apply to an economics dataset	2	Ap
CO - 7	manipulate the probability models that are most widely used in economics, and apply them correctly and carry out the appropriate statistical analysis	6	Kn
CO - 8	use the basic concepts of probability and bayes Theorem	7	Le

Semester– I			
Core - III	STATISTICS FOR ECONOMISTS- I		
Course Code: 21PECC13	Hrs/Week: 6	Hrs/ Semester: 90	Credits: 4

UNIT-I: Measures of Averages and Dispersion   **15 Hrs**

Measures of central tendency – Mean, Median, Mode Measures of Dispersion – M.D., Q.D. and S.D and relative measures of dispersion application of averages and dispersion

UNIT-II: Correlation and Regression   **20 Hrs**

Meaning, assumptions and limitations of simple correlation and regression analysis – Pearson's product moment and Spearman's rank correlation co-efficient – Concept of least squares and the regression lines

UNIT-III: Analysis of Time Series   **15 Hrs**

Uses – Components – Measurement – Methods of Moving Average – Semi Average – Method of least squares- Seasonal Variations and its Measurements

UNIT-IV: Probability   **20 Hrs**

Various types of events – Classical and empirical definitions of probability, Laws of addition and multiplication, conditional probability and concept of interdependence, Baye's theorem and its applications- Probability Distribution-Binomial, Poisson and Normal distribution

UNIT-V: Theory of Estimation and Testing of Hypothesis   **20 Hrs**

Properties of a good estimator, formulation of statistical hypotheses – Null and alternative, Goodness of fit, confidence intervals and level of significance - Type I and Type II errors - Hypothesis testing Z, t, χ^2 (chi-square) and F-test

Text Book:

Gupta, S.P., *Statistical Methods.* New Delhi: S.Chand& Sons Ltd, 1st edition 2001

Books for Reference

1. Gupta, S.C., *Fundamentals of Applied Statistics.* New Delhi: S.Chand& Sons
2. Speigal. M.R., *Theory and Problems and Statistics*. London: McGraw Hill Book Co.,
3. R.S.N. Pillai & Bagavathi. *Statistics.* New Delhi: S.Chand &Company Ltd, 2006

	Semester– I		
Core - V	**ECONOMICS OF FARM BUSINESS**		
Course Code: 21PECC15	**Hrs/Week: 6**	**Hrs/ Semester: 90**	**Credits: 4**

Objectives:
- To explain the fundamental aspects of managing a farm business
- Interpret and analyse the financial and economic performance of a farm business
- Apply appropriate economic and financial techniques to analyse new farm investments
- Select and apply appropriate methods for analyzing risk and uncertainty involved in farm business decisions

Course Outcome:

CO. No	Upon Completion of this course, students will be able to	PSO addressed	CL
CO - 1	apply economic principles to understand the conduct and performance of agricultural sector.	2	Ap
CO - 2	understand the causes of green revolution.	3	Kn
CO - 3	understand role and impact of institutional support to agricultural sector.	5	Le
CO - 4	be able to demonstrate an awareness of various agricultural market structures.	4	Kn
CO - 5	understand the role of pricing policy in agricultural sector.	8	Ev
CO - 6	be able to identify core principles of micro economics, especially related to agricultural production, cost analyses price and application of this is economics principles to selected farm management problems.	5	Kn
CO - 7	demonstrate strong conceptual knowledge of farm business	6	Re
CO - 8	develop critical thinking and problem solving skills applicable to farm business and management practices	7	Kn

Semester– I			
Core - V	ECONOMICS OF FARM BUSINESS		
Course Code: 21PECC15	Hrs/Week: 6	Hrs/ Semester: 90	Credits: 4

UNIT-I: Principles of Farm Management   **20 Hrs**

Meaning and Scope of Farm Management –Importance of the Subject of Farm Management In India. Principals Involved In Farm Management Decisions: Principle of VariableProportion - Cost Principle - Principles of Factor Substitution - Law of Equimarginal Return - Opportunity Cost Principle - Principle of Combining Enterprises

UNIT- II: Farm Resources   **15 Hrs**

Green Revolution - Agriculture Inputs: Fertilizers and Plant Protection, Irrigation and Farm Mechanization - Concept of Agricultural Labourer – Growth, Causes of Growth – Conditions and Problems of Agricultural Laborers and Measures Taken.

UNIT-III: Capital and Credit   **15 Hrs**

Role of Capital in Agriculture - Sources of Capital - Need for Agricultural Credit - Classification of Agricultural Credit - Source of Agricultural Credit: Non-institutional and Institutional – Crop Insurance - Capital Formation In Agriculture Sector.

UNIT-IV: Marketing   **20 Hrs**

Functions of Marketing - Characteristics of Agricultural Produce – Defecting In Marketing of Agricultural Produce In India – Measures Taken By Government – Regulated Markets Co-Operative Marketing – Marketed and Marketable Surplus, Marketing Costs and Margin.

UNIT-V: Price Policy and Public Distribution   **20 Hrs**

Need For and Objectives of Agricultural Price Policy - Instruments of Agricultural Price Policy in India: Support, Procurement And Issue Prices - Public Distribution – Buffer Stock – Agricultural Trade and Balance of Payment With Special Reference To Agricultural Commodities.

Text Book:

   S.S.Johl and Kapur. *Fundamentals of Farm Business Management*- New Delhi: Kalyani Publishers, 2nd edition 2006

REFERENCES:

1. A.N.Sharma and V.K.Sharma. *Elements of Farm Management*. New Delhi: Prentice-Hall ofIndia Pvt. Ltd, 3rd edition 2000.
2. Sadhu and Singh. *Fundamentals of Agriculture Economics*.Bombay: Himalaya PublishingHouse,1999
3. Earl.O.Heady. *Economics of Agricultural Production & resources.*New Delhi:Prentice Hall, 2008
4. Rudder Datt and K P M Sundaram. *Indian Economy*.New Delhi: S.Chand & Company Ltd, 3rdedition 2011

	Semester– II		
Core- VI	**ADVANCED MICRO ECONOMIC ANALYSIS- II**		
Course Code: 21PECC21	**Hrs/Week: 5**	**Hrs/ Semester: 75**	**Credits: 4**

Objectives:

- To provide non-specialists economics student with a good introduction to the fundamental principles of microeconomics.
- To familiarize students to use the concepts to which they are introduced to facilitate analysis of the functioning of the micro economy.
- To analyse how individual decision-makers, both consumers and producers, behave in a variety of economic environments.

CO. No	Upon Completion of this course, students will beable to	PSO Addressed	CL
CO - 1	identify and apply relevant terminology and concepts toeconomic issues and problems.	7	Re
CO - 2	compare and contrast the market system of economicswith other systems.	8	Ap
CO - 3	use demand and supply models in the analysis of real-world issues.	4	Kn
CO - 4	use market structure models to explain and to predictbusiness firm behaviour	1	Un
CO - 5	use the theory of consumer choice to explain and topredict consumer behaviour.	2	Le
CO - 6	students will be able to evaluate the consequences of economic activities and institutions for individual and social welfare.	6	Un
CO - 7	students will be able to identify the basic features of alternative representations of human behaviour in economics.	5	Ap
CO - 8	analysis of the economic behaviour of individuals, firms and markets.	3	Kn

Semester- II			
Core VI	**Advanced Micro Economic Analysis- II**		
Course Code: 21PECC21	**Hrs/Week: 5**	**Hrs/ Semester: 75**	**Credits: 4**

UNIT –I: Alternative Theories of the Firm   **15 Hrs**

Baumol's sales revenue maximization model; Williamson's model of managerial discretion Marris model of managerial enterprise; Full cost pricing - Bain's limit pricing theoryand Sylo's Labini model of limit pricing - Behaviouristic model of Cyert and March

UNIT-II: Theories of Distribution   **15 Hrs**

Marginal Productivity Theory; Euler's product exhaustion theorem –
Theories ofdistribution: Ricardian, Marxian, Kalecki and Kaldor's theories
of distribution

UNIT-III: Welfare Economics   **15 Hrs**

Nature – Pigouvian Welfare Economics – Pareto optimality condition – Kaldor – Hicks compensation criteria – Scitovsky Paradox - Social welfare function, Bergson and Samuelson - Arrow's theory of social choice

UNIT-IV: Theory of Games   **15 Hrs**

The Zero – Sum, Two - Person Game – No constant- sum Games -Maximin and Minimaxstrategies – Equilibrium points (Saddle)

UNIT –V: Economics of Risk and Uncertainty   **15Hrs**

Individual Behaviour towards risk, expected utility and certainty - Risk and Riskaversion competitive firms under uncertainty – Factor demand under price uncertainty –Economics of information – Search for New Market Models.

Text Book:
Kennedy, Maria John M. *Advanced Micro Economic Theory.*
Bombay: HimalayasPublishing House, 2nd Edition 1999

Books for Reference:
1. Da Costa. *Prices and Distribution.* New Delhi: Tata McGraw Hill.
   G.C. Production,1980
2. Hirshleifer, J and A. Glazer .*Price Theory and Applications.* New
   Delhi: Prentice Hallof India, 1997
3. Stigler. G. *Theory of Price.* New Delhi: Prentice Hall of India. 4th Edition 2012.

	Semester – II			
Core - VII	**ADVANCED MACRO ECONOMIC ANALYSIS- II**			
Course Code: 21PECC22	**Hrs/Week: 5**	**Hrs/ Semester: 75**		**Credits: 4**

Objectives:

- To learn the fundamentals of economics and they can apply these concepts to their lives and to the world in which they live
- To identify the determinants of various macroeconomic aggregates such as output, unemployment, inflation, productivity and the major challenges associated with the measurement of these aggregates.
- To understand the prevailing economic and business policy in totality and its impact on the energy sector.
- To apply economic concepts to complex business realities as well as support them to forecast in the energy business.

CO. No	Upon Completion of this course, students will be able to	PSO addressed	CL
CO - 1	analyse of the establishment of the functional relationship between the large aggregates.	2	Le
CO - 2	understand the macroeconomic theoretical structure that is considered essential for the proper comprehension of the different issues and policies.	4	Kn
CO - 3	study of Macroeconomics and analysis of body of empirical economic knowledge.	1	Kn
CO - 4	understand the systemic facts and latest theoretical developments for empirical analysis.	4	Un
CO - 5	students will be able to identify the determinants of various macroeconomic aggregates such as output, unemployment, inflation, productivity and the major challenges associated with the measurement of these aggregates.	7	Kn
CO - 6	students will be able to discuss the linkages between financial markets and the real economy, and how these linkages influence the impact of economic policies over differing time horizons.	3	Le
CO - 7	students will be able to describe the main macroeconomic theories of short term fluctuations and long term growth in the economy.	6	Kn
CO - 8	students will be able to critically evaluate the consequences of basic macroeconomic policy options under differing economic conditions within a business cycle.	4	Ap

Semester – II			
Core - VII	**ADVANCED MACRO ECONOMIC ANALYSIS- II**		
Course Code: 21PECC22	**Hrs/Week: 5**	**Hrs/ Semester: 75**	**Credits: 4**

UNIT-I: Demand for Money and Supply of Money   **15 Hrs**

Demand for Money: Classical, Keynesian and Post-Keynesian; Patinkin's - Real Balance Effect; Approaches of Baumol, Tobin and Friedman - Meaning of Money supply – Money Multiplier – Determinants of Money supply

UNIT-II: Theories of Inflation   **15 Hrs**

Classical, Keynesian and Monetarist approaches to inflation; Structuralist theory of inflation; Philips curve analysis-Short run and Long run Philips curve -Tobin's modified Philips curve; Policies to control inflation

UNIT-III: Business Cycles   **15 Hrs**

Theories of Schumpeter, Kaldor, Samuelson and Hicks, Control of business cycles-Relativeefficacy of monetary and fiscal policies

UNIT-IV: Recent Developments in Macroeconomics   **15 Hrs**

Monetarism Vs Keynesianism – Supply side Economics – New Classical Macro Economics –Rational Expectation

UNIT-V: Macro Economic Policy   **15 Hrs**

Monetary policy – Fiscal policy – Incomes policy – Objectives – Instruments and Applications toDeveloping Economy

Text Book:

Maria John Kennedy. *Macro Economic Theory*.New Delhi: PHIL 2nd edition 2012

Reference Books:

1. Glahe, Fred, R *Macroeconomics Theory and Policy*.New York : Harcourt BraceJovanovich, Inc,1973
2. Laidler, D.E.W.*Demand for Money: Theory and Evidence*.New York: Dum-Don Valley,1977
3. Romer, D.L. *Advanced Macroeconomics*.New York: McGraw Hill Company Ltd., 1996
4. Ackley, G. *Macroeconomics: Theory and Policy*.New York : Macmillan PublicationsPvt.Ltd, 1978
5. Branson, W.A. *Macroeconomic Theory and Policy*.New York : Harper and Row,3[rd]edition 1989

	Semester – II		
Core - VIII	**STATISTICS FOR ECONOMISTS- II**		
Course Code: 21PECC23	**Hrs/Week: 5**	**Hrs/ Semester: 75**	**Credits: 4**

Objectives:

- To introduce statistical methods and provide an insight into their uses in economics
- To develop the skills required to work effectively and inclusively in groups, as in a real work environment.
- To write effectively and communicate their ideas regarding Descriptive & Inferential statistics with clarity.
- To understand and know how to use statistics in their research work.

Course Outcome:

CO. No	Upon Completion of this course, students will beable to	PSO addressed	CL
CO - 1	increase the skills in describing, analysing and interpreting statistical data	1	Le
CO - 2	make basic statistical calculations and critically evaluate the basis for these calculations;	8	Le
CO - 3	use graphical and numerical methods to calculate and illustrate descriptive statistics	2	Kn
CO - 4	identify the statistical concepts in questions about economic models	6	Ap
CO - 5	identify common problems which may affect regression analyses	4	Re
CO - 6	identify the appropriate regression model to apply to an economics dataset	12	Un
CO - 7	manipulate the probability models that are most widely used in economics, and apply them correctly and carry out the appropriate statistical analysis	16	Kn
CO - 8	use the basic concepts of probability and Bayes Theorem	17	Le

Semester – II

Core - VIII	STATISTICS FOR ECONOMISTS- II		
Course Code: 21PECC23	Hrs/Week: 5	Hrs/ Semester: 75	Credits: 4

UNIT-I: Industrial Statistics 15 Hrs

Process and product control - general theory of control charts - different types of controlcharts for variables and attributes – Concept of Reliability – failure rate and reliability functions – reliability of series and Parallel systems and other simple configurations – renewal density andfunctions.

UNIT-II: Optimization Techniques 15 Hrs

Different types of models in Operations Research – their construction and general methods of solution – simulation and Monte – Carlo methods formulation of Linear Programming problem – Simple LP model and its graphical solution, the simple procedure, the two phase method and the M technique with artificial variables.

UNIT-III: Quantitative Economics 15 Hrs

Determination of trend – Seasonal and Cyclical components – Box-Jenkins method – Tests for stationary series – ARIMA models and determination of orders of autoregressive and moving average components – forecasting.

UNIT-IV: Index Number 15 Hrs

Commonly used Index number – Laspeyre's, Paasche's and Fisher's Ideal Index numbers – Cham-base Index number, Uses and Limitations of Index numbers, Index number of Wholesale prices- Consumer price – Agricultural production and Industrial production- test for index numbers – Proportionality, Time- reversal and circular.

UNIT-V: Linear Model 15 Hrs

Ordinary least square and generalised least squares methods of estimation – problem of multi- collinearity – consequences and solutions of multi- collinearity, consequences and solutions of multi- collinearity – auto correlation and its consequences – Heteroscedasticity of disturbances and its testing.

Text Book:

Gupta, S.P.*Statistical Methods.* New Delhi: S.Chand& Sons Ltd, 2ndedition 2001

Books for Reference

1. Gupta, S.C.*Fundamentals of Applied Statistics.* New Delhi: S.Chand& Sons Ltd, 1993
2. Speigal. M.R. *Theory and Problems and Statistics.* London: McGraw Hill Book Co.1992
3. R.S.N. Pillai & Bagavathi. *Statistics*. New Delhi: S. Chand &Company Ltd,2ndedition, 2000

	Semester– III		
Core - XII	**INDIAN ECONOMY**		
Course Code: 21PECC32	**Hrs/Week: 6**	**Hrs/ Semester: 90**	**Credits: 4**

Objectives:

- Using appropriate analytical frameworks, this course reviews major trends in economic indicators and policy debates in India.
- In the post-Independence period, with particular emphasis on paradigm shifts and turning points.
- To develop all these themes, the course is divided into specific modules.

CO. No	Upon Completion of this course, students will be Able to	PSO addressed	CL
CO - 1	know the development process in India after independence	6	Le
CO - 2	understand the problems and measures in their contextual perspective	7	Kn
CO - 3	identify and analyse current issues	1	Le
CO - 4	analyse economic behaviour in practice	4	Ap
CO - 5	understand the economic way of thinking.	6	Kn
CO - 6	analyse historical and current events from an economic perspective.	3	Kn
CO - 7	write clearly expressing an economic point of view.	5	Kn
CO-8	create students ability to suggest of the various economic problems	7	Le

Semester– III

Core - XII	INDIAN ECONOMY

Course Code: 21PECC32	Hrs/Week: 6	Hrs/ Semester: 90	Credits: 4

UNIT-I: Structure of Indian Economy   **20Hrs**

Natural resources – Land, Water, Forest - Demography – Features, size, sex Composition and Growth rates; Infrastructure – Transport, Communication, Energy. National Income: Trend, Growth rate and sectoral contribution

UNIT-II: Agricultural Sector: **20Hrs**

Institutional structure – Land reforms in India: Technological change in agriculture – Pricing of agricultural inputs and output; Agricultural Finance Policy; Agricultural Marketing and Warehousing- Issues of food security – Policies for sustainable agriculture.

UNIT-III: Industrial Sector   **15Hrs**

New Industrial policy of India 2020- Salient features of New Industrial Policy – Three major industries in India today- Sources of Industrial Finance- Internal and External Sources- Industrial Finance Corporation of India (IFCI) - Outcomes of New Industrial Policies- Limitations of Industrial Policies in India

UNIT-IV: Financial Sector   **15Hrs**

Monetary policy of RBI-Money and Capital markets-Growth and problem- Role of commercial banks in India-Banking sector reforms since 1991

UNIT-V: Globalization and India   **20Hrs**

Rationale of internal and external reforms-globalization of Indian economy-WTO & its impact on different sectors of the economy-need for and issues in good governance.

Text Book:

Ruddar Datt & K.P.M. Sundaram. *Indian Economy*. New Delhi: R.Chand& Co.2008

Books for Referance:

1. Kindleberger.C.P.*Economic Development*.New York: McGraw Hill, 3rd edition 2008
2. M.L Jhingan. *The Economics of Development and Planning*.New Delhi: VikasPublishing House PVT Ltd, 2nd edition 2000
3. Misra, S.K. and V.K.Puri.*Indian Economy*.Dhingra: Himalaya Publishing House, 16thedition 2005

	Semester – III		
Core - XIII	**RURAL DEVELOPMENT**		
Course Code: 21PECC33	**Hrs / Week: 5**	**Hrs / Semester: 75**	**Credits : 4**

Objectives:
- To get employment in the department of rural development and Panchyatraj of both State and Central.
- The objective of this course is to provide a detailed treatment of issues pertaining to rural development to those intending to specialize in this area.
- To familiarize students with the theory of rural development issues those are relevant to Indian countryside and enable them to understand and analyze the problems of rural development.

CO. No	Upon Completion of this course, students will Be able to	PSO addressed	CL
CO - 1	help in prediction, formulating suitable policies, simplify mass of figures, facilitate comparison ofdata ,learn software programmes to analyze the statistical techniques.	7	Le
CO - 2	understand different categories of rural development policies and programmes and itsimpact on rural poverty and unemployment.	2	Un
CO - 3	inculcate about the scope, importance and sources of micro finance, SHGS and womenempowerment.	8	Un
CO - 4	know the importance, structure, significance, resources of Indian rural economy.	3	Ap
CO - 5	learn basic mathematics to analyze and understand economic problem to estimate Marginal value, rate of change, maxima and minima value, profit maximization and cost minimization, consumer and producer surplus, etc..	7	Kn
CO - 6	know different theories of international trade and finance and its impact on Indianeconomy.	6	Le
CO - 7	understand the problem of rural sector, backwardness, income inequalities, regional imbalances, gender disparities and remedial measures.	5	Kn
CO - 8	understand the economic behaviour of consumers and producers at micro and macro level.	6	Re

Semester – III			
Core - XII	**RURAL DEVELOPMENT**		
Course Code: 21PECC33	**Hrs / Week: 5**	**Hrs / Semester: 75**	**Credits : 4**

UNIT-I: Rural Development   15 Hrs
Meaning, Definition, Scope and Concept of Rural Development, Components of Rural Development, Pre-Independence Rural Development Programmes

UNIT-II: Approaches and Policies for Rural Development   15 Hrs
Approaches for Rural Development: Broad Front Approach, Sectoral Approach-Policies for Rural Development: National Forest Policy-National Water Policy and National Agricultural Policy.

UNIT-III: Rural Development Programmes15 Hrs
Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA)-Pradhan Mantri Gram SadakYojana (PMGSY) - Bharat Nirman – Swachh Bharat, P.M Jandhan Yojana- National Rural Health Mission (NRHM).

UNIT-IV: Area Development Programmes: 15 Hrs
Drought Prone Area Programme (DPAP)-Desert Development Programme (DDP)-Tribal and Hill Area Development Programme (THADP) - Integrated Wastelands Development Programme (IWDP)

UNIT-V: Rural Development and Welfare Schemes in Tamil Nadu: 15 Hrs
SC&ST Sub-Plan - Social Security Scheme - Old Age Pensions-Widow Pensions-Disabled Pensions-Maternity Aid to Pregnant Women

TEXT BOOKS:
    Katar Singh. *Rural Development principles, policies and Management*. NewDelhi:Sage publications, 2nd edition 1999

Reference Books:
1. M.J. Moseley. *Rural Development: Principles and Practice.* New Delhi: SagePublications 6th edition 2013
2. K. Sahu. *Rural Development in India*. New Delhi: Anmol Publications, 4th edition 2003
3. Todaro M.P. *Economic Development in III World.* New Delhi: Orient Long Man,3rdedition 1985
4. R. Chambers. Rural development. New Delhi: Putting the Last First, Longman,2ndedition 1983
5. Arora R.C *Integrated Rural Development in India*. New Delhi: S.Chand Publications,1stedition 1980.

	Semester - IV		
Core - XVI	**MONETARY ECONOMICS**		
Course Code: 21PECC 41	**Hrs/Week: 6**	**Hrs/ Semester: 90**	**Credits: 4**

Objectives:

● To understand the functioning of the monetary system and the currency markets, and of theoretical basis of monetary and exchange rate policies.

● To gain the Knowledge and skills in the field of economic theory and practice of implementing monetary policy.

● The present course is designed to acquaint the students fully with the changing role of financial institutions in the process of growth and development.

● Money and banking constitute important components towards understanding of economics.

CO. No	Upon Completion of this course, students will Be able to	PSO addressed	CL
CO - 1	explain the role of short-term monetary policy, and the key strategies and techniques used	4	Le
CO - 2	describe the dimensions of performance and risk relevant to financial firms.	7	Kn
CO - 3	Calculate contemporary measures of monetary measures of performance and risk.	9	Kn
CO - 4	describe contemporary monetary risk management oversight processes	1	Le
CO - 5	manage cash, marketable securities, accounts receivable andinventory.	14	Kn
CO - 6	identify the major sources of short-term and long term monetary finance available to the firm.	12	Ap
CO - 7	analyse financial statements using standard financial ratios of liquidity, activity, debt, profitability, and market value.	3	Re
CO - 8	apply techniques to project financial statements for forecasting long-term financial needs.	2	Ap

Semester - IV			
Core - XVI	MONETARY ECONOMICS		
Course Code: 21PECC 41	Hrs/Week: 6	Hrs/ Semester: 90	Credits: 4

UNIT-I: Introduction   20 Hrs

Meaning, functions and kinds of money; components of supply of money, Measures of money supply - Features of a developed money and capital market - Functions of commercial banks and prerequisites of a sound commercial banking system - A brief review of the measures taken in India to liberalize the financial system.

UNIT-II: Supply of Credit, Term Structure of Interest Rates   15 Hrs

The theory of bank credit and bank deposits-Allocation of institutional credit-factors influencing institutional credit- the credit supply curve- Term structure and risk structure of interest rates-Theories of term structure of interest rates-Expectations theory-Market segmentation theory-Preferred habitat theory.

UNIT-III: Functions & growth of financial institutions   20 Hrs

Functions and objectives of central bank; instruments of credit control- Objectives and limitations of monetary policy - Role of non-banking financial institutions in India -mutual funds, LIC, Investment companies, venture capital- Role of regulatory authorities -SEBI and IRDA.

Unit-IV: The structure of financial markets   15 Hrs

Call money, treasury bills and commercial bills; the stock market and market for gilt edged securities; unregulated credit markets - Financial sector reforms in India.

Unit-V: Monetary Policy and Financial System   20 Hrs

Monetary policy—goals, tools, targets and limitations; Financial markets—classification of financial markets, Instruments of developed money and capital markets; Financial intermediaries—classification and functions; Role of financial system in economic development.

Text Book:

Gupta, S.B. *Monetary Economics*.New Delhi: S.Chand& Company, 2006

Reference Books:

1. Mitra, S. *Money & Banking*.New York: Random House, 2002
2. Chandler, L.V. *The Economics of Money and Banking*.New York : Harper & Row1989
3. S.M. Goldfeld Sayers. *Modern Banking*.New Delhi : Oxford University Press, 2nd edition2000
4. Smith, P.F.*Economics of Financial Institutions & Markets*.New Delhi: Prentice-Hallof Indiapvt. ltd, 3rd edition 2000
5. Gupta, S.B. *Monetary planning for India*.New Delhi: S. Chand & Company, Pvt.Ltd3rd edition 1990