PG ECONOMICS 2018-19
COURSE PROFILE:

SEM	COURSE CODE	TITLE OF THE PAPER	CREDITS	MARKS		
				CA	SE	T
I	3P18/1C/AMT// 8P18/1C/AMT	Advanced Micro Economic Theory	4	40	60	100
	3P18/1C/PUE	Public Economics	4	40	60	100
	3P18/1C/MFE// 8P18/1C/MFE	Mathematics for Economists	4	40	60	100
	3P18/1C/SFE// 8P18/1C/SFE	Statistical Methods for Economists	4	40	60	100
	3P18/1E1/ FNE// 8P18/1E1/ FNE	Financial Economics	3	40	60	100
	Soft Skill	Personality Enrichment for Women	2		50	50
II	3P18/2C/MEA// 8P18/2C/MEA	Macro Economic Theory and Analysis	4	40	60	100
	3P18/2C/HES	Health Economics	4	40	60	100
	3P18/2C/ECM// 8P18/2C/ECM	Econometric Methods	4	40	60	100
	3P18/2C/SCA// 8P18/2C/SCA	Statistics with Computer Applications	4	40	60	100
	3P18/2E2/MGE// 8P18/2E2/MGE	Managerial Economics	3	40	60	100
	3P18/2E/ HCM	Health Care Management	3	40	60	100
	Soft Skill	Interpersonal Communication	2		50	50
III	3P18/3C/IEY// 8P18/3C/IEY	Indian Economy	4	40	60	100
	3P18/3C/MOE// 8P18/3C/MOE	Monetary Economics	4	40	60	100
	3P18/3C/RMC// 8P18/3C/RMC	Research Methodology and Computer Applications in Economics	4	40	60	100
	3P18/3E3/ECS	Economics of Social Issues	3	40	60	100
	3P18/3E4/ EIS	Economics of Infrastructure	3	40	60	100
	3P18/3E/HAD	Hospital Administration	3	40	60	100
	3P18/3S/YML// 8P18/3S/YML	Yoga and Meditation for Better Living	2		50	50
IV	3P18/4C/EGD// 8P18/4C/EGD	Economics of Growth and Development	4	40	60	100
	3P18/4C/INE// 8P18/4C/INE	International Economics	4	40	60	100
	3P18/4C/ENE// 8P18/4C/ENE	Environmental Economics	4	40	60	100
	3P18/4C/PRJ	Project	4	40	60	100
	3P18/4E5/DEY	Demography	3	40	60	100
	3P18/4S/EMS// 8P18/4S/EMS	Employability Skills	2		50	50

		Internship	2			
		Total	91			

SEMESTER – I

MATHEMATICS FOR ECONOMISTS

Teaching Hours   : 90   **Credits: 4**

Course Code : 3P18/1C/MFE// 8P18/1C/MFE   **LTP : 3/ 3/ 0**

COURSE OBJECTIVES AND OUTCOME:

- To enable Students to understand the application of Mathematical Tools to Economic Theories.
- To formulate Mathematical Models.

COURSE OUTLINE:

UNIT I: Vector and Matrix Algebra– Basic Operations – Trace - Rank and Inverse of a Matrix – Orthogonal Matrix – Partitioned Matrix – Elementary Transformation of a Matrix – Vector and Matrix Differentiation – Quadratic Form – Definite Matrices - Definition - Types and Properties – Positive Definite - Negative Definite.

(20 hrs)

UNIT II: Linear Equations - Consistency of a System of Linear Equations – Solution of a System of Linear Equations (homogenous and non-homogenous) – Linear Transformation – Eigen Values and Eigen Vectors.

(15 hrs)

UNIT III: Optimization Methods – Two and Three Variables – Unconstrained Optimization – Jacobian, Hessian – Constrained Optimization – Lagrangian.

(15 Hrs)

UNIT IV: Differential Equations types (elementary ideas) – Linear Differential Equations with Constant Coefficients (First, Second and Higher Order) – Solution of Differential Equations (Homogenous and Non-Homogenous) – Applications – Samuelson's Accelerator and Multiplier Model.

(20 hrs)

UNIT V: Difference Equations- Finite Differences: Operators 'E' and 'Δ' – Linear Difference: Equations with Constant Coefficients (first, second and higher order) – Solution of Difference Equations (Homogenous and Non-Homogenous) – Applications – Samuelson's Accelerator and Multiplier Model.

(20 hrs)

STATISTICAL METHODS FOR ECONOMISTS

Teaching Hours : 90   **Credits: 4**

Course Code : 3P18/1C/SFE // 8P18/1C/SFE   **LTP: 3/ 3/ 0**

COURSE OBJECTIVES AND OUTCOME:

- To make students familiar with various Statistical Tools and their applications in Economic Analysis and Scientific Research Work.
- To develop skills in handling complex problems in Data analysis and Research designs.

COURSE OUTLINE:

UNIT I: Interpolation and Extrapolation –Newton's and Lagrange's Methods.

(15 hrs)

UNIT II: Probability - Addition and Multiplication Theorems - Conditional - Probability - Discrete and Continuous - Random Variables - Mathematical Expectations – Bayes Theorem- Theoretical Distributions - Binomial, Poisson and Normal.

(20 hrs)

UNIT III: Simple, Partial and Multiple Correlation- Regression- Regression Lines- Multiple Regression.

(20 hrs)

UNIT IV: Univariate and Multivariate Techniques – Factor Analysis.

(15 hrs)

UNIT V: Vital Statistics – Sources – Errors in Census and Registration – Measurement of Population rate and Ratio of vital events – Measurement of Mortality - Crude Death Rate (CDR) - Specific Death Rate (SDR) - Infant Mortality Rate (IMR) and Standardized Death Rate (SDR) - Maternal Mortality Rate (MMR) - Morbidity Rate.

(20 Hrs)

FINANCIAL ECONOMICS

Teaching Hours   : 60   **Credits: 3**

Course Code : 3P18/1E1/FNE//8P18/1E1/FNE   **LTP:2 /2/ 0**

COURSE OBJECTIVES AND OUTCOME:

- To understand the financial system of India.
- To have an insight about trading in the financial markets.
- To analyse the security system in financial markets.

COURSE OUTLINE:

UNIT I: Capital Market- Money Market- Primary Market - Definition - Kinds of Issues - General Conditions - Governing issues of shares in Primary Market - (a brief view) – Intermediaries involved in Primary Market.

(10 hrs)

UNIT II: Secondary Market - Definition - Securities dealt in Secondary Market - Listing of Securities –Meaning – Objectives - Classification of Listed Securities - Benefits of Listing to Companies and Investors - Stock Brokers - Types of Stock Brokers in Stock Exchanges

(15 hrs)

UNIT III: Stock Brokers - Underwriters- Advantages- Responsibilities - Depositories- Functions- Procedure - Benefits- Remedies- Credit Rating Agencies- Benefits- Instruments- Investors- Company - Basic types.

(10 hrs)

UNIT IV: OTCEI - Insider Trading - Online Trading System - Meaning – SEBI - Objectives - Administration and Activities of SEBI - SEBI and Primary Market - SEBI and Secondary Market / Vanilla Interest Rate Swaps – Swaptions - other types of Swaps – Currency - Equity and Commodity Swaps - Rating Derivatives

(15 hrs)

UNIT V: Merchant Banking- Recognition-Conditions - Role- Functions- Mutual Funds- Classification-Benefits- Performance -Venture Capital - Importance - Types

(10 hrs)

ECONOMETRIC METHODS

Teaching Hours: 75   **Credits: 4**

Course Code : 3P18/2C/ECM // 8P18/2C/ECM   **LTP : 3/ 2/ 0**

COURSE OBJECTIVES AND OUTCOME:

- To enable students to understand the essential quantitative tools to make decision making a rational process.
- To learn the technique of finding optimal solutions in a dynamic business environment.

COURSE OUTLINE:

UNIT I: Regression Analysis - Linear Regression Model – Two Variables and Multi Variables – BLUE property – General and Confidence Approach to Hypothesis Testing – Partial Effects and Elasticity – Goodness of fit - Extension of Linear Regression Models - Definition, Sources - Consequences and Detection of Multicollinearity – Heteroscedasticity - Autocorrelation and Remedial Measures.

(15 hrs)

UNIT II: Dummy Variables - Regression on Qualitative and Quantitative Variables - Dummy Variable Trap – Structural Stability of Regression Models – Chow Test – Deseasonalisation - Piecewise Linear Regression Model.

(15 hrs)

UNIT III: Distributed Lag Models - Formation of Expectations - Naïve Expectation Versus Adaptive Expectations Models – Partial Adjustment Models - Distributed Lag Models - Koyck's Model – Almon Lag - Polynomial Distributed Lag Models - End Point Restriction– Rational Expectation Models.

(15 hrs)

UNIT IV: Simultaneous Equation Methods – Approaches to Estimation – Recursive Models and Ordinary Least Squares – Estimation of Just - over and under Identified Equation - The Method of Indirect Least Squares (ILS) – Estimation of an over identified equation - The Method of Two – Stage Least Squares (2SLS).

(15 hrs)

UNIT V: Time Series Analysis - Time Series Econometrics: Forecasting – Approaches to Economic Forecasting – AR - MA and ARIMA Modeling of Time Series Data – Box-Jenkins (BJ) Methodology – ARCH and GARCHs.

(15 hrs)

SEMESTER – II

STATISTICS WITH COMPUTER APPLICATIONS

Teaching Hours: 75   **Credits: 4**

Course Code : 3P18/2C/SCA // 8P18/2C/SCA   **LTP : 2/2/1**

COURSE OBJECTIVES AND OUTCOME:

 To make students familiar with various Statistical Tools and their applications in Economic
        Analysis for Scientific Research Work.
 To develop skills in handling complex problems in Data Analysis and Research design.

COURSE OUTLINE:

UNIT I: Sampling Theory- Types of Sampling **-**Sampling Distributions and Standard Error of–
            Means - Standard Deviation and Proportions - Testing of Hypothesis **-** Level of
            Significance - Type I and Type II Error - Large Sample test for Two Means - Two
            Standard Deviations and Two Proportions.

                                                                                                            (15 hrs)

UNIT II: Estimator and Estimate – Point and Interval Estimates – Reliability of an Estimate –
            Sampling Variance and Mean Square Error – Properties of a good estimator.

                                                                                                            (15 hrs)

UNIT III: Small Sample Test – t-test- Paired t- test - Chi-square Test- Test of Goodness of Fit –
            Test of Homogeneity - Test of Independence of Two Attributes.

                                                                                                            (15 hrs)

UNIT IV: F test – Analysis of Variance- One Way and Two Way Classifications.

                                                                                                            (15 hrs)

UNIT V: Introduction – Statistical Data Files- Statistical Workbook – Installation – Data
            Spreadsheet Toolbar - Scroll Sheet Applications- Diagrams and Graphs - Elementary
            concepts in Statistics – Application in Computer – Correlation, Multiple Correlation -
            Regression – Multiple Regression – ANOVA **(Practical Examination only. No
            question for End Semester Examination)**

                                                                                                            (15 hrs)

MANAGERIAL ECONOMICS

Teaching Hours : 60   **Credits: 3**

Course Code : 3P18/2E2/MGE//8P18/2E2/MGE   **LTP: 4/0/0**

COURSE OBJECTIVES AND OUTCOME:

- To enable students to understand the Models and Managerial Theories of the firm.
- To equip them in selecting projects under risk and uncertain conditions.

COURSE OUTLINE:

UNIT I: Definition of Economic Models – Types of Models – Analysing Cases in Managerial Economics – Usefulness of Case Study Method – Limitations of Case Study Method.

(15hrs)

UNIT II: Inventory Management- Types of Inventory - Methods of Inventory Control – EOQ – ABC - VED Analysis.

(10hrs)

UNIT III: Role of Government in Market Economy – Legal and Social Framework – Restraining Unfair Competition – Increasing Market Power – Reallocation of Resources – Redistribution of Income – Regulation of Natural Monopoly – Stabilisation of the Economy.

(15hrs)

UNIT IV: Risk in Project Analysis – Selection of a Project – Finite Horizon Method Certainty – Equivalent Approach – Decision Tree Approach – Sensitivity Analysis – Capital Budgeting – IRR – NPV.

(10hrs)

UNIT V: Forecasting - Economics and Business Forecasting Methods of Economic Forecasting – Evaluating Forecasts

(10hrs)

HEALTH CARE MANAGEMENT

Teaching Hours   : 60   **Credits: 3**

Course Code : 3P18/2E/HCM   **LTP: 3/1/0**

COURSE OBJECTIVES AND OUTCOME:

 To enable students to understand about the health care administration and medical care.
 To expose the students to Health Insurance and First Aid.

COURSE OUTLINE:

UNIT I : Definition of Health – Health as a Component of Human Resource Development – Health as a Commodity and Service – Scope of Health Management.

(10hrs)

UNIT II :   Health Awareness – Health Education - Approaches to Health Education - Health Education and Health Services – Planning Health Education.

(10hrs)

UNIT III: Health Management – Preventive Care and Curative Care – Individual Health Care – Role of the State in Health Care – Privatization and Health Care – Rural Health Care – Tele Medicine.

(15hrs)

UNIT IV: Health Insurance – Private – Government – Recent Trends.

(10hrs)

UNIT V: First Aid – Need for First Aid – Methods of First Aid – Medical Tourism – Health Tourism in India.

(15hrs)

RESEARCH METHODOLOGY AND COMPUTER APPLICATION IN ECONOMICS

Teaching Hours: 75   **Credits : 4**

Course Code : 3P18/3C/RMC//8P18/3C/RMC   **LTP   : 2/2/1**

COURSE OBJECTIVES AND OUTCOME:
- To understand the research, the research process in a scientific manner.
- To assist the students in preparing project dissertation and proposals.
- To learn the computer applications in Economic research.

COURSE OUTLINE:

UNIT I: The Scientific Approach – Aims of Social Sciences –Scientific Sciences – Scientific Revolution – Role of Methodology – Research Process – Conceptual Foundation of Research – Economic Theory and Methods – Axiomatic, Mathematical and Historical Methods – Theory, Models and Empirical Research – Basic Elements in Research – Identification of a Research Problem – Hypothesis Formulation and Testing – Research Process– Ethics in Research.(15 hrs)

UNIT II: Principles and Process in Data Collection – Primary Data – Case Study Method– Survey Research – Sample Selection – Sampling Design – Preparation of Structure Interview Schedule – Construction of Questionnaire – Pilot Study – Classification and Tabulation – Diagrammatic Representation – Secondary Data – Sourcing of Data for India and Tamil Nadu – Census of India, NSSO, Economic Survey , RBI Report , Agricultural Census, Annual Survey of Industries.(15 hrs)

UNIT III: Concept of Data, Record and File – Type of Data and Data Structure – Data – File handling and operations – Data storage and retrieval – Data Operations – Algorithms like Sorting , Merging, Joining and Bifurcation – Data Base Concept and Operation on Data Base.(15 hrs)

UNIT IV: Series – Group tables – Groups and objects – Time and Frequency Series – Regression Methods and Techniques – Regression Analysis – Trends and Forecasting – Report writing – Plan of Research report – Style & Mechanics of writing Research report.(15 hrs)

UNIT V: Application of Software to Economic Research – (Practical Classes).