# **PG ECONOMICS 2015-2016**

## 1. COURSE PROFILE:

# SEMESTER I

Core	Code	Title	Н	Credit	CA	End	Total
						Sem	
Core: 1	3P15/1C/MIC	Micro Economic	6	4	40	60	100
		Analysis					
Core: 2	3P15/1C/PUB	Public Economics	6	4	40	60	100
Core: 3	3P15/1C/MAT	Mathematics for	6	4	40	60	100
		Economists					
Core: 4	3P15/1C/STA	Statistics for	6	4	40	60	100
		Economists					
Major	3P15/1E1/FIN	Financial	4	3	40	60	100
Elective: 1		Economics	·				
Soft Skills	PG15/1S/PEW	Personality	2	2			
		Development					
	Total		30	21			

## SEMESTER II

Core: 5	3P15/2C/MAC	Macro Economic Analysis	5	4	40	60	100
Core: 6	3P15/2C/WEL	Welfare Economics	5	4	40	60	100
Core: 7	3P15/2C/OPE	Operations Research	5	4	40	60	100
Core: 8	3P15/2C/STT	Statistics with Computer Applications	5	4	40	60	100
Major Elective:2	3P15/2E2/MAN	Managerial Economics	4	3	40	60	100
Extra Disciplinary Elective Subject:1	3P15/2E/HEA	Health Care Management	4	3	40	60	100
Soft Skills	3P15/2S/INT	Interpersonal Communication	2	2			100
	Total		30	24			

# SEMESTER III

Core	Course Code	Course Title	Hrs	Credit	CA	End	Total
						Sem	
Core: 9	3P15/3C/APE	Applied	6	4	40	60	100
		<b>Econometrics</b>					
Core: 10	3P15/3C/MON	Monetary Economics	5	4	40	60	100
Core: 11	3P15/3C/RES	Research	5	4	40	60	100
	01 10,0 0,1123	Methodology		•			100
Elective 3	3P15/3E3/EAI	Economics of	4	3	40	60	100
		Agriculture and					
		Industry.					
Elective 4	3P15/3E4/ EOI	Economics Of Infra	4	3	40	60	100
		structure					
Extra	3P15/3E/HOS	Hospital	4	3	40	60	100
disciplinary		Administration					
Soft Skill	3P15/3S/YMB	Yoga and meditation	2	2			
		for better living					
	Total		30	23			

# SEMESTER IV

Core: 12	3P15/4C/GDM	Growth and	6	4	40	60	100
		Development Models					
Core: 13	3P15/4C/INT	International Economics	6	4	40	60	100
Core: 14	3P15/4C/EOH	Economics Of Health	6	4	40	60	100
Core: 15	3P15/4C/PRO	Project	6	4	40	60	100
Elective:5	3P15/4E5/EVE	Environmental Economics	4	3	40	60	100
Soft Skill	3P15/4S/EMS	Employability Skills	2	2			
	Total		30	21			

# SEMESTER – I

# MATHEMATICS FOR ECONOMISTS

Teaching Hours : 90 Credits: 4

Course Code: 3P15/1C/MAT

3/3/0

#### **OBJECTIVE:**

To enable students to understand the application of Mathematical Models to Economic Theories and scientific testing of Economic Theories.

#### **COURSE OUTLINE:**

UNIT I: Matrix Algebra and Linear Models-Transpose and Inverse – Determinants and Rank – Test of Non – Singularity –Inverse Matrix – Cramer's Rule-Nobel Laureate Wassily Leontief (1973) Input – Output Analysis- Hawkins Simon's

Conditions.

20hrs

UNIT II: Differentiation - Partial Differentiation - Second Order - Cross Partial

Derivatives- Young's Theorem

20hrs

**UNIT III:** Applications of Partial Derivatives in Economics – Extreme Values of Function of Two Variables –Cost and Profit Functions-Lagrangian Function – Jacobian and Hessian.

15hrs

UNIT IV: Elementary Integration Techniques- Indefinite Integrals- Rules of Operation-Definite Integrals- Economic Applications – Derivation of TC and TR from MC and MR-- Consumer's Surplus- Producer's Surplus.

15hrs

**UNIT V:** First Order Difference Equation- General Formula - Stability- The Cobweb Model.

20hrs

#### SEMESTER – I

#### STATISTICS FOR ECONOMISTS

Teaching Hours : 90 Credits : 4

Course Code: 3P15/1C/STA LTP: 3/3/0

To enable students to understand the application of statistical tools in economic analysis.

#### **COURSE OUTLINE:**

**UNIT I:** Extrapolation and Interpolation- Newton's and Lagrange's Methods only.

15hrs

UNIT II: Probability – Theorems- Addition- Multiplication-Conditional Probability –

Bayes' Theorem Mathematical Expectation-Theoretical Distribution- Normal-

Binomial and Poisson

20hrs

**UNIT III:** Index Number – Types of Index Numbers – Construction of Consumer Price

Index – Wholesale Price and Production Indices in India.

20hrs

**UNIT IV:** Analysis of Time Series – Measurement of Trend – Semi Averages, Moving

Averages-Method of Least Square-Seasonal Variations-Theory of Estimation

- Types and Properties

15hrs

**UNIT V:** Simple Correlation – Partial Correlation - Multiple Correlation and

Regression- Multiple Regression.

20hrs

## SEMESTER – I

## FINANCIAL ECONOMICS

Teaching Hours :60 Credits: 3

Course Code: 3P15/1E1/FIN LTP: 4/0/0

To enable students to understand the working of Money and Capital Market and the Reforms in the Financial Sector.

**UNIT I:** Capital Market – Primary and Secondary Market Structure

10hrs

**UNIT II:** Stock Brokers- Underwriters-Depositories -Credit Rating Agencies.

10hrs

**UNIT III:** Stock Market System – Trading- Listing – Market Efficiency – Pricing – Insider in India – Investor protection.

15hrs

**UNITIV:** Derivative Markets – Options and Futures - Derivative Market in India – Recent Trends.

15hrs

**UNIT V :** Stock Market System in India – NSE – SEBI – OTC Online Trading System – Recent Trends in Capital Market Operations.

10hrs

## SEMESTER – II

## **OPERATIONS RESEARCH**

Teaching Hours : 75 Credits : 4

Course Code: 3P15/2C/OPE LTP: 3/2/0

To enable students to understand the essential quantitative tools to make decision making a rational process and the technique of finding optimal solutions in a Dynamic Business Environment

#### **COURSE OUTLINE:**

**UNIT I:** Operations Research – Introduction – Meaning – Scope – Models – Limitations – Formulation – Application in Management Decision Making.

15hrs

**UNIT II:** Nobel Laureate Tjalling Koopmans (1975)Transportation Models –

Assignment Models – North West Corner Rule Method – Least cost Entry

Method - Vogel's Approximation Method

15hrs

**UNIT III:** Decision Theory –Certainty- Uncertainty- Use of Probability – Applications –

Bayes' Theorem – Decision Trees.

15hrs

**UNIT IV:** Network Analysis – Construction of the Network – Time and Critical Path

Calculations – CPM.

15hrs

**UNIT V:** Queuing Theory –Single Channel-Erlang Model- Number of Customers-

Waiting Line & System – Waiting Time in Line & System-Fundamentals –

Uses.

15hrs

## SEMESTER - II

## STATISTICS WITH COMPUTER APPLICATIONS

Teaching Hours : 75 Credits: 4

Course Code : 3P15/2C/STT LTP : 3/ 2/0

**OBJECTIVE:** 

To enable students to understand the sophisticated methods of statistical analysis and the analysis of mass data and variables using Statistical Package.

#### **COURSE OUTLINE:**

UNIT I: Sampling Methods- Hypothesis Testing, Standard Error – Large Sample Test for Two Means and Standard Deviations – Proportion and Confidence Interval.

15hrs

**UNIT II :** Test of significance for attributes - Small sample test - t - test - Paired t - test - Chi Square test - z - test

15 hrs

**UNIT III:** F Test- Analysis of Variance One Way - Two Way Classifications-Design of Experiments- Latin Squares.

15hrs

**UNIT IV:** Univariate and Multivariate Techniques – Factor analysis

15hrs

**UNIT V:** Introduction-Statistical Data Files- Statistical Workbook – Installation Data Spreadsheet Toolbar – Scroll Sheet – Applications – Diagrams and Graphs, Elementary Concepts in Statistics-Applications in Computer – Correlation, Regression.

(Practical Examination only. No questions for the End Semester Examination)

15hrs

## SEMESTER II

## MANAGERIAL ECONOMICS

Teaching Hours : 60 Credits: 3

Course Code : 3P15/2E2/MAN LTP: 4/0/0

**OBJECTIVE:** 

To enable students to understand the models and Managerial Theories of the Firm and the methods for selecting projects under risk and uncertain conditions.

**UNIT I:** Definition of Economic Models – Types of Models – Analyzing Cases in

 $Managerial\ Economics-Usefulness\ of\ Case-Study\ Method\ -Limitations\ of$ 

Case Study Method.

15h

rs

**UNIT II:** Inventory Management- Types of Inventory - Methods of Inventory control – EOQ, ABC, VED Analysis

10h

rs

**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 -

Stabilization of the Economy.

15h

rs

**UNIT IV:** Risk in Project Analysis – Selection of a Project – Finite Horizon Method

Certainty - Equivalent Approach - Decision Tree Approach - Sensitivity

Analysis.

10h

rs

**UNIT V**: Economics and Business Forecasting – Economic forecasts – Methods of Economic forecasting – Evaluating forecasts.

10hrs

## SEMESTER – II

## HEALTH CARE MANAGEMENT

Teaching Hours : 60 Credits: 3

Course Code : 3P15/2E/HEA LTP: 4/0/0

To enable students to understand to get an idea about the Health Care Administration and Medical Care.

#### **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 State in Health Care – Privatization and Health Care – Rural Health Care.

15hrs

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

10hrs

**UNIT V:** First Aid – Need for First Aid – Methods of First Aid – Medical Tourism

15hrs

## SEMESTER – III

## RESEARCH METHODOLOGY

Teaching Hours : 75 Credits : 4

Course Code: 3P15/3C/RES LTP: 3/2/0

## **OBJECTIVE:**

To enable students to have a clear view about conducting Research in a Scientific Manner.

## **COURSE OUTLINE:**

**UNIT I:** Research in Economics - Meaning, Objectives, need and scope- Present position of Research in Economics in India.

10hrs

UNIT II: Scientific Attitude in Economic Research - Basic elements of Scientific Method Fact, Conceptual and Operational Definitions, Assumptions, Hypotheses- Primary and Secondary data.

10hrs

**UNIT III:** Research Design - Meaning and types- Surveys and Sampling- Probability and Non- Probability Sampling Logical- Mathematical and Statistical methods- Case study methods.

20hrs

**UNIT IV:** Tools of Research - Participant and Non-Participant Observation-Questionnaire- Interview Schedule-Pilot Study- Pre-Testing.

20hrs

**UNIT V:** Report Writing - Plan of Research Report- Style and mechanics of writing Research Reports.

15hrs

## SEMESTER – III

## ECONOMICS OF INFRASTRUCTURE

Teaching Hours : 60 Credits : 3

Course Code : 3P15/3E4/EOI LTP :4/0/0

## **Objective:**

To enable students to understand the development of infrastructure over the period of time

## **COURSE OUTLINE:**

UNIT 1: Infrastructure and Economic development – Infrastructure as a Public Good; Social and Physical Infrastructure; special characteristics of Utilities. The Peak –Load, Off- Load problem, Dual Principal Controversy

#### **10 HRS**

UNIT II: The Structure of Transport Costs and Location of Economic Activities.

Demand Transport . Models of Freight and Passenger Demand. Models
Choice; Cost Function in the Transport Sector. Principle of Pricing. Special
Problems of Individuals Modes of Transport – Impact on Economic
Development

#### **15 HRS**

UNIT III: Primacy of Energy in the process of Economic Development – Factors
 Determining Demand for Energy – Effects of Energy Shortage – Energy
 Conservation – Renewable and Non – Conventional Sources of Energy – The search for an optimal Energy Policy in the Indian Context.

**15 HRS** 

UNIT IV: Organization and Financing of Services – Private Vs Public Sector Financing

 The fixation of prices of social services – Health , Education and Human
 Development concept – Scope and relevance of Human Resource
 Development – Education and Economic Growth – Educational Planning –
 Social Demand – The case for Universal , Free, Primary Education; Structure of Higher education and problems of its financing in India; The issues in education policy – importance of Health and its impact on Economic Development.

 10 HRS

UNIT V: Infrastructure in Modern India – Strategies for Infrastructure development – Differences in infrastructure building between China and India - Infrastructure investments in India – Prioritization of Infrastructure sectors for development – Macro perspective of infrastructure development in India – Infrastructure and Plans.

10
HRS

#### SEMESTER III

## YOGA AND MEDITATION FOR BETTER LIVING

Teaching Hours : 30 Credits : 2

Course Code: 3P15/3S/YMB LTP:2/0/0

Voga – Introduction – Yoga as a Science of Art - The five elements - The steps to be followed - yoga and health benefits (The physical and Mental) – Theoretical insight into 10 asanas – Pranayama techniques – Surya pranayama – Nadishuddi and Bastrika – Diet – Nutrition and Health – Understanding Human anatomy and Acupressure Points 10 Hrs

UNIT II: Meditation – Introduction – Brain wave patterns – The sub Conscious Mind – Chakras – Anthakarna – Koshas – Receiving universal energy –Goal visualization – The physical body and the etheric body – Positive affirmations – The protective shield .- Emotional Balance – The kundalini shakti

10 Hrs

UNIT III: Practice on 10 Asanas and simplified Physical Exercises – Practical sessions on Meditation – Relaxation Techniques and cleansing of chakras – Practical lessons on few Mudras.

10 Hrs

## SEMESTER – III

## HOSPITAL ADMINISTRATION

Teaching Hours: 60 Credits: 3

Course Code : 3P15/3E/HOS LTP : 4/0/0

## **Objective:**

To enable students to understand the theoretical fundamentals of Hospital Administration along with a practical exposure.

#### **COURSE OUTLINE:**

**UNIT I:** Definition of Hospital Administration – Administrative Functions – Modern Techniques – Health Care Marketing.

10hrs

**UNIT II:** Accounting Principle – Systems – Budgeting Process- Depreciation.

10hrs

**UNIT III:** Human Resources Planning - Application to Staffing - Management of Doctors Unit - Management of Nursing unit - Supporting unit - Quality of Care.

15hrs

**UNIT IV:** Information and Communication in Hospital Administration – Maintenance of Records-Barriers to Communication.

15hrs

UNIT V: Medical Ethics – A Case Study of Private Hospital Administration (Multi Specialty Hospital-Super Hospital-Corporate Hospitals.)
 Hrs

## SEMESTER – IV

## INTERNATIONAL ECONOMICS

Teaching Hours : 90 Credits : 4

Course Code: 3P15/4C/INT LTP: 3/3/0

#### **OBJECTIVE:**

To enable students to understand to study the tools and Theories of International Trade and the role of International Organizations on world trade.

#### **COURSE OUTLINE:**

**UNIT I:** Theories of International Trade- Stolper- Samuelson Theorem- Metzler Paradox- Nobel Laureate Paul Krugman (2008).

20 hrs

**UNIT II:** Exchange Control Measures – Objectives – Methods – Determination of Equilibrium Exchange Rate – Theories – Mint Par – Purchasing Power Parity – Balance of Payment Theory.

20hrs

**UNIT III:** Balance of Payment – Structure – Disequilibrium – Causes – Remedies – The Absorption Approach – Effects –Foreign Trade Multiplier – Backwash Effects -Dumping - Anti-Dumping methods.

15hrs

**UNIT IV:** Foreign Direct Investment - Types – Merits and Demerits – Role and Functions of Multi-National Corporations – Technology Transfer- Impact of Foreign Capital on India's Economic Development.

15hrs

**UNITV:** NAFTA- RTAS- RIAS- North- South Dialogue- South- South Dialogue- EEV- Rybczynski.

20hrs

## SEMESTER IV

## ECONOMICS OF HEALTH

Teaching Hours: 90 Credits:

4

Course Code: EC15/4C/EOH

:3/3/0

**UNIT: I**: Health Economics – Importance of Health Economics – The Principle of the Margin – Efficiency and Equity concept of Economic Evaluation - Different types of Health Economic Evaluation

15HRS

UNIT: II: Four Key Health Concepts – Scarcity and Sacrifice Efficiency – Opportunity

Cost – utility – concept of Economic Evaluation – Measuring Benefits and

Costs – Resource Allocation Decision in Health Care – An Economists

approach to getting NHS Budget- at Macro and Micro Levels.

#### **20 HRS**

UNIT: III: Demand for Health Theory and Applications: Basic concepts of the Economic Approach – Health Production Function –Effects of Change in prices – Changes in the technical knowledge.

20HRS

**Unit: IV:** Health Indicators—Birth Rate , Fertility Rate — Morbidity — Mortality — Disability life style status , DALY, QALYS , Sources — WHO — CSO —NFHS

**20 HRS** 

**UNIT: V:** Health Insurance – Medical Ethics – Medical Tourism

15HRS