



# **St. PETER'S UNIVERSITY**

**St. Peter's Institute of Higher Education and Research**

**(Declared Under Section 3 of the UGC Act, 1956)**

**AVADI, CHENNAI – 600 054**

**TAMIL NADU**

**B.A. (ECONOMICS)**

**Code No. - 303**

**(Effective From 2009 – 2010)**

**(Distance Education)**

**Regulations and Syllabi**

**(I & II & III Year)**

**St. PETER'S INSTITUTE OF DISTANCE EDUCATION**

**Recognized by Distance Education Council and**

**Joint Committee of UGC – AICTE - DEC, New Delhi**

**(Ref. F. No. DEC/SPU/CHN/TN/Recog/09/14 dated 02.04.2009 and**

**Ref.F.No.DEC/Recog/2009/3169 dated 09.09.2009)**

**St. PETER'S UNIVERSITY**  
**St. PETER'S INSTITUTE OF DISTANCE EDUCATION**  
Chennai – 600 054.

**Code No. – 303**  
**B.A. (ECONOMICS)**  
(Distance Education)

**Regulations and Syllabi**  
(Effective from 2009 – 2010)

- 1. Eligibility:** Candidates who have passed the Higher Secondary Examination conducted by the Government of Tamilnadu, or any other examination recognized as equivalent thereto are eligible for admission to Three Year B.A Programme in Economics.
- 2. Duration:** Three Years.
- 3. Medium:** English is the medium of instruction and examination.
- 4. Methodology:** The methodology of distance education includes the supply of self-instructional study materials in print format and in CD, face-to-face instruction for theory and practicals for a limited period during week ends and on holidays, provision of virtual class in phased manner, dissemination of information over e-mail, Student - Support Service at various Centres of the University, Continuous Assessment and End Assessment conducted by the University at various parts of India.
- 5. Weightage for Continuous and End Assessment:** There is no weightage for Continuous Assessment unless the ratio is specifically mentioned in the scheme of Examinations. The End Assessment (EA) has 100% weightage.

**6. Credit System:** Credit system be followed with 36 credits for each Year and each credit is equivalent to 25 hours of effective study provided in the Time Table of the formal system.

## 7. Scheme of Examinations

### First Year

Code No.	Course Title	Credit	Marks	
			EA	Total
<b>Theory</b>				
109UTMT01 109UHIT01	Tamil - I Hindi - I	6	100	100
109UEHT02	English - I	6	100	100
109UECT03	Indian Economy: Problems and Policies	8	100	100
109UECT04	Statistics for Economists	8	100	100
109UECT05	Allied: Principles of Commerce	8	100	100
<b>Total</b>		<b>36</b>	<b>500</b>	<b>500</b>

### Second Year

Code No.	Course Title	Credit	Marks	
			EA	Total
<b>Theory</b>				
209UTMT01 209UHIT01	Tamil - II Hindi - II	6	100	100
209UEHT02	English - II	6	100	100
209UECT03	Micro Economics	8	100	100
209UECT04	Monetary Economics	8	100	100
209UECT05	Allied: Rural Banking	8	100	100
<b>Total</b>		<b>36</b>	<b>500</b>	<b>500</b>

### Third Year

Code No.	Course Title	Credit	Marks	
			EA	Total
<b>Theory</b>				
309UECT01	Macro Economics	6	100	100
309UECT02	Fiscal Economics	8	100	100
309UECT03	History of Economics Thought	6	100	100
309UECT04	Managerial Economics	8	100	100
309UECT05	Application Oriented Subject: Environmental Economics	8	100	100
<b>Total</b>		<b>36</b>	<b>500</b>	<b>500</b>

**8. Passing Requirements:** The minimum pass mark (raw score) be 40% in End Assessment.

**9. Grading System:** Grading System on a 10 Point Scale be followed with 1 mark = 0.1 and the conversion of the Grade point as given below.

$$\begin{aligned}\text{Overall Grade Point Average (OGPA)} &= \frac{\text{Sum of Weighted Grade Points}}{\text{Total Credits}} \\ &= \frac{\sum (EA)C}{\sum C}\end{aligned}$$

**The Overall Grade:** The Overall Grade and Classification of all successful candidates be arrived at from the Overall Grade Point Average as stipulated in the following conversion Table.

<b>Grade</b>	<b>Over all Grade Point Average(OGPA)</b>	<b>Over all weighted Average marks</b>	<b>Classification</b>
0	9.0 to 10.0	90 to 100	First Class
A	8.0 to 8.9	80 to 89	First Class
B	7.0 to 7.9	70 to 79	First Class
C	6.0 to 6.9	60 to 69	First Class
D	5.0 to 5.9	50 to 59	Second Class
E	4.0 to 4.9	40 to 49	Third Class
<b>F</b>	0.0 to 3.9	0 to 39	<b>Reappearance</b>

The Grade Sheets of successful candidates provide particulars such as (1) Overall weighted Average Marks and (2) Overall Grade.

**10. Pattern of the Question Paper:** The question paper for the End Assessment will be set for three hours and for a maximum of 100 marks with following divisions and details.

**Part A:** 10 questions (with equal distribution to all units in the syllabus). Each question carries 2 marks.

**Part B:** 5 questions with either or type (with equal distribution to all the units in the syllabus). Each question carries 16 marks.

The total marks scored by the candidates will be reduced to the maximum prescribed in the Regulations.

## **11. Syllabus**

**FIRST YEAR**  
**109UECT03: INDIAN ECONOMY – PROBLEMS AND POLICIES**

**Unit I**

Features of less developed and developing economies – Economic and non – Economic factors impeding Economic development – Concept of Economic growth and development – Factors determining Economic development.

**Unit II**

Capital formation – Human and Physical – Savings and investment pattern during the plans – National Income – Methods, Trends, Limitation – Distribution – Recent Trends in National Income.

**Unit III**

Human Resources – Population growth as a retarding factor – Population policy.

**Unit IV**

Agriculture – its contribution to economic development – Food problems – methods of solving it – measures to increase agriculture productivity – Land reforms – Green revolution – Agriculture inputs and agricultural credit – Evaluation of agricultural policy during plan period.

**Unit V**

Role of Technology – Its impact on Economic development.

Role of Industries in Economic development – Cottages, Small scale and Large scale (Cotton, Iron, Steel, Paper, Jute, Sugar and Tea) – Assessment of Industrial policy during the plan period. Public Sector – privatization – (Industrial policy 1948, 1956, 1980, 1991 – Industrial licensing policy – Industrial Finance Development banking (IDBI, IFCA, ICICI, IRBI, SFC, SIDCS and SIDBI).

**Unit VII**

Agricultural Labour and Industrial Labour – Trade Unions and Labour unrest – Industrial Relations – Social Security Schemes – Unemployment and employment policy – Evaluation of Government policy.

**Unit VIII**

Transport – Importance of Transport ( Road, Railways, Shipping and civil Aviation ) to Economic growth – Evaluation of Government policy – Transport co-ordination.

## **Unit IX**

Planning in India – A Brief resume of Indian's Five Year Plans – Ninth Plan performance – the Ninth Five Year Plan 1997 – 2002 objectives – Growth rate targets – Ninth plan outlay and investment – Sectoral development profile – Role of deficit financing – Effects of deficit financing – External assistance or foreign aid – role of foreign aid in India's Economic development – Problems of foreign aid – planning for self sufficiency.

## **Unit X**

Poverty in India – Poverty eradication programmes – Regional Development Disparities – Economic development and social changes – India's foreign Trade and Balance of payments – Exim policy (2000) – 11<sup>th</sup> Finance Commission Report – New Textile Policy (2000) and India's Foreign trade – Government subsidies in India – Antyodaya Anna Yojana.

### **TEXT BOOK:**

1. Dhingara - Indian Economy
2. Dutt and Sundaram - Indian Economy
3. Jhingan. M.L - Economics of Development and Planning
4. Sankaran. S. - Indian Economy
5. Five Year Plan - Government of India Publication
6. The Economic & Political Weekly
7. Economic Survey - Government of India

# **109UECT04: STATISTICS FOR ECONOMICS – I**

## **Unit I**

Nature, significance and limitations of statistics – Collection, Classification and tabulation of data.

## **Unit II**

Diagrammatic and graphic representation – Bar diagrams – Pie diagrams – Histograms – Pictograms – Cartograms – Frequency distribution – Frequency graphs – Ogives – Lorenz curve.

## **Unit III**

Measures of central tendency – Arithmetic mean – Median – Mode.

## **Unit IV**

Measures of dispersion – Range – Quartile Deviation – Mean Deviation Standard Deviation – Co-efficient of variation – Percentiles and deciles.

## **Unit V**

Skewness and Kurtosis – Pearsonian measures of skewness – Bowley's measure of Skewness – Kurtosis.

## **Unit VI**

Sampling – Population and sample – Types of Sampling – Simple, random and stratified sampling – Design of Questionnaire – Sampling errors – Sampling design.

## **Unit VII**

Correlation – Limits of coefficient of correlation – Calculation of co-efficient of correlation – Rank correlation of co-efficient.

## **Unit VIII**

Regression – Two variable linear regression – Meaning – Regression lines and regression co-efficient.

## **Unit IX**

Index numbers – Simple and weighted – Laspeyer's and Paache's Index numbers – Fishers Ideal Index Number – Marshall and Edgeworths Index Numbers – Construction – Tests to be satisfied by an Ideal Index Number – Uses – wholesale price index and consumer price index – Index of Industrial production.



## **Unit X**

Analysis of Time Series – Four components – Measurement of secular Trend – moving average methods and methods of least squares – Uses of Time Series Analysis.

### **TEXT BOOK:**

1. D.N. Elhance - Fundamental Statistics
2. S.P. Guptha - Statistical Methods
3. R.S.N. Pillai and V. Bhagavathi - Statistics
4. R.G.D. Allen - Statistics for Economics – Macmillan India.
5. Compton F.B. And Cowden. D.J. - Applied General Statistics
6. Hodda. R.P. - Introduction to Statistics
7. Hodda. R.P. - Statistics for Business and Economics – Macmillan India.

# **109UECT05: ALLIED – I - PRINCIPLES OF COMMERCE**

## **Unit I**

Economics Basics of Commerce – Types of Business Sole Proprietorship – Partnership – Joint Stock Company.

## **Unit II**

Office Organization – Its Methods – Office Appliances.

## **Unit III**

Means of Instruments – Instrument of Credit – Its Uses.

## **Unit IV**

Banks Evaluation – Functions of Commercial Banks – Functions of Central Banks.

## **Unit V**

Agents Rights – Agents duties – Agents Liabilities – Terminations.

## **Unit VI**

Its measuring and importance – Various Procedures – Shipping – Insurance.

## **Unit VII**

Types of Industries – large and Scale Industries – Sources of Finance – Long Term Sources – Short Term Sources.

## **Unit VIII**

Its Functions and Importance – Allied Institutions for promotion of trade.

## **Unit IX**

Retail and Wholesale – Hire Purchase and Installment Trade – International Trade.

## **Unit X**

Marketing Functions – Marketing Mix – Advertising – Salesmanship – Media and Transport – Advantages and Disadvantages.

**SECOND YEAR**  
**209UECT03: MICRO ECONOMICS - I**

**Unit I**

Economic Problems – Scarcity and choice – definitions of Economics – Smith, Marshall, Lionel Robins, Samuelson.

**Unit II**

Definition of Micro Economics – Wants – Utility – Value in use – Value in exchange – Demand – Demand schedule – Drawing demand curve from demand schedule – Supply – Supply schedule – Drawing supply curve from supply schedule – Demand and supply equilibrium – Graphical representation.

**Unit III**

Consumer behaviour – Cardinal & ordinal utility – Marshallian theory of Diminishing Marginal utility – Hick's indifference curve analysis – Consumer equilibrium using indifference curve analysis – Derivation of demand curve using Marshall's & Hick's approach.

**Unit IV**

Determinants of demand – Causes of downward sloping demand curve – Income and substitution effect (Concept only) – Revealed preference (Concept only) – Construction of graph depicting Marshall's and Hick's analysis of consumer behaviour from a given schedule – consumer surplus (Concept only).

**Unit V**

Price elasticity of demand – Definition – Formulae – Arc and point method – Derivation – Simple problems and shape – Income and cross elasticity of demand (Concept only) – Price elasticity of supply.

**Unit VI**

Factors of production – Production – Short run and Long run production – Law of variable proportions – Laws of returns – Producer's equilibrium – Expansion paths (Concept only) – construction of graph explaining short run and long run production functions from given schedules.

**Unit VII**

Cost – types – Accounting and Economic costs – Opportunity cost – Cost functions – Short run functions – Long run functions – Construction of cost curves from a given data set – Revenue functions – Total, average, marginal revenue curves under different market conditions – Conditions for equilibrium of firm – Relationship between AR and MR.

## **Unit VIII**

Market Equilibrium – Element of time in price determination – perfect competition – Characteristics – Equilibrium of firm under perfect competition – Monopoly – Characteristics equilibrium of firm – Price discrimination (Concept and kinds only) – Monopolistic competition – Characteristics – Group equilibrium – Under utilization of capacity – oligopoly – Kinked demand curve concept only.

## **Unit IX**

Functional and personal distribution of income – Macroeconomic theories of distribution – Simple exposition to Marx and Kaldor – Marginal productivity theory of factor pricing – Wages – Real and nominal – Modern theories of wages – Trade Union and collective bargaining.

## **Unit X**

Rent – Ricardian, Marshall and Modern theories of rent – Interest – Loanable fund theory – Keynes' liquidity preference theory IS – LM Model of interest determination – Profit – Modern theories of profit – innovation – Risk Bearing – Uncertainty bearing.

## **TEXT BOOK:**

1. H.L. Ahuja - Principle of Micro Economics
2. S. Sankaran - Economic Analysis
3. Hs. Agarwall - Micro Economics
4. M.L. Seeth - Principle of Economics
5. Storvier & Hanguie - A Text of Economics Theory
6. Watson D.S. - Price theory and its uses.
7. Prichard A. Prilas - Micro Economics theory
8. Lispey and Steiner - Economics

## **209UECT04: MONETARY ECONOMICS – I**

### **Unit I**

Money – functions and Classification – Gresham’s Law – Role of Money in Capitalist, Socialist and Mixed Economics.

### **Unit II**

Value of money – Index numbers – Fisher’s equation – Cambridge equation – General evaluation of the Quantity Theory of money.

### **Unit III**

Monetary standards – paper currency – Systems of note issue – Gold Standard – Indian currency system – Development and problems.

### **Unit IV**

Factors influencing money supply – Money supply and price level – Keynesian approach Neutrality of money – Classical dichotomy – Real balance effect – Friedman’s restatement of quantity theory.

### **Unit V**

Inflation – Causes types and remedies – Inflationary trend in India – Trade cycles – General Features.

### **Unit VI**

Commercial Banking – Types – function – the process of credit creation – purpose and limitations – Liabilities and assets of banks.

### **Unit VII**

Nationalisation of banks – A critical appraisal of the progress of commercial banking after nationalization – Recent reforms in banking sector in India.

### **Unit VIII**

Central Banking – functions of a central bank – Quantitative and qualitative methods of credit control – Efficiency and limitations.

### **Unit IX**

Functions of Reserve Bank of India – Its role in agricultural and industrial development – RBI and credit control – Objectives and limitations – RBI and monetary policy.

## Unit X

Euro currency – Meaning and scope – Important features of the market – Origin and growth – An evaluation of the currency.

### TEXT BOOK:

1. Basu C.R. - Central Banking in a planned economy.
2. Chandler L.V. - Economics of Money and Banking
3. Clower (Ed.) - Monetary theory
4. Crowther G. - An Outline of money
5. Gupta G.P. - Monetary policy of the Reserve Bank of India
6. Gupta S.B. - Monetary Economics
7. Kurihara K. - Monetary theory and Public Policy
8. Milton Friedman - Studies in quality theory of money
9. Seth M.L. - Money, Banking and International Trade
10. Sen S.N. - Central banking in underdeveloped Countries
11. Sankaran S. - Monetary Economics
12. Narendra Jadhav - Monetary Economics for India
13. Vaish M.C. - Monetary Theory.

## **209UECT05: ALLIED – II: RURAL BANKING**

### **Unit I**

Features of Rural Economy in India and Tami Nadu – Size – Structure and Issue – Relative importance of Agricultural, Industry, Trade and other Activities.

### **Unit II**

Backwardness of Indian agriculture – production pattern in villages – Land tenure and methods of production – Low yield per acre – cause for backwardness – Effects of Backwardness – Suggestions.

### **Unit III**

Rural poverty – meaning – Extent of rural poverty – Causes and Consequences – Eradication of poverty – Remedies – Eradication of Rural poverty during five year plan.

### **Unit IV**

Rural indebtedness – Causes – Consequences – Suggestions to solve the problem of rural indebtedness – Steps taken to solve the problem.

### **Unit V**

Saving pattern in Rural India – Causes for low saving in Rural sector – Measures promote Rural savings – Mode of savings in Rural India.

### **Unit VI**

Sources of Rural credit – Non-Institutional sources – Money-lending – Friend and relatives – Government Sources.

### **Unit VII**

Institutional sources – Co-operative credit Agencies – Structure of Co-operation credit in India – Weakness of co-operative credit agencies – Taccavi loans – Need transfer of taccavi funds to co-operatives – Suggestions to improve the working co-operative credit agencies.

### **Unit VIII**

State Bank of India – Before and after nationalization – Commercial Bank and Agricultural finance – Weakness – Land development Bank – Lead Bank Scheme – Connection with S.F.D.A and M.F.A.L.A.

## **Unit IX**

Agricultural Refinance Corporation – origin and Structure – Management – Critical appraisal – Reserve Bank of India – Its role as an apex body – Agricultural credit department – direct and indirect lending approvals.

## **Unit X**

Measures taken under 20 points programme in rural banking – Recent trends in Rural Banking.

### **TEXT BOOK:**

1. All India Rural Credit Survey Committee Report
2. All India Rural Credit Review Committee Report
3. S.N. Ghosal - Agricultural financing in India
4. Dr. S.G. Jain - Indian Rural Economics
5. Dr. S.G. Jain - Economic Institutions of Rural upfit
6. John W. Meller - The Economics of Agricultural Development
7. Mamoriah - Agricultural problems of India.



**THIRD YEAR**  
**309UECT01: MACRO ECONOMICS**

**Unit I**

Nature and scope of Macro Economics – Micro and Macro Economics – Circular flow of Income – Two Sector model.

**Unit II**

National income – GNP – NNP – personal Income – disposable Income – Real Income – per capita Income – measurement – uses – social accounting.

**Unit III**

Classical Theory of Employment and Income – Say's Law of market.

**Unit IV**

Consumption Function – Meaning – Keynes's Psychological Law of consumption – Theories of consumption function.

**Unit V**

Investment Function – meaning – types – Determinants of Investment – MEC – Keynesian model of income and employment determination.

**Unit VI**

Multiplier – Static and dynamic multipliers – Induced investment and accelerator – The interaction principle – Basics of Income and Employment multiplier.

**Unit VII**

Money in the Keynesian Model – Demand for money in the Keynesian theory – Liquidity trap – Keynesian Revolution and its application to less developed countries.

**Unit VIII**

Monetary theory in relation to underemployment and full employment – Integration of monetary and output theories – Patinkin.

**Unit IX**

Post Keynesian Macro analysis – General equilibrium of money and real sector – contribution of Hicks, Hanson – ISLM – diagram.

## **Unit X**

Objectives and importance of Macro Economic Policy.

### **TEXT BOOK:**

1. Broo man - Macro Economics
2. Derberg and Mc.Dougal - Macro Economics
3. Dillard D. - Macro Economics
4. Shapiro. E. - Macro Economics Analysis
5. Gupta R.D. - Introduction of post Keynesian Economics
6. Jhingam M.L. - Macro Economics Theory
7. Vaish M.C. - Macro Economics Theory
8. Sankaran. S. - Macro Economics

## **309UECT02: FISCAL ECONOMICS – I**

### **Unit I**

Definition, Meaning and Scope of public finance – Distinction between private and public finance – Public goods versus private goods – Principle of maximum social advantage.

### **Unit II**

Principles of public expenditure – Classification – Causes and effects of public expenditure with reference to India.

### **Unit III**

Public revenue sources – Distinction between Tax Revenue and Non Tax Revenue – Trend in Revenue – Taxation – Meaning – Sources of taxation – Classification of taxes – Canons – Theories of taxation – Impact and incidence of taxation – Effects of taxation.

### **Unit IV**

Individual taxes – Income Tax – Expenditure tax – Wealth tax – Property tax – Estate duty – Gift tax – Death duty – Customs duty – Excise duty – Sales tax – Value added tax.

### **Unit V**

Characteristics of a good Tax System – Taxable capacity – Factors determining taxable capacity – Limits – Measurement of taxable capacity.

### **Unit VI**

Public Debt – Sources – Effects of public debt – Public debt of Central Government – Management of public debt.

### **Unit VII**

Deficit financing – meaning – Objectives – role of deficit financing in Indian plans – Effects on prices, production and distribution.

### **Unit VIII**

Federal finance – Principles – Analysis of division of revenue, expenditure other powers between union, state and local Governments – Finance commission – Analysis of latest finance commission recommendation.

## **Unit IX**

Local finance – Sources of finance to local bodies.

## **Unit X**

Fiscal policy – Objectives and instruments of fiscal policy in a developing economy – economy with reference to India – Analysis of Central analysis.

### **TEXT BOOK:**

1. Bhargava R.N. - Indian Public Finance
2. Bhatia - Public Finance
3. Chelliah. R. - Fiscal policy in under developed countries.
4. Dalton. H. - Principles of Public Finance
5. U.K. Hicks - Public Finance
6. Musgrave and Musgrave - Theory and practice of Public Finance.
7. Sankaran. S. - Fiscal Economics
8. Sundaram. K.P.M. - Fiscal Economics
9. K.P.M. Sundaram and K.K. Andley - Public Finance Theory and Practice.
10. M. Govinda Rao (Ed.) - Development, Poverty and Fiscal Policy
11. Sampat Mukherjee - Simple Analytics of Public Finance.

## **309UECT03: HISTORY OF ECONOMIC THOUGHT**

### **Unit I**

Nature and Significance of the History of Economic thought – Mercantilism – Physiocracy.

### **Unit II**

Classical school – A. Smith – T.R. Malthus – D. Ricardo – J.S. Mill – J.B. Say.

### **Unit III**

Role of Socialism – Karl Marx – different Schools of Socialism, Utopian – Christian – Fabian – Syndicalism – Guild Socialism.

### **Unit IV**

Historical School – List – Veblen and Institutional School – Marginal School and Austrians.

### **Unit V**

Alfred Marshall – J.A. Schumpeter.

### **Unit VI**

Keynes and Keynesian Revolution – Limitations.

### **Unit VII**

Welfare Economics – Pigou – Hicks – Pareto.

### **Unit VIII**

Nobel Laureates since 1985.

### **Unit IX**

Indian Economic Thought – D. Naoroji – Ranade – Gokhale – M.K. Gandhi – B.R. Ambedkar.

### **Unit X**

Indian Economic Thought – Rajaji – Nehru – V.K.R.V. Rao – Gandhi – Indira Gandhi – E.V.R. Periyar – Anna.

**TEXT BOOK:**

1. E. Roll - History of Economic Thought
2. A. Grey - Development of Economic Doctrines
3. L.H. Haney - History of Economic Thought
4. Dr. Shanmuga Sundaram - Indian Economic Thought  
Development and policies.
5. V.B. Singh - From Naoroji to Nehru
6. Srivatsava - History of Economic Thought
7. T.N. Hajela - History of Economic Thought
8. Sankaran. S. - A History of Economic Thought

## **309UECT04: MANAGERIAL ECONOMICS**

### **Unit I**

Definition, Scope and method of Managerial Economics – Demand analysis – Importance of elasticity measures : Prices, Income and Cross Elasticity.

### **Unit II**

Estimating demand – Forecasting techniques.

### **Unit III**

Production functions and optimizing objectives – Cost, cost output relationships, cost control and reduction.

### **Unit IV**

Pricing methods – Full cost pricing, target pricing, going rate pricing – differential pricing – specific pricing, pricing a new product – pricing by manufactures and pricing by retailers – price regulations – dual pricing – mark-up-resale price maintenance.

### **Unit V**

Linear Programming – graphical methods – simplex methods.

### **Unit VI**

Profit and profit management – Accounting profit and economic profit measurement – profit-planning and forecasting : Break event point.

### **Unit VII**

Capital Budgeting – Cost of capital – Capital management and financial policy.

### **Unit VIII**

Project profitability – methods of appraising project profitability.

### **Unit IX**

Decision Theory – Subject matter some proposed decision rules – Geometric interpretation of the decision rules – Axiomatization – Newmann Morgenstern utility and Bayes criterion.

## Unit X

Game theory – Taking account of competitive decisions – The zero-sum 2 persons game – maximin and minmax strategies – equilibrium points (Saddle).

### TEXT BOOK:

1. Davies & Hughes - Managerial Economics
2. Dean, Joel - Managerial Economics
3. Hague. D.C. - Managerial Economics
4. Mote, Paul and Gupta - Managerial Economics  
Concept and Cases
5. Savage and Small - Introduction to  
Managerial Economics
6. Spencer. M.H. - Managerial Economics –  
Text, problems, short cases.
7. Stokes. C.J. - Economics for Managers.
8. Varshney & Maheswari - Managerial Economics
9. Boumal William . J. - Economic Theory and Operation  
Analysis.



## **9UECT05: APPLICATION ORIENTED SUBJECT – I: ENVIRONMENTAL ECONOMICS**

### **Unit I**

Economics and Environment – Definition and Role of Environmental Economics – Scope and Significance of Environmental Economics – Ecology and its system – Relationship between the environment and the Economic system – Environment as a Resource – Environmental quality.

### **Unit II**

Resources – Concept and Definition – classification of Resources – Renewal and Non- Renewable Resources – Definition and Meaning of Conservation Resources – Material Substitution – Product Life Extension – Recycling.

### **Unit III**

Energy – Definition – Sources of Energy and their Classification – Renewal and Non-Renewable Source of Energy – Conventional and Non-conventional Energy Resources – Direct and Indirect Energy – Atomic Energy – Energy Scenario in India.

### **Unit IV**

Water Pollution – Meaning – River Water Pollutions in India – Control of War Pollution – marine Pollution – causes and extent of Marine Pollution – Air Pollution – Sources and their Effects – Pollution by Automobiles – Acid Rain – Air Pollution in India.

### **Unit V**

Forest and Environmental Quality – Benevolent role of the forest – Deforestation in India – Effects of deforestation – CHIPKO Movement – Social forestry.

### **Unit VI**

Population and Urbanization – Malthusian Prediction – Demographic – Transition Effects of Over Population – Urbanization – Problem, impact – Trend in Urbanization.

### **Unit VII**

Pollution as an Economic Problem – Pollution Control – L-Moral suation – Direct Control – Regulation – fiscal Technique – Effluent Charges – Subsidies compared.

## **Unit VIII**

Global Warming – Ozone Depletion – Green House Effect – Effect of Global Warming Contribution of India towards Warming – Programmes in India.

## **Unit IX**

Environmental Awareness – Environmental Education – Education Through Environmental Movements – Environmental Protection – Tiwari Committee's Findings the Environment (Protection ) Act, 1986 – The Forest Conservation Act.

## **Unit X**

International Environmental Policy – Transfrontier Pollution – International Investments – Stockholm Conference on Human Environment – Recommendations – United Nations Conference on Environment and Development at Rio De Janeiro Agenda 21, June(1992) – An Assessment.

### **TEXT BOOK:**

1. S.W. Pearu - Environmental Economics
2. J. Sereca & K. Taussig - Environmental Economics
3. A.V - Environmental Economics
4. Hjalte Lidgren and Stand - Environmental Policy and Welfare Economics
5. Paul - The Economics Theory of Pollution Control
6. Bandopadhyay - India's Environmental Economics,
7. Gam. M. - Environmental Economics, A Text Book.
8. Sankaran - Environmental Economics