

ANNAMALAI UNIVERSITY
DEPARTMENT OF ECONOMICS
M.A. Economics
Five Year Integrated Degree
On-Campus Programme
Regulations

Common to all Departments of Studies in the Faculty of Arts

English, History, Political Science, Economics, Sociology, Commerce, Population Studies, Business Administration, Library & Information Science and Philosophy.

Master's Programme

A Master's Programme consists of a number of courses which consists of a set of compulsory courses and Languages Papers .

The entire course carries credit system. The number and distribution of credits for the courses will be decided by the respective Faculties.

A course is divided into two Semester, Odd Semester and Even Semester. The normal Semester periods are:

Odd Semester : July to November (90 working days)

Even Semester : December to April (90 working days)

Credits

The term credit is used to describe the quantum of syllabus for various programmes in terms of hours of study. It indicates differential weightage given according to the contents and duration of the courses in the curriculum design.

The minimum credit requirement for a Five years Master's Programme shall be 230,

Courses

Each course may consist of lectures / tutorials / laboratory work / Seminars / project work / practical training report / Viva voce etc.

Normally, in each of the courses, credits will be assigned on the basis of the lectures / tutorials / laboratory work and other form of learning in a 15 week schedule.

Eligibility for Admission

A candidate who has passed the Higher Secondary Class (10+2)

Grading System

The term Grading System indicates a 10 point scale of evaluation of the performance of students in terms of marks, grade points, letter grade and class.

Duration

The duration for completion of a Five years Master's Programme in any Subject is Ten Semesters, but in any case not more than eight years from the year of admission.

Attendance

Every teaching faculty handling a course shall be responsible for the maintenance of attendance register for candidates who have registered for the course. The instructor of the course must intimate the Head of the Department at least Seven Calendar days before the last instruction day in the semester about the particulars of all students who have secured an attendance of less than 75%. A candidate who has attendance less than 75% shall not be permitted to sit for the End-Semester examination in the course in which the short fall exists.

However, it shall be open to the authorities to grant exemption to a candidate who has failed to obtain the prescribed 75% attendance for valid reasons on payment of a Condonation fee and such exemptions should not under any circumstances be granted for attendance below 75%

Examination

There will be two internal assessments and one End – Semester examination during each semester.

Internal Assessment – I will be held after 35 working days and Internal Assessment –II will be held after 70 working days.

Internal Assessment –I will be combination of a variety of tools such as class test, assignment, and paper presentation that would be suitable to the course. This requires an element of openness. The students are to be informed in advance about the nature of assessment and the procedures. However the tests are compulsory. Test I may be for one hour duration. The pattern of question paper will be decided by the respective Faculty. Internal Assessment – I will carry 10% of marks of the entire course.

Internal Assessment – II will be held after 70 working days for the syllabi covered between Seventh and Eleventh weeks.

Internal Assessment – II will be conducted with a variety of assessment tools. It will also have an element of openness. The students are to be informed in advance about the nature of assessment and the procedures. However the tests are compulsory. Test II may be for three hours duration. The pattern of question paper will be decided by the respective Faculty. Internal Assessment -II carries 10% of marks of the entire course.

There will be one end semester examination of 3 hours duration in each course. The End Semester Examination will cover all the syllabus of the course for 75% of marks.

Evaluation

Evaluation will be done on a continuous basis. Evaluation may be by objective Type Questions, Quiz, Short Answers, Essays or a combination of these, but at the End Semester Examination it has to be a written examination.

The performance of a student in each course is evaluated in terms of Percentage of marks (PM) with a provision for conversion to Grade Point (GP). The sum total performance in each semester will be rated by GPA while the continuous performance from the 2nd Semester onwards will be marked by (OGPA).

Marks and Pass Minimum

A Student cannot repeat the Internal Assessments I and II. However, if for any compulsive reason the students could not attend the test, the prerogative of arranging a special test lies with the teacher in consultation with the Head of Department.

A minimum of 50% marks in each course is prescribed for a pass. A student has to secure 50% minimum in the End Semester Examination.

If a candidate who has not secured a minimum of 50% of marks in a course shall be deemed to have failed in that course.

The Student can repeat the End Semester Examination when it is offered next in the subsequent odd / even semester till the regulations are in force. However, a candidate cannot move to the next semester if he/she has more than six papers as arrears at any point of time.

A candidate who has secured a minimum of 50 marks in all the courses prescribed in the programme and earned a minimum of credits will be considered to have passed the Master's Programme.

Grading

A ten point rating scale is used for the evaluation of the performance of the student to provide letter grade for each course and overall grade for the Master's Programme.

Marks	Grade Point	Letter Grade	Class
90+	10	S	Exemplary
85 – 89	9.0	D++	Distinction
80 – 84	8.5	D+	Distinction
75 – 79	8.0	D	Distinction
70 – 74	7.5	A++	First Class
65 – 69	7.0	A+	First Class
60 – 64	6.5	A	First Class
55 – 59	6.0	B	Second Class
50 – 54	5.5	C	Second Class
49 or Less	–	RA	Reappear

The Successful candidates are classified as follows.

I Class – 60 % Marks and above in overall percentage of Marks (OPM)

II Class – 50 – 59% Marks in overall percentage of marks.

Candidates who obtain 75% and above but below 90% of marks (OPM) shall be deemed to have passed the examination in FIRST CLASS (Distinction) provided he / she passes all the courses prescribed for the programme at the first appearance.

Candidates who obtain 90% and above (OPM) shall be deemed to have passed the examination in FIRST CLASS (Exemplary) provided he / she passes all the courses prescribed for the programme at first appearance.

The maximum of 100 marks to each course is distributed as 75 marks for End semester Examination and 25 marks for Internal Assessment . For Internal Assessment the break up of 25 marks shall be as follows:

Test	(I &II)	---	10 Marks
Assignments		---	5 Marks
Case Study / Seminar		---	5 Marks
Attendance		---	5 Marks

(90% and above -5; 80-89 % -4; 70-79% - 3 marks)

Course-Wise Letter Grades

The percentage of marks obtained by a candidate in a course will be indicated in a letter grade.

A student is considered to have completed a course successfully and earned the credits if he / she secures an overall letter grade other than RA. A letter grade RA in any course implies a failure in that course. A course successfully completed cannot be repeated for the purpose of improving the Grade Point.

The RA grade once awarded stays in the grade of the student and is not deleted even when he / she completes the course successfully later. The Grade acquired later by the student will be indicated in the grade sheet of the odd / even semester in which the candidate has appeared for clearance of the arrears.

If a student secures RA grade in the Project Work/ Field work / Practical Work / Dissertation , either he / she shall improve it and resubmit it if it involves only rewriting incorporating the clarifications of the evaluators or he / she can re-register and carry out the same in the subsequent semesters for evaluation.

ANNAMALAI UNIVERSITY
DEPARTMENT OF ECONOMICS
M.A. ECONOMICS - FIVE YEAR INTGRATED PG PROGRAMME
2018-2019 on wards

Semester	Course No.	Course Code	Course Title	Course Type	Credit	University Exam. Marks	Internal Marks	Total Marks
I	1.	ITAC 11	1. Part-I: Language Tamil /IHIC- Hindi /IFRC-French	Language	3	75	25	100
I	2.	IENC 12	2. Part-II English: English Through Literature I: Prose	Language	3	75	25	100
I	3.	IECC 13	3. Principles of Economics	Core	5	75	25	100
I	4.	IECC 14	4. Basic Statistics	Core	4	75	25	100
I	5.	IESC 15	5. Environmental Studies	Core	3	75	25	100
I	6.	IECA 16	6. Principles of Commerce (Commerce)	Allied	3	75	25	100
			Total		21	450	150	600
II	7.	ITAC 21	1. Part-I: Language Tamil /IHIC- Hindi /IFRC-French	Language	3	75	25	100
II	8.	IENC 22	2. Part-II English: English Through Literature II: Poetry	Language	3	75	25	100
II	9.	IECC 23	3. Microeconomics	Core	4	75	25	100
II	10.	IECC 24	4. Macroeconomics	Core	4	75	25	100
II	11.	IECC 25	5. Economic History and India (1857-1947)	Core	4	75	25	100
II	12.	IECA 26	6. Principles of Sociology (Sociology)	Allied	3	75	25	100
			Total		21	450	150	600
III	13.	ITAC 31	1. Part-I: Language Tamil /IHIC- Hindi /IFRC-French	Language	3	75	25	100
III	14.	IENC 32	2. Part-II English: English Through Literature III: Drama	Language	3	75	25	100
III	15.	IECC 33	3. Mathematical Methods- I	Core	5	75	25	100
III	16.	IECC 34	4. Economics of Agriculture	Core	4	75	25	100
III	17.	IECC 35	5. Entrepreneurial Development	Core	4	75	25	100
III	18.	ICAC 36	6. Computer and Its Applications	Core	3	75	25	100
III	19.	IECA 37	7. Principles of Population Sciences (Population Studies)	Allied	3	75	25	100
			Total		25	525	175	700
IV	20.	ITAC 41	1. Part-I: Language Tamil /IHIC- Hindi /IFRC-French	Language	3	75	25	100
IV	21.	IENC 42	2. Part-II English: English Through Literature IV: Short Story	Language	3	75	25	100
IV	22.	IECC 43	3. Money and Banking	Core	4	75	25	100
IV	23.	IECC 44	4. Development Economics	Core	4	75	25	100
IV	24.	IECC 45	5. Mathematics Methods-II	Core	4	75	25	100
IV	25.	IECC 46	6. Economic Statistics	Core	4	75	25	100
IV	26.	IECA 47	7. Principles of Public Administration (Political Science)	Allied	3	75	25	100
			Total		25	525	175	700
V	27.	IECC 51	1. Economics of Social Issues	Core	5	75	25	100
V	28.	IECC 52	2. Managerial Economics	Core	4	75	25	100
V	29.	IECC 53	3. Industrial Economics	Core	4	75	25	100
V	30.	IECC 54	4. Energy Economics	Core	4	75	25	100
V	31.	IECC 55	5. Basic Econometrics	Core	4	75	25	100
V	32.	IECC 56	6. Rural Development	Core	3	75	25	100
			Total		24	450	150	600
VI	33.	IECC 61	1. International Economics	Core	5	75	25	100
VI	34.	IECC 62	2. Public Economics	Core	4	75	25	100
VI	35.	IECC 63	3. Economics of Infrastructure	Core	4	75	25	100

VI	36.	IECC 64	4. History of Economic Thought	Core	4	75	25	100
VI	37.	IECC 65	5. Economics of Insurance	Core	4	75	25	100
VI	38.	IVEC 66	6. Value Education	Core	3	75	25	100
				Total	24	450	150	600

VII	39.	IECC 71	1. Advanced Microeconomics	Core	5	75	25	100
VII	40.	IECC 72	2. Modern Macroeconomics	Core	5	75	25	100
VII	41.	IECC 73	3. Research Methodology	Core	5	75	25	100
VII	42.	IECC 74-1	4. Urban Economics	Core	4	75	25	100
		IECC 74-2	4. Resource Economics	Core	4	75	25	100
VII	43.		5. Elective Course	Elective	3	75	25	100
				Total	22	375	125	500

VIII	44.	IECC 81	1. Welfare Economics	Core	5	75	25	100
VIII	45.	IECC 82	2. Monetary Theory and Policy	Core	5	75	25	100
VIII	46.	IECC 83	3. Health Economics	Core	5	75	25	100
VIII	47.	IECC 84-1	4. Regional Economics	Core	4	75	25	100
VIII	48.	IECC 84-2	4. Labour Economics					
VIII	49.		5. Elective Course	Elective	3	75	25	100
				Total	22	375	125	500

IX	50.	IECC 91	1. International Trade and Finance	Core	5	75	25	100
IX	51.	IECC 92	2. Econometric Methods	Core	5	75	25	100
IX	52.	IECC 93	3. Gender Economics	Core	5	75	25	100
IX	53.	IECC 94	4. Computer Applications in Economics (Practical)	Core	3	75	25	100
IX	54.		5. Elective Course	Elective	3	75	25	100
IX	55.	ISSC 96	6. Soft Skills	Core	3	75	25	100
				Total	24	450	150	600

X	56.	IECC 101	1. Indian Economic Development and Policy	Core	5	75	25	100
X	57.	IECC 102	2. Environmental Economics	Core	5	75	25	100
X	58.	IECC 103-1	3. Modern Economic Development	Core	4	75	25	100
	59.	IECC 103-2	3. Economics of Sustainable Development	Core	4	75	25	100
X	60.	IECC 104	4. Project and Viva-voce	Core	5	75	25	100
X	61.		5. Elective Course	Elective	3	75	25	100
				Total	22	375	125	500

				Grand Total	230	4425	1475	5900
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Inter Department Elective Courses offered by the Department of Economics

Semester	Course No.	Course Code	Course Title	Course Type	Credit	University Exam. Marks	Internal Marks	Total Marks
VII		IECE 75	1. Economics of Climate Change	Elective	3	75	25	100
VIII		IECE 85	2. Economics in Everyday Life	Elective	3	75	25	100
IX		IECE 95	1. Economics Natural Disasters	Elective	3	75	25	100
X		IECE 105	2. Environmental Audit	Elective	3	75	25	100

IECC-13 PRINCIPLES OF ECONOMICS

Unit- I

1. Scarcity and choice
2. Opportunity cost
3. The marginalist principle
4. The efficiency principle
5. The incentive principle

Unit – II The Market Mechanism:

1. Law of demand
1. The law of supply
2. Equilibrium Price
3. Changes in supply and demand
4. The concept of elasticity

Unit –III Economics of Production

1. The production function (basic introduction)
2. Marginal cost and average cost
3. Profit maximization
4. short run and long run costs

Unit– IV Introduction to Macroeconomics

1. Major macroeconomic issues
2. Measuring Economic Activity: GDP
3. Money: Functions of money, role of central bank
4. Inflation: Types of inflation, measuring inflation and costs of inflation
5. Unemployment: Causes and Policy to generate employment
6. Fiscal Policy

Unit– V Introduction to international Economics

1. Comparative advantage and trade
2. Determination of Exchange rates
3. Free trade and protectionism

Textbook:

1. Principles of Economics by Rober H Frank and Ben Bernanke (New Delhi:Tata McGrAw Hill,2007)

Supplementary Readings

1. Economics: Principles and Applications by Gregory Mankiw (New Delhi:Cengage Learning India,2007)
2. Essentials of Economicsby Paul Krugman, Robin Wells and Kathryn Graddy (New York: Worth Publishers, 2011)

IECC-14 BASIC STATISTICS

(Resolved that in Quantitative Papers, at least 50 percentages of Questions must be asked to solve problems in view of increasing Numerical and application skills)

Unit –I: Introduction and Collection of Data

Introduction – Nature and Scope of Statistics – Uses and Limitations of Statistics
Collection of data - Census vs Sampling: Advantages and Limitations – Primary and Secondary data – Methods of collecting Primary Data- Requisites of good questionnaire - Classification and tabulation of data - sources of secondary data.

Unit-II: Classification and Presentation of Data

Classification of data – Rules of Tabulation - Frequency distribution – Methods of constructing class intervals in a frequency distribution – Cumulative frequency distribution - Diagram –types. Graphic representation of data – Histogram – frequency polygon, frequency - Ogive curve.

Unit – III: Univariate Analysis

Measure of central Tendency– Mean, Median and mode – Relative merits and demerits – Requisites of a good average - Measures of dispersion – range, mean deviation, quartile deviation, standard deviation, Co-efficient of variation – Relative merits and demerits - Skewness and Kurtosis

Unit – IV: Bivariate Analysis

Correlation – Karl Pearson’s correlation – Spearman’s Rank Correlation . Simple Regression – equations - curve fitting by methods of Least Squares – distinction between correlation and Regression.

Unit – V: Index Numbers.

Index numbers – Aggregative and relative index – Chain and fixed based index – whole sale index – cost of living index. Analysis of time series – straight line – semi average – moving average – measurement of seasonal variations

Text Books

1. Elhance D.N. (2004) Fundamentals of Statistics (Kitab Mahal, New Delhi).
2. Gupta S.C. (2006) Fundamentals of Statistics (Himalaya, New Delhi).
3. Gupta S.P.: Statistics Methods, (S Chand & Co, New Delhi).
4. Miller R.K. (1995) Introductory Statistics for Business and Economics (St. Martin Bros, New York).

ENVIRONMENTAL STUDIES – IESC 15 (Semester I)

For All the 5 Year Integrated PG Programmes of Arts Faculty

Objective: To introduce the learners to the ecosystem and to create environmental awareness among them. Also the course aims at creating pollution free environment and protecting the natural resources.

Unit: I THE ENVIRONMENTAL SYSTEM

- (1.1) The Services Provided by the Environmental System**
- (1.2) Ecosystems: Food Chains, Food Webs, Ecological Pyramids**
- (1.3) Biochemical Cycles: Hydrological Cycle, Carbon Cycle.**

Unit: II ENVIRONMENTAL DAMAGE- POLLUTION

Sources and impact of

- (2.1) Air Pollution**
- (2.2) Water Pollution**
- (2.3) Land Pollution**
- (2.4) Municipal Solid Waste**
- (2.5) Noise Pollution**

Unit: III RESOURCE DEPLETION

- (3.1) Importance of Forests: Causes and Consequences of Deforestation.**
- (3.2) Bio Diversity: Meaning and Importance-Reasons and Consequences of Biodiversity Decline**
- (3.3) Consequences of Overdrawing Water Resources.**

Unit: IV GLOBAL CLIMATE CHANGE

- (4.1) The Science of Climate Change-The Green House Effect**
- (4.2) Sources and Impact of Climate Change**
- (4.3) Coping with Climate Change**

Unit: V SUSTAINABLE DEVELOPMENT

- (5.1) Concepts and Definition of Sustainable Development (Brundtland Commission Definition)**
- (5.2) Poverty, Population Growth and Environmental Damage**
- (5.3) Policies for Sustainable Development**

Text Book:

1. Erach Bharucha. *Environmental Studies*. New Delhi: UGC, 2004.

References:

1. Kumarasam, K. A. Alagappa Moses and M. Vasanthi. *Environmental Studies*. Trichy: Bharathidasan University Pub., 2004.
2. Rajamannar. *Environmental Studies*. Trichy: EVR College Pub., 2004.
3. Kalavathy S. *Environmental Studies*. (Ed). Trichy: Bishop Heber College Pub., 2004.
4. Richard Wright and Dorothy F Boorse. *Environmental Science: Toward a Sustainable Future*. New Delhi: Prentice-Hall India, 2010.

IECA-16 PRINCIPLES OF COMMERCE

Objectives

1. To make the students understand the working of Commercial Organizations and Business Intermediaries in the present context.

Unit-I: Functions of Banks

1. Types of Deposits – Methods and purposes of lending
2. Special services rendered by Commercial Banks – Bank Balance Sheet.

Unit-II: Elements of Trade

1. Internal and International Trade – Trade barriers – WTO and its functions
2. Chamber of Commerce – Role of Government.

Unit-III: Transport System

1. Surface, Water and Air Transport – Relative Advantages
2. Transport Coordination – Problems

Unit-IV: Fundamentals of Insurance

1. Life Insurance – Marine Insurance – Fire Insurance
2. Governing Principles – Advantages of Insurance.

Unit-V: Consumerism

1. Consumer Rights – Consumer Protection
2. Consumer Councils – Functions

Text Books

1. Bushan Y.K. (2002). *Business Organization and Management*[Sullan Chand & Sons, New Delhi].
2. Radhasamy and Vasudevan (2001). *Theory of Banking*[Sullan Chand & Sons, New Delhi].
3. Jingan M.L. (2002). *International Economics* [Konark Publications, New Delhi].
4. Mishra M.N. (2000). *Insurance – Principles and Practice*[Sullan Chand & Sons, New Delhi].
5. Sheriekar S.A. (2000). *Trade Practices and Consumerism* [Himalaya Pub. House, Bombay].

IECC-23 – MICROECONOMICS

Objectives

1. To equip the students with the basic micro economic concepts and theories with graphic illustrations.
2. To develop the skills of analysis of economic problems.

Unit-I: Introduction

1. Nature and Techniques of Economic Analysis
2. Positive and Normative Economics
3. Inductive and deductive methods – Micro and Macro Economics

Unit-II: Cardinal Approach to the Theory of Demand

1. Marshallian cardinal utility – Law of Diminishing Marginal Utility
2. Consumer's Equilibrium
3. Law of Demand –Determinants of Demand - Elasticity of demand.

Unit-III: Ordinal Approach to the Theory of Demand

1. Ordinal utility – Hicks and Allen – Indifference curve and its Properties
2. Consumer's equilibrium – Price, income and substitution effects – Law of Demand
3. Applications of indifference curve analysis.

Unit-IV: Theory of Production

1. Stages in production – Law of variable proportions – Laws of Returns to Scale – Iso-quants
2. Producer's Equilibrium – Least-cost combination of input - Expansion path
3. Homogenous production function – Cobb Douglas

Unit-V: Cost and Revenue concepts

1. Types of Costs – Fixed and Variable Costs – Average, Marginal and Total Costs
2. Traditional and Modern Cost -Short and Long sum Cost Curves
3. Derivation of cost from production function - Optimum firm.
4. Total, Average and Marginal Revenue.

Text Books

1. Ahuja, H.L. [2006]. *Advanced Micro Economic Theory* [Sultan Chand, New Delhi].
2. Jhingan, M.L. [2004]. *Advanced Micro Economic Theory* [Konark Publishers Private Ltd., Chennai].

Reference Books

1. Ferguson, C.E. [1970]. *Micro Economic Theory* [Homewood, U.S.A.].
2. Koutsiyiannis [2003]. *Modern Micro Economics* [Macmillan Press, London]
3. Kreps, David M. [1990]. *A Course in Microeconomic Theory* [PrincetonUniversity Press, Princeton].
4. Stigler, G. [1996]. *Theory of Price* [4th edition, Prentice Hall of India, New Delhi]
5. Varian, H. [2000]. *Microeconomic Analysis* [W.W.Norton, New York]
6. Watson [1975]. *Price Theory and its uses* [Scientific Book Company, Calcutta.

IECC-24 – MACROECONOMICS

Objectives

1. To make the students understand the basic macroeconomic concepts and theories.
2. To train the students in analyzing economic problems with the help of theoretical foundations.

Unit-I: Introduction to Macro Economic Analysis

1. Nature and Scope of Macro Economics – Importance and Limitations
2. Static – Comparative Static and Dynamic Analysis.

Unit-II: National Income Accounting

1. Concepts and Components of National Income Methods of measuring National Income – Difficulties in Calculation
2. Circular flow model in two, three, four sector economy – Social Accounting Matrix
3. Flow of fund accounting and balance of payment accounts.

Unit-III: Classical Macro Model

1. Classical Theory of Employment – Assumptions
2. Say's Law of Market – Criticisms of classical theory.

Unit-IV: Keynes Macro Model

1. Keynes theory of employment and output – Aggregate supply function – Aggregate demand function – Effective demand
2. Comparison and contrast between classical and Keynes' theory.

Unit-V: Theories of Consumption Function

1. Determinants of Consumption – Keynes' Psychological Law-Short and Long run Consumption Functions
2. Theories – Absolute Income Hypothesis, Relative Income Hypothesis,
3. Permanent Income Hypothesis, Life Cycle Hypothesis

Text Books

1. Jhington M.L., [2004]. *Macro Economic Theory* [Konark Publishers Pvt.Ltd., Chennai].
2. Vaish M.C.,[2007] *Macro Economics Theory*, Vikas Publishing House Pvt.Ltd., New Delhi.

Reference Books

1. Ackley, G. [1978]. *Macro Economics: Theory and Policy* [Macmillan, New Delhi]
2. Dornbusch, R. and F.Stanley [1977]. *Macro Economics* [McGraw Hill Inc., New York]
3. Edmund R. [1985]. *Macro Economic Theory and Policy* [New Delhi, Prentice Hall].
4. Edward Shapiro [1984]. *Macro Economic Analysis* [McGraw Hill Publishing Company Ltd, New York].
5. Lindauer J.H. [1968]. *Macro Economics* [John Wiley and Sons, London]
6. Michael K. Evans [1969]. *Macro Economic Activity* [Harper International Edition, New York].

IECC- 25 ECONOMIC HISTORY OF INDIA: 1857-1947

Objectives

In this course you will learn about the development of the Indian economy under British rule. You will also learn how economic analysis can be used to interpret historical facts.

Unit-I: The Study of Economic History

1. The subject matter of economic history-The link between economic theory and economic history-The importance of economic history
2. Theories of economic history- Hicksian theory -Institutionalist theory- Marxian theory

Unit-II: Mid Nineteenth Century Background

1. Agrarian change
2. Industry and finance
3. Foreign Trade - State of development - An Overview

Unit-III: Agriculture in the Colonial Period

1. Commercialization of agriculture- Factors behind commercialization- Effect of commercialization on cropping pattern- Impact of commercialization on food security in colonial period-Impact of commercialization on the credit market
2. Land market-Growth of land market in the nineteenth century- Tenancy: reasons for increasing incidence of tenancy - Inequality in land ownership: the “polarization” thesis
3. Effect of British rule on agricultural labour
4. Agricultural production: 1890–1947-Explaining low growth rate of agricultural production in colonial period-Forced commercialization” approach- Resource-endowments approach- Class-structure approach

Unit-IV: Industrial Development in the Colonial Period

1. Small scale industry-Distinction between traditional and modern small scale industry - Patterns of change in small scale industry during colonial period-Interpretation of industrial change - De-Industrialization thesis: technological obsolescence, decline in small industry employment and rise in capital intensity - Commercialization thesis
2. Large scale industry-Profile of large scale industry in colonial India - Stages of industrialization- Labour and large scale industry- Reasons for limited development of large scale industry in British India
3. Effect of railways on the industrial sector

Unit-V: The Macro-Economy in the Colonial Period

1. The economic structure of colonial India-Growth and fluctuations
2. Foreign trade and Monetary policy
3. Explaining the slow growth of Indian economy in colonial period- “Drain” theory- Economic structure as cause of stagnation

Text Book

1. Roy, Tirthankar (2000). *The Economic History of India: 1857–1947* (New Delhi: Oxford University Press)

Reference Books

1. Kumar, Dharma (ed.) (1982). *The Cambridge Economic History of India: c. 1757– c.1970*(Vol-2) (Hyderabad: Orient Longman) chapter 1, 4, 6-10, 12
2. Singh, V.B. Ed. (1983). *Economic History of India: 1857-1956* (New Delhi, Allied Publishers) Chapters-1,6,10-13,17-20,23 and 24
3. Chaudhuri, K.N. and C.J. Dewey (Eds.) (1979). *Economy and Society: Essays in Indian Economic and Social History* [Oxford University Press, New Delhi] Chapters-6,8-10,
4. Gadgil D.R. (1973), *The Industrial Evolution of India in Recent Times 1860-1939*(New Delhi, Oxford University Press) Chapters 3,4, 8, 9, 11, 20

IECA– 26 PRINCIPLES OF SOCIOLOGY

Objectives: To make the students understand the social world from sociological perspective and to make them interpret life experience in terms of social facts.

Unit-I

Nature, Scope and development of Sociology - Uses of Sociology- Sociology and other social sciences - History, Economics, Politics, Anthropology, Psychology.

Unit II

Basic concepts of Sociology - Institution -Association - community - Society - Social Interaction -Social Processes -Types of Social Processes

Unit-III

Individual and society - The process of socialization -Agencies of socialization - Various stages of socialization Culture Definition - Elements - Functions - Cultural lag Ethnocentrism.

Unit-IV

Groups - Definition - characteristics - Types of groups - Primary and Secondary groups - Major social Institutions - Family - Marriage - Religion - Education mid Economic Institutions.

Unit-V

Social stratification - Definition - Characteristics - Functions - Forms social control - Definition - Agencies and types of social control. Social change - Factors of Social change Theories of social change.

Text Books

1. Shankar Rao C. N., *Sociology*, New Delhi, S. Chand and Company, 1997.
2. Inkeles, Alex. *What is Sociology? - An Introduction to the Discipline and Profession*. Englewood Cliffs. N. J.' Prentice Hall, 1964.

References

1. Ogburn W.F. and Nimkoff M.F., *A Hand Book of Sociology*, Boston, Houghton Mifflin Company, 1958. /
2. Horton B and Hunt L., *Sociology*, Tokeyo, McGraw Hill Book Co., 1984.
3. Cuber, F. John., *Sociology: A Synopsis of Principles*, Newyork, Appleton Century Crafts Inc., 1955.
4. Shepard, John M., *Sociology*, Minnesota: West Pub. Co., 1980.
5. Johnson, Harry M., *Sociology: Systematic l Introduction*, Newyork, Brace & Co., 1960.

IECC-33 MATHEMATICAL METHODS –I

(Resolved that in Quantitative Papers, at least 50 percentages of Questions must be asked to solve problems in view of increasing Numerical and application skills)

Objectives

1. To teach the meaning and significance of elementary mathematical tools in economics.
2. To make the students understand economic problems clearly with the applications of mathematical tools.

Unit-I: Economic Model

1. Variables, Constants, Equations and its types – Uses and limitations of mathematics in Economics
2. Functions of one or more variables – Linear function, Parabola, Rectangular hyperbola
3. Exponential, Logarithmic power function and homogenous function – Applications in Economics.

Unit-II: Matrix Algebra

1. Determinants – Evaluation and properties
2. Types of matrices – Matrix operations – Addition – Subtraction
3. Matrix Multiplication – Transpose and Inverse [problems]

Unit-III: Applications of Matrix Algebra

1. Solving a system of linear equations – Cramer's rule and Matrix inverse method
2. Leontief's input-output model – Open and closed model components, uses, and limitations
3. Hawkin – Simon conditions for viability of I-O model [problems]

Unit-IV: Rules of Derivatives of $Y = f(X)$

1. Polynomial, Scalar product, Exponential and Logarithmic rules
2. Addition, Subtraction, Product and Division rule
3. Composite function, Inverse and Implicit functions rules without derivation [problems].

Unit-V: Applications of First Order Derivatives

1. Marginal values, growth rate and elasticity
2. Relation between marginal revenue, average revenue and price elasticity – Normal revenue conditions
3. Marginal cost, average cost and cost elasticity – Normal cost conditions [problems]

Text Books

1. Dowling [1990]. *Mathematical methods: Schaum Series* [McGraw, New Delhi]
2. Metha and Madnani [1995]. *Mathematics for Economists* [Sultan Chand, New Delhi]

Reference Books

1. Allen R.G.D. [2001]. *Mathematical Analysis for Economists* [Macmillan, London]
2. Arrow, K.J. and M.Intriugator [Eds.] [1982]. *Hand book of Mathematical Economics* [North Holland, Amsterdam]
3. Chiang, A.C. [1986]. *Fundamental methods of Mathematical Economics* [McGraw Hill, New York]
4. Lancaster, K. [1968]. *Mathematical Economics* [Macmillan, New York]
5. Yamane Taro [1975]. *Mathematics for Economics* [Englewood Cliffs, New Jersey]

IECC – 34 ECONOMICS OF AGRICULTURE

Objectives

1. To make the students aware of the significance of agriculture in the development scenario of the nation.
2. To improve the conditions of agriculture for accelerating the pace of agricultural development in India.

Unit-I: Introduction

1. Scope and Significance of Agriculture
2. Agriculture and Industry - A Comparison
3. Role of Agriculture in India's Development
4. Inter-Sectoral Linkage - An Overview

Unit-II: Agricultural Production and Productivity

1. Production Function Analysis - Relevance to Farm Production Economics.
2. Productivity Trends; Low production and Productivity: Causes, Consequences and Measures.
3. Size - Efficiency relations in Indian agriculture - A.K. Sen's Hypothesis.
4. Role of Technology in Agriculture - Structural Changes in Agriculture.

Unit-III: Agricultural Labour

1. Agricultural Labour: Types – Supply of Labour – Problems
2. Rural Unemployment: Types, consequences and remedial measures.
3. Minimum wages for agricultural workers - An evaluation.
4. Poverty Eradication programmes – Recent Wage and Self-Employment Programmes

Unit-IV: Agricultural Finance and Capital

1. Agricultural Finance: Meaning, Nature, Types, Sources and Problems of Agricultural Finance.
2. Co-operatives in Rural Finance.
3. Role of Commercial Banks and NABARD in Rural Finance.
4. Farm Capital - Meaning, Types, and Marginal Efficiency of Farm Capital and Capital formation in agriculture.

Unit-V: Agricultural Policy

1. Agricultural Price policy - Objectives, instruments and impact.
2. Economic Reforms and Agricultural policy – WTO and Agriculture
3. Agricultural Taxation and its relevance.

Text Books

1. Ashok Rudra (1982). *Indian Agricultural Economics: Myths and Realities* (Allied publishers, New Delhi)
2. Dantwala M.L (ed) (1991). *Indian Agricultural Development since Independence*(Oxford and IBH Publishing company private limited, New Delhi).
3. Vasant Desai B.P (1996). *Agricultural Economics, Rural development* (Jai Prakash North, Meerut)

Reference Books

1. Hanumantha Rao C.H. (1975). *Technological changes and distribution of grains in India agriculture* (Macmillan, New Delhi).
2. Ruddar Datt and K.P.M. Sundharam (2001). *Indian Economy* [S.Chand and Ltd., RamNagar. New Delhi]

IECA-35 ENTREPRENEURIAL DEVELOPMENT

Unit –I: Introduction of Concepts

Concept of Entrepreneur – characters of an Entrepreneur – distinction between Entrepreneur & Manager – function & Types of Entrepreneur. Concept Entrepreneurial ship – Role in Economic Development, Women Entrepreneurial ship – function, problems recent trends.

Unit – II: Entrepreneurial Growth

1. Economic & Non Economic Factors – Role of Government
2. Entrepreneurial Motivation – Theories – factors
3. Entrepreneurial Development – Need, Objectives, Phases Evaluation

Unit – III Projects & Entrepreneur

1. Meaning – Identification – Selection
2. Project Formation: Meaning and Significance - Contents of a Project Report – Formation – Planning Commission Guidelines.

Unit – IV Project Appraisal and Finance

1. Concept - methods of Appraisal
2. Need for financial Planning – Source of finance- - Capital structure –
3. Capitalisation –venture capital – Export Finance

Unit – V Institutional Finance to Entrepreneurs

1. Commercial Bank, Industrial Development of India (IDBI), Industrial Finance Corporation of India (IFCI), Industrial Credit & Investment Corporation of India (ICICI) Unit Trust of India (UTI), State Financial Corporation's (SFCs), State Industrial Development Corporation (SIDCO) Exam Bank of India.
2. Institutional Support to Entrepreneur
 1. National Small Industries Corporation Ltd.(NSIC)
 2. Small Industries Development Organisation (SIDO)
 3. Small Scale Industries Board (SSIB)
 4. State Small Industries Development Corporations (SSICS)
 5. Small Industries Service Institutes (SISI)
 6. District Industries Centre (DICs)

Text Books :

1. Entrepreneurial Development Dr.S.S.Khanka S.Chand & Company Ltd, Ram Nagar New Delhi
2. Poornima M. Charantimath, 2007, *Entrepreneurship Development and Small Business Enterprises*, Pearson Education, New Delhi, 2007
3. Khanka, S.S.2007, *Entrepreneurial Development*, S.Chand & Company, New Delhi, 2007

Reference Books :

1. Vasant Desai,2008 Dynamics of Entrepreneurial Development and Management, Himalaya Publishing House, New Delhi.
2. Robert D. Hisrich, Michael P. Peters and Dean A. Shepherd,2007 Entrepreneurship, Tata McGraw Hill, New Delhi.

COMPUTER AND ITS APPLICATIONS – ICAC 36
For All the 5 Year Integrated PG Programmes of Arts Faculty

OBJECTIVE: To introduce the students to the fundamentals of both software and hardware of a computer and its application in different fields.

UNIT - I

Introduction to Computers: History - Generation of Computers - Storage Devices - Primary Storage Devices (RAM, ROM, PROM, EPROM) - Secondary Storage Devices (Floppy Disk, Hard Disk, Optical Disk and Magnetic Tapes) - Input and Output Devices (Keyboard, Mouse, Joystick, Monitor, Printers and Scanners).

UNIT - II

Introduction to Operating System: Types of Operating System (DOS, Windows) – Operating System Features – Booting (Warm and Cold Booting) - Introduction to Software: Software Types (System Software, Application Software) - Computer Languages (Machine Language, Assembly Language and High Level Language) – Computer VIRUS, WORMS and Vaccines.

UNIT - III

Personal Productivity Software: Introduction to MS-Office - MS-Word - MS-Excel - MS-Power Point - MS-Access.

UNIT - IV

Data Communication: Elements - Computer Network - Types (LAN, MAN and WAN) - Topology - Transmission Media – Guided Medium (Twisted Pair, Coaxial Cable and Fiber Optic Cable) – Wireless Transmission.

UNIT - V

Introduction to Internet: Browser and Its types - World Wide Web (WWW) - Internet Service Provider (ISP) - HTTP - Electronic Mail - Introduction to Multimedia - HTML - Creation of Web Pages.

TEXT BOOKS:

1. **Sanjay Saxena.** *A First Course in Computers.* New Delhi : **Vikas Publishing House, 1998.**
2. **Peter Norton.** *Introduction to Computers.* (4th Edition). Delhi: **Tata McGraw-Hill, 2001.**
3. **Alexis Leon, Mathew Leon.** *Fundamentals of Information Technology.* New Delhi: **Vikas Publishing House, 1999.**

REFERENCES:

1. **V.Rajaraman.** *Introduction to Information Technology.* (2nd Edition). Delhi: **PHI., 2013.**
2. **Neil Randall.** *Teach Yourself the Internet in a Week.*(2nd Edition). Delhi: **PHI., 1996.**
3. **Behrouz A Forouzan.** *Data Communication and Networking.* (2nd Edition). Delhi: **PHI., 2003.**
4. **Tay Vaughan.** *Multimedia: Making It Work.* (8th Edition). Osborne: **McGraw-Hill, 2011.**

IECA -37 PRINCIPLES OF POPULATION SCIENCES

Unit-I Introduction

Population Studies: Nature and scope, Concepts and Definitions, Population Studies and Demography, Development of population Studies in World and India, Inter relationship between population studies and other disciplines.

Sources of Population Data: Population Census-History of Census Taking in India, Vital Statistics Registration Systems-Historical Background-Vital Registration in different countries, Civil Registration in India-Historical Background, Sample Surveys-Important Demographic Sample Surveys conducted in India. Dual Reporting System, Population Registers and International Publications.

Unit-II Population Growth and Distribution

Population Growth: World, Developing and Developed countries. India's Population Growth-Trends and differentials in state and union territories, Factors Responsible for Rapid Population increase in India, Current Population situation and Future Prospects, Population Distribution among developed and developing regions of the world, Factors affecting Population distribution of India, Basic measures of population distribution.

Unit-III Population Structure and Characteristics

Sex and Age Structure: Sex and Age Structure of various countries, Population PYRAMID, Factors affecting Age and Sex Structure of population, Aging Population. Marital status classification of population, Literacy and Educational attainment: Definition, Source of Data Measures used to study Literature, Religious classification of population.

Unit-IV Population Dynamics

Fertility: Terms and Concepts, Factors affecting Fertility: Physiological factors, Social and Cultural factors, Proximate determinants of Fertility, Sources Fertility data, Basic measures of Fertility.

Mortality: Importance of the study, Terms and Concepts Data Sources and limitations, Factors important in the analysis of mortality, Measures of mortality, infant childhood and Maternal Mortality, Components of infant mortality, Levels and Trends and Mortality rates, Global HIV/AIDS Epidemic.

Migration: Importance of the study, Concepts and Definitions, Internal and International migration, Sources of Migration data, Measures of migration: Direct and Indirect methods, Everett Lee's Conceptual Framework for Migration analysis.

Unit-V Population Policy

Concepts and Definition, Types of population Policies, Mortality, Fertility and Migration influencing Policies, World Population Plan of Action, Millennium Development Goals (MDGs), India's Population Policy, Family Planning Programme under various Five Year Plan Periods, Approaches to Family Planning Programme, Reproductive and Child Health Approach, National Population Policy 2000.

References:

1. Bhende Asha, A and Tara Kanitkar, 2012 *Principles of Population studies*, Mumbai Himalaya Publishing House.
2. Bogue, Donald J., *Principles of Demography*, New York: John Wiley and Sons, 1969
3. Baskar D. Misra., *An introduction to the Study of Population*, Madras: South Asian Publishers Pvt. Ltd. 1980.
4. United Nations, *Determinants and Consequences of Population Trends*, Vol.1 (New York: United Nations, 1973).

IECC-43 MONEY AND BANKING

Objectives

To equip the students with analytical tools of Monetary theory. To make the students understand the value of financial Institution in a development economy. To make the students understand the working of monetary systems in India.

Unit I- Theories of Demand for Money

Classical theory of money. Keynesian Monetary theory. James Tobin;s Portfolio analysis of Money Demand. Milton Friedman's Reformulated quantity theory.

Unit II- Monetarism vs Keynesianism

Monetarism and Keynesianism- Comparison. Determinants of money Supply- Money Multiplier. Supply side policies of Inflation.

Unit III – Money Market

Money market and capital market in India. The Role of Financial Intermediaries- Effect of Financial intermediation of the Cost and Availability of finance. Non- banking financial institutions in India.

Unit IV- Banking

Commercial Banks and Multiple credit creation function. Commercial Bank's role after nationalization. RBI's role in Economic Development. Narasimhan Committee Report.

Unit V – Monetary Policy

Monetary policy operation in India- Limitation of Monetary policy. Effects of Debt management policy.

Reference books

1. Basil J. Moore (1965) An Introduction to the theory of Finance, (Oxford University Press)
2. S.K. Basu (1975) Recent Banking Development ,(Chand and Co., New Delhi)
3. Glower R.W.(1955) (Edited) Monetary theory (Penguin Edition).
4. Jhonson Harry (1957)-Essays in Monetary Economics (George Allen Unwin).
5. Sayers R.S. (1920) – Modern banking (Oxford University Press)

Text Books

1. Gupta R.D.(1995) Keynes and post Keynesian Economics, (Kalyani Publishers, New Delhi)
2. Vaish M.C. (2004) Money, Banking and International Trade, (New Age International (P) ltd, New Delhi)
3. Sundaram K.P.M.(1996) Money , Banking and International Trade.(Vikas , New Delhi)
4. Jhingaon M.L.(2004) Monetary Economics , (Konark Publication, New Delhi).

IECC -44 DEVELOPMENT *ECONOMICS*

Objectives

1. The students will be introduced to the economic way of reasoning about economic progress and to traditional and contemporary thinking about the central issues pertinent to poor economics.

Unit – I :Introduction

1. Conceptualizing development: (a) GNP as development indicator. (b) The Human Development Index.
2. The structural characteristics of developing economies
3. Factors of development: (a) Capital accumulation (b) Labour (c) Natural resources (d) Technological Progress (e) Social institutions cultural values and entrepreneurial ability.

Unit – II: Theories of Development

1. Development as growth: (a) Harrod-Domar model (b) Rostow's stages of growth theory (c) Lewis theory (d) balanced and unbalanced growth (e) Neo classical growth theory –Solow Model
 2. Contemporary theory of development: (a) New growth theory: Romer model (b) Underdevelopment as Co-ordination failure (c) Kremer's O-Ring theory of development
- Geography and development: Krugman's theory

Unit – III : Poverty, Inequality and Human Capital

1. Measurement of inequality and poverty-Inverted –U hypothesis -Cause of inequality
2. Investing in education and health-the human capital approach.
3. Education and Development(a) social and private benefits of education (b)Women's education and development
4. Health system in development (a) health and productivity (b) financing health system in developing economics (c) Gender perspective in health care.

Unit – IV: Agriculture and Rural Development

1. The role of agriculture in development
2. Agricultural policy : (a) agricultural taxation (b) pricing policy
3. Risk aversion and uncertainty in subsistence farming-sharecropping and interlocking factor markets
4. Rural urban migration –Todaro model – (a) providers and characteristics (b) theories of informed credit markets: lender's monopoly and default collateral

Unit- V: Policies for development

1. Market and the state in development:(a) The Washington consensus components and critical evaluation (b) The role of state in development (c) market failure state failure and development
2. Trade Policy in development : (a) import substitution (b) export promotion
3. Fiscal and Monetary Policy for Development
4. Financial system in development: (a) the role of financial system in development (b) role of central banks (c) financial liberalization.

Text Books

1. Michael p. Todaro and Stephen C. Smith (2004) *Economic Development*, Pearson Education, Singapore cha- 2, 6,7, 8,
2. Yujiro Hayami (2003), *Development Economics: New DelhiOxfordUniversity Press*

Reference Books

1. Debraj Ray (2009) *Development Economics*, New Delhi, OxfordUniversity Press
2. Jomo K.S. and Ben Fiveth (Eds); (2005), “The New Development Economics: London Zes Books and New Delhi, Tulika Books
3. World Development Reports, (The World Bank1998,2005,2007,and 2009)

IECC- 45: MATHEMATICAL METHODS-II

(Resolved that in Quantitative Papers, at least 50 percentages of Questions must be asked to solve problems in view of increasing Numerical and application skills)

Objectives

1. To equip the students with the knowledge of mathematical techniques
2. To train the students with the applications of mathematics in economics

Unit-I – Partial Derivatives

1. Functions of two or more variables – First and second order partial derivatives – Total differential – Partial elasticity values and growth rates.
2. Economic applications of partial derivatives – Marginal utility – Marginal rate of substitution – Marginal productivity – Marginal rate of technical substitution – Input elasticities – Elasticity of substitution – Euler’s theorem.
3. Properties of homogenous production function – Cobb – Douglas and CES function.

Unit -II – Optimization in Economics

1. First and second order conditions for maximum and minimum of $Y = f(X)$ and $Z = f(X,Y)$.
2. Maximum revenue – Minimum average cost – Maximum profit of a firm.
3. Monopoly with tax and price discrimination – Duopoly and game theory.

Unit –III – Constrained Optimization

1. Lagrange’s multiplier method - First and Second Order Conditions
2. Consumer equilibrium – Slutsky equation.
3. Producer equilibrium – Least cost combination of inputs – Expansion path – Minimizing cost with output constraint – Maximizing profit with output constraints.

Unit –IV – Applications of Integration

1. Basic rules and methods of integration
2. Deriving total from marginal values – Consumer’s surplus and producer’s surplus

Unit –V – Dynamic Analysis

1. First order differential equations – Harrod Domar and Solow growth models – Capital expansion model.
2. Linear and exact difference equations – Cob-Web model

Text Books

1. Chiang, A.C. (2004). *Fundamental methods of Mathematical Economics* [McGraw-Hill, New Delhi]
2. Metha and Madnani (2005). *Mathematics for Economists*[Sultan Chand, New Delhi]
3. Veerachamy, R. (1998). *Quantitative Techniques* [New Age International, New Delhi]

Reference Books

1. Allen, R.G.D. (1984). *Mathematical Analysis for Economists*[MacMillan, London.]
2. Baumol W.J. (1982). *Economic Theory and Operations Analysis*[Prentice Hall, New Delhi]
3. Lancaster, K. (1998). *Mathematical Economics* [MacMillan, New York]
4. Dowling, Edward, T. (2003). *Mathematics for Economists* [Schaum Series, New York]
5. Yamane Taro (1981). *Mathematics for Economists* [Prentice Hall, New Delhi]

IECC- 46 ECONOMIC STATISTICS

(Resolved that in Quantitative Papers, at least 50 percentages of Questions must be asked to solve problems in view of increasing Numerical and application skills)

Objectives

1. To impart knowledge of statistical methods to the students
2. To familiarize them with the applications of statistical techniques to research in Economics.

Unit-I –Probability and Probability Distribution

1. Types of probability and theorems of probability [simple problems only]
2. Random variable, probability distribution and mathematical expectation
3. Theoretical distributions: Properties of binomial and normal distributions

Unit -II – Theory of Estimation

1. Estimate and estimator – Properties of a good estimator
2. Point estimation – Methods of estimation and their properties
3. Interval estimation – Confidence interval for mean and proportion

Unit -III – Testing of Hypothesis

1. Basic concepts: Null and alternative hypotheses, types of errors and critical value
2. Procedure of testing of hypothesis
3. Large sample tests – Tests of significance of mean, proportion, difference of means and difference of proportions

Unit -IV – Exact Sample Tests

1. t- distribution – Properties and Applications\
2. Chi-square test – Testing goodness of fit and Association of attributes
3. F-distribution – Applications - ANOVA one-way and two-way classifications.

Unit -V – Time Series Analysis

4. Component of time series - Additive and multiplicative models,
5. Measurement of trend - Graphic method, Method of semi-averages, method of least squares.
6. Measurement of seasonal variations-method of simple averages , Ratio to trend method, Ratio to moving average method, Link relatives method - Measurements of cyclical and irregular variations.

Text Books

1. Gupta, C.B. (1993). *Statistical Methods* [Vikas Publishing House Pvt. Ltd., New Delhi]
2. Elhance, D.N. (2008). *Fundamentals of Statistics* [Kitab Mahal, New Delhi]
3. Monga, G.S. (2001). *Mathematics and Statistics for Economics* [Vikas Publishing House Pvt. Ltd., New Delhi]
4. Gupta, S.C. (2002) *Fundamentals of Statistics* [Himalaya Publishing House]

Reference Books

1. Croxton and Cowden (1973). *Applied General Statistics* [Prentice Hall of India Pvt. Ltd., New Delhi]
2. Gupta, S.C. and V.K.Kapoor (1996). *Fundamental of Applied Statistics* [Madras Progressive Corporation]
3. R.K.Miller (1995). *Introductory Statistics for Business and Economics* [St. Martin Bros., New York]
4. J.T. Mc Clave(1995). *Statistics for Business and Economics* [Dellen Publishing Co., San Francisco]
5. Prem S. Mann, *Introductory Statistics 5th ed 2004*, John Woley & Sons. Inc.USA.

IECA -47 PRINCIPLES OF PUBLIC ADMINISTRATION

Administration is considered as essential machinery through which every government delivers its service to citizens properly. This paper examines various concepts, theories and issues that are affecting the working of Administration.

Unit-I: Introduction

Meaning and Significance of Public Administration - Public and Private Administration – Development Administration – Approaches to the study of Public Administration

Unit-II: Concepts

Bases of Organisation – Units of Organization: Line, Staff and Auxiliary Agencies – Participative Management: R.Likert and C.Argyris

Unit-III: Theories of Organisational Behaviour

Douglas McGregor's Theory X and Theory Y - Alderfer's ERG Theory – Expectancy Theory – Reinforcement Theory - Equity Theory – Fielder's Contingency Model- Path-Goal Theory of Leadership

Unit-IV: Contemporary Public Administration

Organisation and Methods (O&M) – Models of Governance – Administrative Law – Delegated Legislation – Capacity Building – Post Modernist Public Administration

Unit-V: Issues in Indian Administration

Administrative Reforms- Values in Public Service – Problems of Administration in Coalition regimes - Politicians and Permanent Executives relationship- Citizen – Administration Interface- Corruption and Administration – Disaster Management

Text Books:

1. Rumki Basu, Public Administration: Concepts And Theories, New Delhi: Sterling Publishers Pvt. Ltd, 2004.
2. Bidyut Chakrabarty, Public administration: a reader, New Delhi:Oxford University Press, 2003.
3. Avasthi and S.R.Maheshwari, *Public Administration*, Agra: Lakshmi Narain Agrwal,1996.

References:

1. Nigro, A.Felix *Modern Public Administration*,New York: Harper and Row Publishers, 1980
2. White, D. Leonard, *Introduction to the study of Public Administration*, New Delhi:Eurasia Publishing House (p) Ltd.
3. Bhambhri, *Administrators in Changing Society*, Bureaucracy and Politics in India: New Delhi: Vikas, 1971.

IECC-51 ECONOMICS OF SOCIAL ISSUES

Unit-1: Economics of Environment and Health Care

1. Environment as an economic good
2. Costs and benefits of environmental conservation
3. Economic perspective on pollution control : the concept of optimum pollution
4. Demand for health and health care: “physician induced demand”
5. Economic approach to measuring the value of health (Note: basic ideas only. Details of individual methods not required)

Unit-2: Economics of Crime and Drug Addiction

1. Economic approach to crime: concept of “rational crime”
2. Economic perspective on crime control
3. Drug addiction as a rational choice
4. The economic case for and against legalizing drugs

Unit-3: Family Economics

1. Resource allocation in the household
2. Children as economic goods and family size
3. Economic perspective on marriage and divorce

Unit-4: Poverty and Income Distribution

1. Definition and measurement of poverty (Note: basic ideas only.)
2. Economic perspectives on poverty eradication
3. The market system and income distribution
4. Benefits and costs of inequality

Unit-5: Economics and Culture

1. The economic importance of culture
2. The economic approach to valuing culture
3. The market , state and culture: the impact of the market on cultural life; ‘cost disease’ and its policy implications for

Text Books:

1. The Logic of Life: The Rational Economics of an Irrational World by Tim Harford (new York; random House 2008)
2. The Joy of Economics by Robert J Stonebraker (online book, available free at <http://faculty.winthrop.edu/stonebrakerr/book.htm>)

IECC-52 MANAGERIAL ECONOMICS

Objective

1. The students will learn to apply principles of economics to the business decision making.

Unit-I Managerial Objectives of the Firm

1. Economics and management
2. Managerial models of the firm, (a) Sales –revenue –Maximizing model (Baumol), (b) Managerial utility maximizing model (Williamson), (c) Marris model.
3. Behavioral model to the firm , (a) “ Satisfying” (b) X-Inefficiency

Unit-II Competitive Advantage

1. “Structure conduct – Performance” theory
2. “Generic strategies” for competitive advantage (Michal porter)
3. The “ five forces “ model of competition
4. Sustaining competitive advantage, (a) Economics of scale as barrier to entry- mergers, (b) differentiation as barrier to entry.

Unit-III Pricing Strategies

1. Price discrimination : First degree, Second degree and third degree price discrimination
2. Approached to Pricing: (a) Cost-plus pricing (b) target return pricing (c) product life cycle pricing: skimming strategy-penetration strategy (d) transfer pricing

Unit-IV Non Price Competition

1. Non-Price Competition : Components of the “marketing mix”
2. Promotion in marketing mix: (a) Dorfman-Steiner condition for advertising expenditure (b) Determinants of advertising elasticity of demand
3. Product policy and place in the marketing mix: (a) Product mix decisions (b) Place: selecting a “marketing channel”

Unit-V Investment Appraisal

1. The investment selection process
2. Estimating cash flows
3. Evaluating Investment: (a) payback method (b) net present value method
4. The cost of capital (a) dividend valuation model (b) Capital –asset pricing model

Text Books

1. Howard Davies (1998) : Managerial Economics London : Pitman
2. William Boyes (2005): The New Managerial Economics(Indian Adaptation Edition),New Delhi Biztantra

Reference Books

1. Ahuja H.L.(2008) Managerial Economics (S.Chand & Co, New Delhi)
- Mathur (2008) Managerial Economics (Power Book Mark)

IECC-53: INDUSTRIAL ECONOMICS

Objectives

1. To make the students understand the role of industries and corporate form of organization
2. To gain the knowledge of the new industrial policy and some issues in industry

Unit-I – Basic Concepts, Theory of Firm and Pricing

1. Concepts: Firm, Industrial Combination-Causes-conglomerate, cartel, pattern of industrialization– Economies of scale – Market structure.
2. Objectives of the firm – Growth of firms – Marginal cost pricing vs. full cost pricing – Depreciation –Administered prices.

Unit -II – Industrial Organization

1. Industrial Organization -Structure and change- Relevance of industry studies for public policy.
2. Monopoly and concentration: Concepts –Measures of monopoly – Control of monopoly- Industrial monopoly legislation- The Indian MRTP Act, 1969.

Unit –III – Theories of Industrial Location and Regional Development

1. Industrial location: Factors affecting industrial location - Measures of localization – Weber and Sargent Florence - Regional growth of industry in India
2. Need for balance regional development of Industries- Industrial policy on backward areas.

Unit –IV – Industrial Productivity and Finance

1. Industrial Productivity-Measures –factors affecting productivity- and efficiency.
2. Financial statements: Ratio analysis and interpretation.
3. Industrial finance-sources of finance- Industrial Development Bank of India – IFC- Objectives and functioning – Impact of these institutions.

Unit –V – Issues in Indian Industry

1. Public sector: Rationale-organization – Pricing policies – The question of efficiency – Performance of public sector in India – The concept of joint sector.
2. Industrial problems: Industrial sickness, Evaluation of Industrial reform measures
3. Industrial policy since 1991-Foreign capital and role of MMNC in India.

Text Books

1. Divine, P.J. *et al.*, (1978). *An Introduction to Industrial Economics* 3e [George Allen and Unwin, London]
2. Hay, D.A. and D.J.Morris (1979). *Industrial Economics: Theory and Evidence* [Oxford University Press, Oxford]

IECC-54 ENERGY ECONOMICS

Unit –1: Introduction

- 1 Types of energy
- 2 The importance of energy for the economy
- 3 Energy accounting: energy-commodity flow

Unit – 2: Energy Demand Analyses

1. Three-stage decision-making process for energy
2. Energy demand elasticity
3. Energy intensities
4. Energy demand analysis model MAED model, NEMS approach

Unit – 3: Energy Demand Management

1. Importance of demand side management
2. Load management
3. Energy conservation
4. Fuel substitution

Unit - 4: Energy Supply

1. McKelvey Classification of non-renewable energy resources
2. Extraction of non-renewable energy resources: Hotelling model
3. Renewable electricity supply, characteristics, incentives for renewable electricity: Feed in tariffs, renewable obligations
4. Costs of bio-ethanol supply

Unit – 5: Pricing of Energy Resources

1. Average cost pricing
2. Marginal cost pricing
3. Peak load pricing
4. Pricing of oil and natural gas

Text Books

1. *Energy Economics, Concepts, Issues, Markets and Governance* by Subhes C.Bhattacharya (London: Springer- Verlag 2011)

IECC-55 BASIC ECONOMETRICS

(Resolved that in Quantitative Papers, at least 50 percentages of Questions must be asked to solve problems in view of increasing Numerical and application skills)

Objectives

1. To provide elementary ideas of econometrics
2. To enable the students to understand econometric methods

Unit-I – Introduction to Econometrics

1. Nature and scope of Econometrics – Mathematical Economics versus Econometrics – Desirable properties of an Econometric model – Timeseries and cross-section data.
2. Phases of Econometric research – Specification, estimation, evaluation and application.

Unit -II – The Simple Linear Regression Model

1. OLS method of estimating a SLRM – Equation error – Assumptions – Normal Equations.
2. Statistical significance and application of an estimated model [simple problems].

Unit –III – The Multiple Linear Regression Model

1. Model with two explanatory variables – Classical normal assumptions – OLS method of estimation – Normal equations.
2. R^2 and adjusted R^2 – Partial correlation coefficients – Testing the significance of estimators – Prediction solving problems using intermediate results.
3. Multicollinearity problem of estimation – Meaning, sources, consequences, tests and remedial measures.

Unit –IV – Functional Forms of Regression

1. Non-linear equations reduceable to linear form – log-linear model – Polynomial models.
2. Engel's demand function – Consumption function – Investment function
3. Cobb-Douglas production function – Testing for non-linearity – Testing the stability of regression coefficients [simple problems with intermediate results]

Unit –V – Problems in Regression

1. Heteroscedasticity – Meaning, sources, consequences, tests and solutions.
2. Auto-correlation – Meaning, sources, consequences, tests and solutions.
3. Specification errors – Types and consequences – Measurement errors – Types and solutions.

Text Books

1. Gujarathi, D.N. (2005). Text Book of Econometrics [McGraw-Hill, New Delhi]
2. Koutsiyiannis, A. (2002). *Theory of Econometrics*[MacMillan, London]
3. Madnani, G.M.K. (2006). *Introduction to Econometrics* [Oxford IBH Pub. Co., New Delhi]

Reference Books

1. Johnston, J. (1991). *Econometric Methods* [McGraw-Hill, New York.
2. Klein, L.R. (1972). *An Introduction to Econometrics* [Prentice Hall, New Delhi]
3. Lange, O. (1978). *An Introduction to Econometrics* [MacMillan, New York]
- Madalla, G. (1998). *Econometric Methods*[McGraw-Hill, New Delhi]

IECC-56 RURAL DEVELOPMENT

Objectives

1. To teach the students various issues of rural development
2. To understand the rural problems of to evaluate the rural development programme.

Unit-I -Introduction

1. Concepts, Pattern of Development - Pattern of Planning
2. Indicators of rural development
3. Features of the process of development in different sectors

Unit-II - Development Issues

1. Poverty, inequality, unemployment and Regional Disparities
2. Land Reform measures – Size of land holding, better utilization of inputs
3. Rural Industrialization - Small scale and Cottage industries – Economic reforms

Unit-III - Institutional and Organisational Changes

1. Panchyat Raj and Co-operatives
2. NGO's and People participation – Self Help Groups
3. Social and Welfare Organisation

Unit-IV - Administration and Training Process

1. Development of Administrative set up – DRDA - SIRD - BDO
2. Development of adequate Community leadership
3. Rural Development Programmes Implementation, Monitoring and Evaluation

Unit-V – Planning and Policy

1. Rural Health Care Policy
2. Technology Development Policy
3. Conservation, Promotion of environment and Integrated development

Text Books

2. R.P Misra and K.V Sundaram (1999). *Rural Area Development: Perspective and Approaches* (S.Chand and Co., New Delhi)
3. Y.B. Mathur (1998). *Rural Development in India: 1885 - 1995* (Sage Publications, New Delhi)
4. Katar Singh (2000). *Rural Development Principles, Policies and Management* (Sage Publications, New Delhi)

Reference Books

1. P.R. Dubhasi (1999). *Policy and Performance, Agricultural and Rural Development in Post Independence India.*
2. Shriram Maheswari (2000). *Rural Development in India* (Sage Publications, New Delhi).
3. E.D.Setty (1998).*Rural Development Problem and Prospects* (Darya Ganj, New Delhi).

IECC-61 INTERNATIONAL ECONOMICS

Objectives

- 1 To familiarise the students with the postulates of trade theories and modern institutions.
- 2 To develop analytical skill of the students for identifying international economic problems and relations and the complexities in international trade.

Unit-I - Theories of International Trade

- 1 Adam Smith's theory of Absolute Advantage.
- 2 Ricardo's Comparative Cost Theory.
- 3 Opportunity Cost Theory of Haberler.
- 4 Factor Endowment Theory of Heckscher-Ohlin.

Unit-II - Terms of Trade

- 1 Meaning and types of terms of trade.
- 2 Determinants of terms of trade.
- 3 Terms of trade and Economic development.

Unit-III - Trade and Commercial Policy

- 1 Free Trade Vs Protection.
- 2 Tariff and non-tariff barriers .
- 3 Effects of tariffs and quotas .
- 4 International trade organizations - UNCTAD, WTO .

Unit-IV - Foreign Exchange and Balance of Payments

- 1 Fixed, Flexible, and Floating Exchange Rates - Theories of Exchange Rates: Mint Par Theory, Purchasing Power Parity Theory and Balance of Payments Theory
- 2 Balance of Trade and Balance of Payments - Current and Capital accounts
- 3 Adjustment Mechanism – Depreciation, Devaluation, Export Promotion, Import Substitution and Exchange Control
- 4 IMF and International liquidity
- 5 India's BOP - Devaluation and Export Promotion measures

Unit-V - Regional Economic Integration

- 1 Regional Economic Integration – Customs Union
- 2 European Economic Integration
- 3 New International Economic Order - North-South Co-operation - SAARC

Text Books

- 1 Francis Cherunillam (2004). *International Economics* (Tata McGraw Hill, New Delhi)
- 2 H.G. Mannur (1999). *International Economics* 2nd Revised Edition (Vikas Publishing House Pvt . Ltd.)
- 3 Paul R.Krugman and Maurice Obstfeld (2013). *International Economics: Theory and Policy* (Pearson, New Delhi, India)
- 4 K.R. Gupta (1972). *International Economics* (Adma Ram and Sons, New Delhi)
- 5 D.M. Mithani (2002). *Introduction to International Economics* (Vora & Co Publishers, Bombay)

Reference Books

1. Charles P. Kindleberger (1953). *International Economics* (Richard D. Irwin, INC, U.S.A)
2. Lorie Tarshish (1955). *Introduction to International Trade and Finance* (John Wiley & Sons, INC, U.S.A.)
3. Charles P. Kindleberger (1962). *Foreign Trade and the National Economy* (The Carl Purington Rollins Printing, Yale University)
4. R.F. Harrod (1952). *International Economics* (Cambridge University Press, London)

IECC-62 PUBLIC ECONOMICS

Objectives

1. To make the students appreciate relative roles of Government and market in resource allocation from a theoretical perspective.
2. To teach the students the working of the fiscal policy with emphasis on tax structure, debt management in the context of federal setup.

Unit – I Introduction

1. Role of public finance - Major Fiscal functions.
2. Private and Public goods – Mixed goods – Merit goods- Social goods-Market failure Public goods and externalities.

Unit – II Public Expenditure

1. Theories of Public Expenditure – Musgrave – Wagner - Peacock Wiseman– Growth of Public Expenditure – Canons and Evaluation of Public Expenditure.

Unit – III Taxation and Public Debt

1. Direct and Indirect taxation – Canons and Principles of Taxation – Theory of optimal taxation – modern theory of incidence.
2. Classification and Sources of public debt – Burden of public debt – Principles of public debt – Methods of repayment of public debt – Compensatory aspects of public debt policy.

Unit – IV Fiscal Policy and Fiscal Federalism

1. Objectives and Instruments of Fiscal policy – Compensatory Fiscal policy – Fiscal policy for Economic stability and growth– Effectiveness of fiscal policy.
2. Fiscal federalism – Role of finance commission – Principles – Recommendations of the latest Finance Commission – Transfer of resources from Union and States and States to Local Bodies.

Unit – V Indian Public Finance

1. Financial Autonomy in India – Tax Reform proposals of Kelkar Committee.
2. Tax structure and Working of Fiscal federalism in India – Resource transfer from union to State– Value Added Tax – MVAT- goods and service Tax (GST)
3. Fiscal consolidation in India since 2001-2002 – Fiscal responsibilities of central and state.
4. Central and State government Budgets – Issues of fiscal deficit
5. Fiscal policy and Economic downturn : Fiscal correction versus additional Stimulus

Text Books

1. Richard A Musgrave and Peggy B. Musgrave (1980). Public Finance in Theory and Practice [New Delhi]
2. Singh S.K.(2004) , Public Finance in theory and Practice (S.Chand & Co)
3. Sundaram, K.P.M & Andley K.K. (1998) Public Finance in theory and Practice S.Chand & Co)

Reference Books

1. Kavita RaoR. (2004). Impact of VAT Central & State Finance, EPW No :26
2. Kelkar V (2002), “Indian Tax Reform Report of a Survey”. Ministry of Finance.
3. Lekha Chakravarthy (2008) “ Analysing the Raguram Rajan Committee Report on Finance Sector Reforms” EPW 43 (25): 11-14 June -21-27.
4. Raja J Chellaiah (1960). “Fiscal Policy in Underdeveloped Countries: With Special Reference in India” [George Allen And Unwin Ltd, London]
5. Reddy Y.V. (May 2008): Fiscal Policy & Economics Reforms (NIPEP) New Delhi.
6. Shankara Acharya (2006) “30 years of Tax Reform in India” EPW (April)

IECC-63 ECONOMICS OF INFRASTRUCTURE

Objectives

1. Infrastructure is a growing sector in the Indian economy. This course introduces the students to the various theoretical and policy dimensions of the economics of infrastructure in India.

Unit-I Introduction

1. The role of infrastructure in development
2. infrastructure as a public good
3. Overview of infrastructure sector in India- Physical, Social and Financial
4. infrastructure policy in India , the shift towards Public Private Partnership

Unit-II Regulation of Infrastructure

1. The need for regulating infrastructure-Principles of good regulation, regulatory strategies, regulatory institutions and enforcement of regulations.
2. Theories of regulation: a) public interest theories , b) private interest theories, c) institutionalist theories – Measuring efficiency in Infrastructure regulation
3. Methods of regulating quality-Regulation in context of globalization and international competition.

Unit-III Competition and Pricing in Infrastructure Sector

1. Competition versus regulation in provision of infrastructure facilities- Competition and sector – specific regulation.
2. Creating competition in infrastructure industries- Public private partnerships for infrastructure development
3. Price setting in infrastructure sector, a) price setting for natural monopolies, b) rate of return price regulation, c) Price capping, d) peak load pricing

Unit-IV Economics of Transport Infrastructure

1. Competition in the transport sector , a) Creating a competitive transport sector , b) Competitive market forms, “ competition in the market” and “ competition for the market”
2. Private financing of transport infrastructure
3. Railway infrastructure. a) Alternative regulatory frameworks for railway infrastructure, b) price regulation in railway.
4. Road transport , a) creating competition in road transport , b) “ para –transit”
5. Highways infrastructure, a) alternate organizational structure for highways. B) Private participation and risk allocation.

Unit –V Electricity, Telecommunication Infrastructure

1. Regulation of electricity sector, a) Economic rationale for regulating electricity sector , b) regulatory strategies and enforcement methods in electricity sector-Electricity pricing in India- Electricity act 2003.
2. Regulation of telecommunication sector , a) The need for and aims of telecom regulation- TRI, b) regulatory strategies and enforcement methods.
3. Theory and practice of universal telecommunications service in India.-Internet pricing strategies

Text Books

1. Dash L.N. Economics of Infrastructure
2. The Economic Regulation of Transport Infrastructure Facilities and service. The united Nations, Economic and Social Commission for Asia and the Pacific, 2001

Reference Books

1. India Infrastructure Report (OxfordUniversity Press, New Delhi)
2. Infrastructure Development Report (UNDP)
3. Kaushik Basu and A.Martein , Eds (2009) The oxford Companion to Economics , (New Delhi OUP)
4. Navroz K.Dusbash (2008) “ Independent Regulatory Agencies: A Theoretical Review with Reference to Electricity and Water in India “ EPW Oct,4th , No.35, 43-54.
5. Roger G. Noll and Scott J. Wallaten (2006) “ Universal service Obligations in Telecommunications” India Policy Forum 2005-2006, 255-274.
6. The World Bank (1994): The World Development Report 1994: Infrastructure for Development.

Revised

IECC- 64 HISTORY OF ECONOMIC THOUGHT

Objectives

1. To teach the students contributions of various schools of economic thought.
2. To make them gain an appreciation for the Indian economic thought.

Unit – I: Pre-Classical Thought

1. Mercantilism: Main Principles.
2. Physiocracy: Natural order – Agriculture and net product – Social classes.

Unit – II: Classical Economists and Marx

1. Adam Smith – Division of labour – Theory of value– Laissez faire – Canons of Taxation.
2. Ricardo: Theory of Rent - Comparative advantage theory of trade.
3. Malthus: The Principle of population – Proposals to check population growth – Ricardo- Malthus controversy on Say's law of markets.
4. Marx-Theory of surplus value -Breakdown of the capitalist system

Unit – III:Neo-Classical and Institutional Thought

1. The Marginalist revolution
2. Marshall:Time Period-Partial Equilibrium-Consumer's Surplus-Representative Firm - Significance of Marshall in the Evolution of Economics.
3. Institutional Economics: Veblen: Conspicuous Consumption – Theory of Leisure Class- The Workmanship and Predatory Instincts.

Unit – IV: Keynesian Revolution and Modern Thought

1. Keynesian Revolution
2. Schumpeter's Theory of Development;
3. New classical Economics –Rational Expectation hypothesis.

Unit – V: Indian Economic Thought

1. Naoroji drains theory.
2. Gandhian Economics: Sarvodaya – Trusteeship – Views on Industrialisation.
3. Ambedkar – Contribution is to monetary economics.
4. Amartya Sen's Theory of Human Well being .
5. Economic Policies in Koutalya's Arthasasthra

Text Books

1. Agmar Sandmo (2012), Economics Evolving, Harvard University
2. Ganguli, B.N. (1977). Indian Economic Thought :(Tata McGraw-Hill, New Delhi.)

Reference Books

1. E.K. Hunt (2007), History of Economic Thought, Eastern Economy Edition, New Delhi

IECC-65 ECONOMICS OF INSURANCE

Objectives:

1. To teach the students the importance of insurance as a means of reducing uncertainty and risk in regard to personal and business activities.
2. To give a fairly comprehensive view of the subject to the postgraduate students in Economics.

Unit-I: Introduction

1. Meanings and Types of Insurance-Social Vs. Private Insurance: Life Vs. non-life Insurance
2. Classification of life, health and general insurance policies
3. Role of Insurance in Economic development

Unit-II: Risk and Risk Management

1. Uncertainty and risk : Pure risk and speculative risk-Expected utility and the demand for insurance-Moral hazard and insurance demand
2. Essentials of risk management: Elements of risk management-Risk assessment-Risk control and risk financing; Worldwide risk sharing
3. Concept of reinsurance-Types of reinsurance-Reinsurance markets in developing countries.

Unit-III : Insurance Institutions

1. Insurance institutions as financial intermediaries-Insurance institutions as investment institutions.
2. Insurance institutions in Indian capital market
3. Regulations governing investments of insurance institutions in India

Unit-IV :Life and Health Insurance

1. Functions of life insurance-Plans of life insurance-Provisions of policies-Basis of premium and Bonus
2. Individual health insurance-Uses and types of evaluation
3. Principles of underwriting of life and health insurance-Group insurance and superannuation (pension) schemes

Unit-V :General Insurance and Regulation of Insurance

1. Meaning and Types of general insurance-importance of general insurance
2. Fundamentals concepts-Equity, Indemnity, Insurable interest, Physical hazard, Moral hazard, Policy endorsements conditions-warranties
3. Purpose of government intervention-Insurance Regulation and Development Authority (IRDA) in India

Text Books

1. Black K.Jr and H.D.Skipper Jr. (2000) Life and Health Insurance,Prentice Hall,UpperSaddleRiver New Jersey
2. Finsinger,J.and M.V.Pauly (Eds.)(1986),The Economics of Insurance Regulation : A Cross National Study, Macmillan London
3. Insurance Institute of India, Life Assurance Underwriting,(IC-22), Mumbai
4. Benjamin,B.(1991),General Insurance Heinemann, London
5. Drofman,M.S.(1994) Risk and Insurance, Prentice Hall, Englewood-Cliffs.
6. Insurance Regulation and Development Authority (2001),IRDA Regulations New Delhi

Reference Books

1. Dionne, G. and S.E. Harrington (Eds) (1997), Foundations of Insurance Economics, Kluwer Academic Publishers, Boston
2. Elliot M.W., B.L. Webb, H.N. Anderson and P.R. Kensicki (1995), Principles of Reinsurance, Insurance Institute of America, Malvern, pa
3. Williams Jr. C.A. M.L. Smith and P.C. Young (1995), Risk Management and Insurance, McGraw Hill, New York
4. Outreville, J.F. (1990), The Economic Significance of Insurance Markets in Developing Countries, The Journal of Risk and Insurance, Volume 57, No 3
5. United Nations Conference on Trade and Development (1987), The Promotion of Risk Management in Developing Countries, UNCTAD, Geneva.
6. Meier. K.J. (1988), The Political Economy of Regulations: The Case of Insurance, The State University of New York Press, Albany, N.Y

IVEC 66 -VALUE EDUCATION - (Semester VI)

For All the 5 Year Integrated PG Programmes of Arts Faculty

Objective: To teach the students the purpose of life and to instill in them a moral concern for the society.

Unit - I

- 1. Value education – Meaning – Nature and Purpose**
- 2. Importance of Value Education**

Unit – II

- 1. Basic Features of Rational Ethics**
- 2. Moral Consciousness and Conscience**
- 3. Love – The Ultimate Moral Norm**

Unit – III

- 1. Morality and Freedom - Human Freedom and Moral Responsibility**
- 2. God, Religion and Morality**
- 3. Sanction for Moral Life.**

Unit – IV

- 1. Social Ethics: Value of Life and Human Beings**
- 2. Liberty, Equality and Fraternity**

Unit – V

- 1. Ethical Issues Today: Religious Ethics, Family Ethics**
- 2. Political Ethics - Business Ethics**
- 3. Ethics and Culture.**

References:

- 1. Heroled Titus. *Ethics of Today*. New Delhi: Eurasia Publishing House,1964.**
- 2. Madan, G.R. *Indian Social Problems*. New Delhi: Allied Publishers Pvt. Ltd., 1966.**
- 3. Sharma, R.N. *Principles of Sociology*. Meerut: Educational Publishers, 1968.**
- 4. Bhaskaran, G. *Social Philosophy* .(Tamil). Tanjore: Tamil University, 1955.**
- 5. William K. Frankena. *Ethics*. Delhi: Prentice Hall of India Pvt. Ltd., 1999.**

IECC-71 ADVANCED MICRO ECONOMICS

Objectives

1. To equip the students in micro economic theories with graphic illustrations.
2. To develop the skills of application of the principles to the real world problems.

Unit -I: Market Theories-I

1. Perfect competition – Short run and long run equilibrium of the firm and industry – Price and output determination – Optimum firm.
2. Monopoly – Short run and long run equilibrium - Price discrimination, monopoly control, and regulation – Contestable Market.
3. Monopolistic competition–Chamberlin Model- selling costs - Excess capacity.

Unit -II: Market Theories-II

1. Oligopoly – Non-collusive Models - Cournot - Bertrand - Chamberlin - Edgeworth – Sweezy - Stackelberg
2. Oligopoly - Collusive Models - Cartels and mergers - Price leadership - Base point price system
3. Monopsony – Price and output determination – Workable competition.

Unit -III: Alternative Theories of Firm

1. Duopoly price game-dominant strategy-Nash Equilibrium
2. Full cost pricing rule - Bain's limit pricing theory - Sylos-Labini Model
3. Input-output model-linear programming applications in decision making

Unit -IV: Distribution Theories

1. Neo-classical approach – Marginal productivity theory; Product exhaustion theorem; Hick's technical progress.
2. Modern theory of distribution – Factor Pricing in imperfect product and factor markets.
3. Determination of Wages – Labour supply and wage determination – Role of trade unions and collective bargaining

Unit -V: Economics of Information

1. Informational asymmetry – Market for lemons.
2. Adverse selection – Insurance market and adverse selection – Solution to principal agent problem.
3. Hidden action(Moral Hazard) - Signaling and Screening

Text Books

1. Ahuja H.L (2004) *Advanced Economic Theory* (Sultan Chand Co., New Delhi).
2. Hal R. Varian (2004), *Intermediate Micro Economics* (East-West Press: New Delhi).
3. Jhingan. M.L (2004) *Micro Economic Theory*, (Vrinda Publications- Delhi).
4. Ruffin Roy. J (1992) *Intermediate Micro Economics* (Harper & Collins Publishers- New york).
5. Sundaram K.P.M. and Vaish M.C. (2004), *Micro Economic Theory* (S.Chand

Reference Books

1. Koutsiyannis A. (1978) *Modern Micro Economics*, (Macmillan- London).
2. Ferguson C.E. (1970) *Micro Economic Theory*, (Homewood, U.S.A).
3. Gisser Michall (1978) *Introduction to Price Theory*, (International Text Books Co.),
4. Salvatore, Dominick (2004), *Micro Economic Theory* (Tata Mcgraw Hill-New Delhi).
5. Watson (1975) *Price Theory and its uses*, (Scientific Book Company , Calcutta).

IECC-72 - MODERN MACROECONOMICS

Unit-1: Modern Keynesian Macroeconomics:

1. Central propositions of Keynesian macroeconomics
2. Mundell-Fleming model
3. Minsky's financial instability hypothesis
4. The Great Recession and the revival of Keynesian macroeconomics

Unit-2: The New Classical Macroeconomics

1. Assumptions of Rational Expectation Hypothesis
2. Policy Ineffectiveness Theorem
3. Aggregate supply hypothesis
4. Policy implications of new classical approach

Unit-3: Real Business Cycle Theory

1. Source of Productivity shocks in Real Business Cycle Theory
2. Stabilisation Policy and Unemployment
3. Role of money in Real Business Cycle Theory'.
4. Policy implications of real business cycle theory

Unit-4: New Keynesian Macroeconomics

1. Core propositions of new Keynesian macroeconomics
2. Wage and Price Rigidities
3. New Keynesian business cycle theory
4. Policy implications of new Keynesian macroeconomics

Unit-5: Austrian Macroeconomic Theory

1. Basic Principles of Austrian Economic Theory
2. Austrian Theory and Business Cycles
3. Policy Implications of Austrian Theory

Textbook

Business Cycle Economics by Todd A. Knoop (Santa Barbara, California: Praeger)

Reference Book

Modern Macroeconomics : Its origins, development and Current State by Brian Snowden and Howard R Vane (Cheltenham and Massachusetts Edward Elgar 2005)

IECC-73 – RESEARCH METHODOLOGY

Unit-1: Introduction

1. Meaning and Objectives of research-significance of research-Research Methods Vs Methodology-scientific Method-Criteria of Good research
2. Research Problems-Components needs and technique of defining research problems
3. Types of research: Descriptive, Analytical, Fundamental, Applied, Quantitative, Qualitative, Conceptual, Empirical –Survey method, Case study method, Action Research
4. Research design: Types and Characteristics of a good research design.

Unit-2: Theory & Hypothesis

1. Role of theory in research
2. Hypothesis-Importance of a Research hypothesis- Sources of hypothesis-Qualities of a good hypothesis- Hypothesis testing.

Unit-3: Collection of Data

- 1 Methods of collecting primary data –Self Administered questionnaire -Interview Surveys-
- 2 Telephone Surveys- Schedules.
- 3 Characteristics of a good questionnaire
- 4 Important sources of secondary data: Census, NSS, CSO,RBI, World Bank
- 5 Precaution in using secondary data

Unit-4: Sampling Design

1. Types of Population-Need for sampling-criteria for relating a sampling procedure
2. Methods of selecting a sample-Probability and Non Probability sampling methods-Determination of Sample size- Characteristics of a good sample design.

Unit-5: Mechanics of thesis writing

- 1 Significance of report writing-Types of research report
- 2 Format of a thesis
- 3 Importance of organization of literature review -Bibliographical citation procedure
- 4 Ethics in Research

Textbook

- 1 R. Paneerselvam(2005), Research Methodology, prentice Hall of India Private Limited, New Delhi
- 2 C.R. Kothari (2002), Research Methodology Vikas publishing House, New Delhi.

Reference Books

- 1 Goode W. J and Hatt: (1952), Methods in Social Research, Mcgraw Hill Book Co, Tokyo.
- 2 Kenneth. D, and Bailey: (1962), Methods of Social Research, Longman's Green Co, New York.
- 3 Enhance. D.N, (1973) Fundamentals of Statistics: Kitab Mahal, Allahabad.
- 4 Gupta. C.B: (1998), An Introduction to Statistical Methods, Vikas publishing House, New Delhi
- 5 Young, Pauline V.,(1960) Scientific Social Surveys and Research 3rd ed., prentice Hall of India Private Limited, New York.
- 6 Louis Cohen, Lawrence Manion and Keith Morrison (2007)., Research methods in Education, six edition Roughage, New York.

IECC-74 (1) URBAN ECONOMICS

Objective

The study of urban economics is intended

1. To make the students understand the economic factors and forces underlying the process of urbanisation.
2. To develop students skill to examine the economic aspects or urban problems.
3. To provide insights into the formation of effective urban policies.

Unit-I The process of Urbanisation

1. Definition of Urban Area- causes of urbanisation.
2. Theories of urban structure and urban growth-Concentric Zone Theory-Central Place Theory-Urban base theory.
3. Features of urbanization in Developing countries.

Unit-II Rural-Urban migration

1. Theories of Rural- Urban migration-Rosent's Law, Lewis-Fei Ranis Model, Lee's Theory.
2. Concept of informal sector and its role in economic development.
3. Factors affecting migration-Economic Factors-Push and Pull factors Social and other factors.

Unit-III Problems of Urbanisation

1. Urban Transportation.
2. Slums, Housing and Urban Renewal.
3. Urban Water supply and Public Health.
4. Urban Financial Problems.

Unit-IV Urbanisation in India

1. 21st Century Urbanisation in India-Growth of Urban Population.
2. Urbanisation without labour absorption in India.

Unit-V Urban Development Policy in India

1. Policies and Programmes under the plans- Integrated Development of small and medium towns.
2. Urban development and Housing Policy.
3. Measures to control urban growth-Decentralisation industry-Growth Centres-Satellite towns.

Text Books

1. Ashish Bose (1989) India's Urbanisation 1901-2001 (New Delhi, Tata McGraw Hill Co.)
2. Francis Cherunillam (1984) Urbanisation in Developing Countries (Bombay, Himalaya Publishing House)
3. Ghanshyam Shah, (1997) Urban Economics (Sage Publications, New Delhi)

Reference Books

1. Brian A and Ravinder Singh, (edited) (1995) Housing the Urban poor, Policy and Practice in Developing Countries, (Sage Publications, New Delhi)
2. Fred Durr, The Urban Economy (London, Index Educational Publishers) 1971.
3. Harris Tordon (1973), Introduction to urban Economic Analysis and policy (New York).
4. Lolyd Rodwin and Associates (1969). Planning urban growth and Regional Development (London: M.T.Press)
5. Mark Garrett, (1996) Transportation Planning (Sage Publications, New Delhi).
6. Robert L. Bish and Robert J. Kirk (1974), Economic Principles and Urban Problems (New Jersey, Prentice Hall Inc)
7. Rohan Paddison and Bill Lever (Edited) (1999), Hand Book of Urban Studies (Sage Publications, New Delhi)
8. William H. Leahy, David L. Mckee and Robert D.D (1970), Urban Economics (New York, The Free Press).

IECC-74-2 RESOURCE ECONOMICS

Objectives

To familiarize students with tools of economic analysis relevant to study about allocation and measurement of natural resources.

Unit-I - Natural Resources in the History of Economic Thought

- 1) Economic definition of natural resources
- 2) Historical perspective-Classical Approach to natural resources - Adam Smith, Thomas Malthus, David Ricardo- Transition to modern analysis- J.S.Mill, W.S.Jevons, Alfred Marshall
- 3) Natural resources and entropy law (Georgescu-Rogen)
- 4) Limits to Growth model: implications and limitations

Unit-II - Management of Renewable Resources

- 1) Definition of renewable resources
- 2) Management of Rainforests- Local , regional and global benefits of rain forests- Economic theories of deforestation-Frontier model- Immiserization model- Sustainable forestry- Forest management for timber value- Forest management for non-timber value - Optimal rainforest area at the national level-State of forests and forestry management in India
- 3) Management of the fishery-The biological approach : Maximum sustainable yield- Static-efficient sustained yield- Dynamic -efficient sustained yield: the discount rate and renewable resource use
- 4) Property rights and management of renewable resources: resource management regimes-State ownership- Privatization- Community management- Open access

Unit-III - Management of Non-renewable Resources

- 1) Definition of Non-renewable resources-Categorization of non-renewable resources: McKelvey classification
- 2) Resource extraction- Hostelling rule, Resource extraction under monopoly, Efficient intertemporal allocations -Under constant marginal extraction cost , without substitute and with substitute-With increasing marginal extraction cost-Exploration and technological Progress
- 3) Scarcity of resources- The economic interpretation of scarcity -Types of resource scarcity - Measuring resource scarcity - The “mineralogical threshold” - Resource lifetime - Unit cost measures - Real prices- Economic rent
- 4) Optimal resource recycling model

Unit-IV - Economics of Bio Diversity

- 1) Meaning of “biodiversity”: Genetic diversity-Species diversity-Ecosystem diversity
- 2) Importance of bio diversity- Direct use value- Ecosystem service value-Non-use value- The causes of bio diversity loss
- 3) Global conversion process- Local market failure- Global market or appropriation Failure- Government or intervention failure- Population growth
- 4) Making choices between species for preservation
- 5) Measures to protect bio diversity-CITES-Bio diversity Bill

Unit-V - Valuation of Benefits of Environmental Resources

- 1) The need for valuation
- 2) Classification of economic value- Use values-Non-use values
- 3) Approaches to valuation-Demand curve approaches-Non-demand curve approaches
- 4) Techniques of Environmental valuation -Production function approach- Discrete choice valuation-Contingent valuation-Travel cost method -Opportunity cost approach

Text Books

- 1) Hanley, Nick, Jason F.Shogren and Ben White (2001): Introduction to Environmental Economics (Oxford:Oxford University Press)
- Unit-II : Chapters 10, 13, Unit-III : Chapter 14,Unit-IV : Chapter 13
Unit-V : Chapter 3

2) Tietenberg, Tom (1984): Environmental and Natural Resource Economics (Scott, Foresman and company)

Unit-II : Chapters 12, Unit-III : Chapter 6

3) Karpagam, M (2006): Environmental Economics: A Textbook (New Delhi: Sterling)

Unit-I, II, III : Chapter 4, Unit-V : Chapter 22

4) Turner, Kerry R, David Pearce and Ian Bateman (1993): Environmental Economics: An Elementary Introduction (Baltimore: Johns Hopkins University Press)

Unit-II : Chapter 15, Unit-III : Chapter 16, Unit-IV : Chapter 21

Unit-V : Chapter 8

Reference Books

1) Pearce, David and Dominic Moran (1994): The Economic Value of Biodiversity (London: Earthscan) Chapters 1-6

2) Barbier, Edward B (1989): Economics, Natural-Resource Scarcity and Development: Conventional and Alternate Views (London: Earthscan) chapter-1

3) Barbier, Edward B, Joanne C. Burgess, Anil Markandya (1991): "The Economics of Tropical Deforestation", *Ambio: Special Issue on Environmental Economics*, April 1991, 55-58

4) Randall, Alan (1991): "The Value of Biodiversity", *Ambio: Special Issue on Environmental Economics*, April 1991, 64-68

5) Tobias, Dave and Robert Mendelsohn (1991): "Valuing Ecotourism in a Tropical Rain-Forest Reserve" *Ambio: Special Issue on Environmental Economics*, April 1991, 91-93

6) Umana-Quesada, Alvaro F (1990): "Economics of Energy and Natural Resources: Review of an

Expanding Field of Transdisciplinary Research ", in Jose Fernando Isaza Delgado and Ashok Desai (Eds) (1990): *Energy Economics* (New Delhi: Wiley Eastern), 8-78

IECE – 75 ECONOMICS OF CLIMATE CHANGE

Objectives

To familiarize the students with the economic aspect of climate change

Unit-1: Introduction

1. The roots of climate change: greenhouse gas emissions and rising global temperature
2. Climate change and economic development: a) climate change–economy transmission mechanisms; b) impact of climate change on human well-being: known and uncertain impacts c) The “ tipping points” of dangerous climate change
3. Impact of climate change on developed and poor economies

Unit-2: Economic Policies for Climate change Mitigation

1. The need for climate change mitigation
2. Economic explanation of climate change: the concept of “market failure” and how it causes climate change
3. Using prices and markets for climate change mitigation: taxes, carbon emissions trading (‘cap-and-trade’) and regulations promoting green technology
4. Ethics of climate change : limits of cost-benefit analysis

Unit-3: Adapting to Climate Change

1. The case for Adaptation to climate change
2. Adaptive management of risk : managing physical, financial and social risks
3. International action and adaptation in developing nations

Unit-4: Natural Resources Management and Climate Change

1. The fundamentals for natural resource management
2. Economics of water use in context of climate change
3. Climate change and efficient management of agriculture and fisheries
4. Sustainable energy

Unit-5: Local and Global Action

1. Economic incentives for “climate smart” Individual action
2. The role of firms in climate change adaptation and mitigation
3. National and International policies for “climate smart” innovation and technology diffusion

Text & Reference Books

1. Nicholas Stern (2010), *A Blueprint For A Safer Planet* London :Vintage Books
2. United Nations development Programme (2007) *Human Development Report 2007/2008: Fighting Climate Change* Available online <http://hdr.undp.org/en/reports/global/hdr2007-2008/>
3. The World Bank (2010) *World Development Report 2010: Development and Climate Change* Full text online : <http://econ.worldbank.org>

IECC-81 WELFARE ECONOMICS

Objectives

1. In this course students will acquire the skills to normatively evaluate economic policies and think deeply about important social issues such as gender equity, income distribution and poverty.

Unit -1: Basic Concepts

1. Positive and normative economics, welfare economics as a normative study
2. Preference orderings
3. utility function: properties of a utility function
4. Interpersonal comparisons of utility: degrees of interpersonal comparability

Unit II: Measurement of Welfare

1. Ordinal measure, merits and demerits of ordinal measure
2. Cardinal measure: interval scale and ratio scale Merits and demerits of cardinal measure
3. Hicks's four measures of consumers' surplus

Unit-III: Definitions of Welfare

1. The preference definition of well-being
2. Utilitarian definition
3. Rawlsian welfare theory
4. Sen's capability approach.

Unit – IV Pareto Criterion and Compensation Tests

1. The Pareto principle and assumptions underlying pareto optimality
2. Conditions for Pareto optimality: efficiency in exchange, efficiency in production and efficiency in product-mix, Edgeworth Box Diagrams.
3. The two fundamental theorems of welfare economics and Theory of second best
4. Compensation tests : a) the compensation criteria of Kaldor and Hicks ;b) Scitovsky paradox and Scitovsky double criterion; c) Little's criterion

Unit-V: Social Choice

1. Bergson-Samuelson social welfare function
2. Types of social welfare functions: utilitarian, egalitarian and Rawlsian SWFs
3. Arrow's impossibility , Resolving Arrow's paradox: single peaked preferences
4. Sen's "paretian liberal" theorem

Textbooks

1. Ng, Yew-Kwang (1983) *Welfare Economics: Introduction and Development of Basic Concepts* London: Macmillan

Reference Books

1. Sen Amartya (2004) *Inequality Reexamined* Delhi:OUP, chapters 3,4,and 8

IECC - 82 MONETARY THEORY AND POLICY

Objectives

1. To equip the students with basic theories of monetary economics
2. To make the students understand the role of financial institutions in a developing economy
3. To educate the students to understand the working of monetary policies in India

Unit – I: Demand for Money

1. Quantity theories of money – Fisher and Cambridge
2. Keynesian monetary theory
3. James Tobin's portfolio analysis of money demand
4. Don Patinkin's Integration– Real Balance Effect
5. Milton Friedman's reformulated quantity theory

Unit – II: Supply of Money

1. Types and determinants of money supply – money multiplier
2. Theories of interest rate – classical – Keynes – Hicks – Hansen.

Unit – III: Money and Capital Market

1. Significance and functions of Money market and capital market
2. Role of financial intermediaries – Effects of financial intermediation
3. Non-banking financial institutions – Gurley and Shaw theory

Unit – IV: Banking

1. Functions of Commercial banks - Credit creation – process and limitations
2. Role of Commercial banks after nationalization – after reforms
3. Role of RBI – Regulation of money supply and credit
4. Narashimham Committee Reports– 1991 and 1998
5. Raguram Rajan Committee Report -2007

Unit – V: Monetary Policy

1. Objectives and Instruments of Monetary policy– Limitations of monetary policy
2. Monetarism and Keynesianism – Comparison - Supply side policies

Text Books

1. Jhingan, M.L. (2005). *Monetary Economics*[Konark Publication, New Delhi]
2. Sundaram, K.P.M. (2003). *Money, Banking and International Trade*[Vikas, New Delhi]
3. Vaish, M.C. (2004). *Money, Banking and International Trade* [New Age International, New Delhi]

Reference Books

1. Gupta, R.D. (1995). *Keynes and Post Keynesian Economics* [Kalyani Publishers, New Delhi]
2. Basil J. Moore (1965). *An Introduction to the Theory of Finance* [Oxford University Press]
3. Basu, S.K. (1975). *Recent Banking Development*[Chand and Co., New Delhi]
4. Johnson Harry (1957). *Essays in Monetary Economics* [George Allen Unwin].

IECC – 83 HEALTH ECONOMICS

Objectives

1. To teach the students the importance of health economics and the role of economics in the health care sector.
2. To teach the principles relating to economic value of human resources besides introducing concepts of health indicators.

Unit -I - Health Economics – Basic Concepts

1. Definition and Dimensions of Health [WHO definition]
2. Meaning and Importance of Health Economics
3. Determinants of Health
4. Input and Output Indicators of Health

Unit -II - Health and Development

1. Income and Health Linkages
2. Concept of Wellbeing – PQLI and HDI
3. Poverty and Health – Occupational Health Hazards
4. Fertility, Morbidity, Mortality and Life Expectancy
5. Nutrition and Health – Mal-nutrition – Under-nutrition

Unit -III - Health as Investment

1. Economics of Public Health
2. Education and Health – Concept of Health Education
3. Capital Formation in Health Care

Unit -IV - Micro-Economics of Health Services

1. Demand for health services - Preference for health care and health cure - Income and Price effects
2. Physician as a price-discriminating monopolist
3. Health Production Function with Illustration

Unit -V - Health in Developing Countries

1. Significance of Health in LDCs
2. Measuring the Burden of Disease - The Concepts DALY and QALYs
3. Challenges for the Future

Text Books

1. Alistair Mc Guire, John Henderson and Gavin Mooney (1988). *The Economics of Health Care: An Introductory Text*. [Routledge and Kegan Paul London and New York. PP. 9-30]
2. Asha A. Bhende and Tara Kanitkar (2001). *Principles of Population Studies* [Himalaya Publishing House, New Delhi]
3. Park, K. (2000). *Park's Text Book of Preventive and Social Medicine*. 16th edition. [M/s Banarsidas Bhanot Publishers, Jalalpur]
4. William Jack (1999). *Principles of Health Economics for Developing Countries, WBI Development studies* [The World Bank, Washington. D.C.]

Reference Books

1. Government of India (1983). *National Health Policy*, New Delhi.
2. Indian Council of Social Science. Research and Indian Council of Medical Research (1981), *Health for All 2002 A.D.* [ICSSR, Delhi]
3. Jean Dreze and Amartya Sen (1998). *Indian Economic Development and Social Opportunity* [Oxford University Press]
4. Michall H. Cooper and Antony J. Culyer (1973). *Health Economics* [Balsimore. Penguin Books Inc]
5. Somkid Kaewsonthi and Alan G. Harding (1993). *Micro Economic Analysis and Applications in the Health Sector, Students Guide* [The Centre for Health Economics Faculty of Economics, Chulalonglorn University]
6. WHO (1986). *South-East Asian Region. SEA/ACMR12/Agenda Item 13. Health Economic Research.* Prepared by Somkid Kaewsonthi [Chuylalongkorn University, Bangkok. Thailand]
7. World Bank (1993). *World Development Report Investing in Health, World Development Indicators* [Oxford University Press, Oxford, PP. 17 – 65]
8. World Bank (2002). David H. Peters, et al. *Better Health Systems for India's Poor. Findings, Analysis and Options. Human Development Network. Health, Nutrition and Population Series* [The World Bank Washington]

IECC-84-1: REGIONAL ECONOMICS

Objectives

1. To teach the theories of regional development from a multidimensional perspective.
2. To make the students understand the policies of regional development.

Unit – 1: Introduction

1. Objectives and scope of regional economic analysis.
2. Regional economic problems – Causes.
3. Economics of Geography – Krugman – Endogenous growth (Lucas and Romer)

Unit – II: Regional Economic Theories – I

1. Theories of Regional Economic Development – Cumulative Causation (Perroux, Myrdal, Hirschman)
2. Export base theory, Central place theory (Christaller), Sector theory (Colin Kuznets), Stages theory (Rostow).

Unit – III: Regional Economic Theories – II

1. Theories of Location – Weber's and Florence
2. Migration and Regional Development – Todaro Model
3. Three dimensions of Regional Development – Density, Distance and Economic Divisions.

Unit – IV: Regional Disparities

1. Regional Disparities – Interstate variations of poverty and unemployment
2. Comparative analysis of industrial development in different stages
3. Agricultural development in different stages.

Unit – V: Regional Planning

1. Regional imbalances and Financial Institutions in India – Inter-state disparity
2. Problems of developing the backward areas – Regional Planning in India.
3. Micro level plans – Special Economic Zone

Text Books

1. Anitakumari (2006), *Balance and Regional Development in India: Issues and policies*, (New Century Publications) .
2. Mishra J and Chakadar Sinha (1988), *Planning and Regional Development in India* (Guarav Publishing House, Jalandhar).
3. Mishra R.P (2002), *Regional Development Planning In India* (Vikas, New Delhi).

Reference Books

1. Friedman, J and W. Alonso Edited (1964) *Regional Development and Planning: A Reader*, (MIT Press, Cambridge).
2. Isard. W (1960), *Methods of Regional Analysis*, (MIT Press, Cambridge).
3. Myrdal G. (1968) *Economic Theory and Under developed Regions*, (Vora, Bombay).
4. Richardson (1960), *Elements of Regional Economics*, (Penguin Books).
5. World Development Report (2009) *Reshaping Economic Geography* (World Bank).

IECC-84-2 LABOUR ECONOMICS

Objectives

1. To familiarize the students with the problems of labour and the stress and strains developed in Industrial economy.
2. To develop the analytical skills of the students identifying the problems of labour and settlement of industrial disputes and evaluate the conditions of Industrial relation.

Unit-I Introduction

1. Concept of Labour and Labour Economics-Labour Problems.
2. Labour Market – Demand and Supply of Labour – Characteristics of labour market in India.
3. Recruitment Procedure and Employment Exchange.

Unit-II Organisation of Industrial Labour

1. Role and functions of Trade Union
2. Theories of Trade Unionism (i) Webbs (ii) KarlMarx (iii) Gandhi
3. Trade Union Movement in India-Recent Trends-Justifications of Strikes and Lockouts.

Unit-III Industrial Disputes and International Labour Organisations(ILO)

1. Industrial Disputes: Causes and Consequences
2. Industrial Disputes in India
3. ILO Purposes-Constitution-Functions-ILO and India.

Unit-IV Industrial Relation

1. Need for Industrial Relation Machinery-Preventive and Curative methods- Collective Bargaining, Arbitration and Adjudications.
2. Industrial Democracy, concept of Workers participation in management
3. Role of State in Industrial Relations.

Unit-V Labour Welfare

1. Labour Welfare concept, significance, classification, Principles and programmes.
2. Concept of Labour in India; Factory Act ,Labour Welfare Legislation in India.

Text Books

1. Pant C.(1978) Indian Labour Problems,(Allahabad,Chaitanya Publishing House)
2. Singh S.S., and Metha S.(1989) Labour Economics,(Ajanta Prakasham New Delhi).
3. Singh V.N.(1980) Industrial Labour in India (Asia Publishing House,Bombay)
4. Tyagi P.B.(1995) Labour Economics and Social Welfare,(Jaiprakash Nath &Co.Meerut)

Reference Books

1. Baholiwal T.N.(1981), Economics of Labour and Industrial Relations,(Sahity Bhawan, Agra)
2. Giri V.V.(1985) Labour Problems in Indian Industry (Asia Publishing House,Bombay)
3. Loster R.K.(1989) Economics of Labour and Industrial Relations (Macmillan & Co,New York).
4. Mehrotra S.M.(1976) Labour Problems in India (New Delhi,S.Chand & Co,Ltd)
Saxena R.C. (1979), Labour Problems and Social Welfare,(K.Nath & Co,Meerut)

IECE-85 ECONOMICS IN EVERYDAY LIFE

Objectives

1. To introduce the economic way of thinking about society.
2. The students will learn to use basic economic reasoning to reflect on a wide range of issues in a society.

Unit – I: Thinking about Prices

1. How are prices determined: The concept of willingness to Pay.
2. Understanding Inflation: Meaning of Inflation and how it is measured in India.
3. Inflation rate and the prices you pay in shops: why they diverge.
4. Application: why prices are higher in some locations than others although the production and selling costs are identical.

Unit – II: Economics of Social Customs

1. Economics of rising age of marriage and declining family size.
2. How economic globalization is changing the Indian family.
3. Economics of gift-giving: why value of gift in kind is higher compared to gift in cash.
4. Application: Reasoning about economic Inequality between men and women

Unit – III: Economics of Social Evils

1. Discrimination: Why discrimination can be “rational” and the economic harm it causes.
2. Pollution: The economic roots of the pollution problem.
3. Addiction: Economic case for legalizing drugs as solution to addiction.
4. Corruption – An Economists Perspective
5. Application: Why prohibition does more harm than good: An Economic Perspective.

Unit – IV: Economics of Arts, Sports, and Science

1. Understanding the declining demand for performing arts from economic perspective.
2. Economics of Sports: Role of economic competition in sporting activity.
3. Economics and Science: What motivates scientific research?
4. Application: How economic Globalization and commercialization enrich Indian music.

Unit – V: National Issues

1. The Union Budget and you – Taxes, Subsidies and Fiscal Deficit
2. How the stock market works – Bulls and Bears
3. The global economic crisis: Its origin and impact on India.
4. Application: Living through an economic downturn.

Text and Reference Books

1. Robert J. Stonebraker (2005), *The Joy of Economics: Making Sense of Life*, Online book available free at <http://www.faculty.winthrop.edu.stonebraker/book.html>
2. Tim Harford (2000), *The Logic of Life: Discovering the New Economics of Everything*, (London: Little)

IECC-91 INTERNATIONAL TRADE AND FINANCE

Objectives

- 1 To familiarize the students with trade theories and modern institutions.
- 2 To develop analytical skill of the students for identifying international economic problems and the complexities in international trade and policy

UNIT – I: PURE THEORY OF INTERNATIONAL TRADE

1. Comparative Cost Theory - Refinements of Comparative Cost Theory.
2. Modern Theory of Factor Endowments – Leontief Paradox.
3. Factor price equalization theorem – Factors Intensity Reversal: The Stolper-Samuelson Theorem and the Rybezynski Theorem.

UNIT-II: RECENT THEORIES OF INTERNATIONAL TRADE

1. Karvi's Theory of Availability – Lindar's Theory of Volume of Trade and demand pattern.
2. Posner's Technological Gap Theory – Vernon's Product Cycle Theory - Kenen's Human capital theory
3. Intra- Industry Trade – Theory of Imperfect Competition - Strategic Theory – External Economies and International Trade.

UNIT-III: BALANCE OF PAYMENTS POLICIES

1. BOP Disequilibrium – Adjustment Mechanism: Elasticity Approach, Absorption approach and Monetary Approach
2. Expenditure changing monetary and fiscal policy – Monetary and Fiscal policies for internal and external balance: The Swan Model and Mundallian Model
3. Expenditure Switching Policies and Expenditure Reducing Policies – Foreign Trade Multiplier

UNIT-IV: FOREIGN AID AND MNCs.

1. Foreign Aid - Types of Foreign aid – Advantages and Disadvantages – Factors determining foreign aid -
2. Foreign Investment – Foreign Direct investment – Types of FDI – FDI Policy of India.
3. Multinational Corporations – Features of Multinational Corporations - Advantages and Limitations of MNCs – MNCs and International Trade

UNIT-V: MANAGING FOREIGN EXCHANGE RISK

1. Foreign exchange risk - Sources of foreign exchange risk – types of exchange rate risk - Transaction risk, Translation risk, Economic risk.
2. Measurement of Exchange Rate Risk - value-at-risk (VaR) model. Methods of managing foreign exchange risk - internal and external techniques.
3. Forward contracts, Money market hedges, Currency futures, Currency Options, Currency swaps.

Textbooks:

1. Francis Cherunillam(2004),International Economics(Tata McGraw Hill,NewDelhi)
2. Paul Krugman and Maurice *International Economics: Theory and Policy* Obstfeld (New Delhi: Pearson, 2013)

References:

1. J.N. Bhagwati *Free Trade Today* (New Delhi: Oxford University Press, 2003),
2. Jeff Madura *International Financial Management* (Mason, Ohio: Southwestern Cengage Learning, 2011)
3. Sarno, Lucio; Mark P. Taylor & Jeffrey A. (2002), *The Economics of Exchange Rates* (Cambridge University Press, Frankel)

IECC 92: ECONOMETRIC METHODS

(Resolved that in Quantitative Papers, at least 50 percentages of Questions must be asked to solve problems in view of increasing Numerical and application skills)

Objectives

1. To teach the students important applications of econometric tools
2. To familiarize the students with econometric model building

Unit-I – Dynamic Econometric Model

1. Auto-regressive model – Distributed lag model – Koyck's partial adjustment.
2. Adaptive expectation – Almon model.

Unit -II – Dummy Variables

1. Meaning and uses of dummy variables – Seasonal Analysis – Dummy independent and dependent variables.
2. Probit, Logit and Tobit models.

Unit –III – Simultaneous Equation Model

1. Structural model – Reduced form model – Recursive model – Simultaneity bias.
2. Identification problem – Rules for identification and choice of econometric methods.

Unit –IV – Simultaneous Equation Methods

1. Reduced form method (or) indirect least squares method of estimation – Methods of instrumental variables.
2. Two stage least squares method – Generalized least squares.

Unit –V – Introduction to Time Series Econometrics:

1. Stochastic Process - Stationary and Non Stationary stochastic process-Unit root stochastic process.
2. Trend stationary and difference stationary stochastic process-Integrated stochastic process - Properties.
3. Unit root tests - Cointegration - Economic Applications.

Text Books

1. Gujarathi, D.N. (2005). *Text Book of Econometrics* [McGraw-Hill, New Delhi]
2. Kalirajan, K.P. (1995). *Applied Econometrics* [Oxford and IBH, New Delhi]
3. Suresh, J. Ghosh (1994). *Econometric Theory and Applications* [Prentice Hall of India, New Delhi]

Reference Books

1. Apte, P.G. (2002). *Text Book of Econometrics* [Tata McGraw-Hill, New Delhi]
2. Carl, F. Christ (1998). *Econometric Models and Methods* [Wiley, New York]
3. Koutsiyiannis, A. (2008). *Theory of Econometrics* [MacMillan, New Delhi]

IECC-93 GENDER ECONOMICS

Objectives

1. To make the students understand the demographic aspects of gender and their role in family
2. To enable students understand the role played by women in rural sector, urban sector and the empowerment of women

Unit -I – Demographic Aspects of Gender

1. Women Studies vs Gender studies – Sex vs Gender –
2. The dimensions of female mortality and morbidity female density- Age Composition – Sex ratio – Missing women – Longevity of Life

Unit -II – Gender and Family

1. Women and the household – Women's paid work and the family – decision making power
2. Domestic role of women – Valuing women's work – Time allocation of Women's work

Unit –III – Gender and Rural Sector

1. Occupational pattern of women's employment – Agricultural occupation and Non-Agricultural Occupation- Faminisation of labour
2. Theories of Labour market -Wage differentials in the labour market – male and female productivity differences – Demand and supply factors

Unit –IV – Gender and Urban Sector

1. Women in organized sector – Women in unorganized Sector -women's employment in service sector.
2. Emergence of women entrepreneurship – Women's business – Rural and Urban Compared.

Unit –V – Gender and Empowerment

1. Economic empowerment – Poverty eradication – HDI - GDI – GEM- Social empowerment –Education, Health and Nutrition.
2. Political Empowerment – Membership in Panchayat Raj Institution, Co-operative institution – Legislature Assemblies in Parliament - Cultural Empowerment

Text Books

1. Ashok Mitra (1980). *Status of women: Household and Non Household Activity*, Bombay, Allied Publications.
2. Krishnaraj. M., R.m. Sundarshan and A. Shariff (1999), *Gender, Population and Development*, Oxford University Press, New Delhi.
3. Nancy David and Loganathan, (1993), *Women and the Economy: Mother Teresa Women's University, Madras.*

Reference Books

1. Agnihotri, S.B. (2000), *Sex ratio in India Population: A Fresh Exploration*, Sage Publications, New Delhi.
2. Dwyer, D. and J. Bruce (Eds) (1988), *A Home Divided: Women and Income in The Third World*, Stanford University press, Stanford.
3. Gulati, S.C (1998), *Fertility in India: An Econometric Analysis of a metropolis*, Sage Publications, New Delhi.
4. Kabeer, N. (1994). *Reversed Realities Gender Hierarchies in /development Thought*, [Kali for women, New Delhi]

IECP-94
COMPUTER APPLICATIONS IN ECONOMICS

Objectives

To equip skill in applying statistical tools to Economics using computers

Unit-I - Text Management with MS-WORD

Creating new Documents –Document template – Typing Text – Editing Text – Insert Text – Go to, Find, and Replace text or word - Formatting of Text – Format painter – Cut and Paste utility - Copying Document/text in the same or Different file or Document – Drag and drop of typed text- creating tables – using auto correct, dictionary thesaurus.

Unit-II - Managing Data Base

EXCEL: The typical worksheet or spread sheet – cell and their properties – formatting cell – text, numbers, currency, accounting, date, time, percentage, scientific – formats.
Formula: using arithmetic and relational operators in a worksheet -Advanced Formulas: sum, count, Average, Max, Min, Product -Using auto format

Unit-III - Graphs and Charts

1. Bar diagrams, pie charts, Area,
2. Building Line Diagrams, Histograms, Scatter plots
3. Frequency Graphs, Ogive, Lorenz curve
4. Time Series

Unit- IV - Data Analysis-I

1. Naming variables - Coding and Recoding of data - Arithmetic calculations with in variables
2. Descriptive Statistics: Frequencies, Descriptive, Explore, Cross Tabulation
3. Compare Means: One sample T- test, Independent Sample T – test, paired sample T test, One way ANOVA
4. Correlation: Bivariate, Partial,
5. Regression: Linear, Curve Estimation, Multiple Regression

Unit-V - Data Analysis-II

- 1 Classification: K-means cluster, Hierarchical cluster, Discriminant function
- 2 Non-parametric Test: Chi-square, Bi-nomial
- 3 Time Series – Exponential Smoothing, Auto regression, Seasonal Decomposition

Text Books

1. Lipschutz M.M. and S. Lipschutz (1982) *Theory and problems of Data processing : Schaum's Outline Series*, (McGraw Hill, New York)
2. Corey Sandler, Tom Badgett, Jan Weingarten (1997) *Office 97 for Windows*(BPB Publications, New Delhi)
3. Andy Field (2000). *Discovering Statistics Using SPSS for Windows – Advanced Techniques for the Beginner* [Sage Publications, New Delhi]

IECE-95 ECONOMICS OF NATURAL DISASTERS

Objectives

1. To make the students understand economic impact of natural disasters.
2. To teach them appropriate economic policies.

Unit – I: Introduction

1. The goal of disaster economic analysis
2. Important terminology-hazard, vulnerability, disaster, disaster risk, mitigation, preparedness, rehabilitation and reconstruction.
3. Types of hazards - Natural hazards- Man made hazards

Unit – II: Economic Effects of Disasters

1. Direct effects-Indirect effects -Secondary effects
2. Consequences of disasters - measurement of consequence -Tangible losses - Intangible losses

Unit – III: Disaster Risk Reduction and Mitigation

1. Quantification of disaster risk: UNDP's Disaster Risk Index.
2. Components of disaster risk reduction –Role of market.
3. Integrating disaster risk in poverty reduction strategy and incorporating disaster risk in economic appraisal.
4. Vulnerability context - Source of Vulnerability - Tools for assessing hazard-induced Vulnerability - Vulnerability indicators.
5. Mitigation of economic and human impact.

Unit – IV: Intervention Policies

1. Differences in intervention for natural and human – made disasters
2. Policy instruments for disaster intervention
3. Interventions for general multi – sectoral disasters - Disasters involving displaced populations - Disasters leading to food insecurity - Disaster expected from climate change.

Unit – V: Finance Options

1. Debt swaps-Triangular food aid.
2. Disaster insurance
3. Revolving funds-Central bank assistance.

Text Books

1. Ahmad, Ayaz: (2003), *Disaster Management*,(Anmol Publications. New Delhi).
2. Ghosh, G.K: (2007),***Disaster Management; Saujanya Books.***
3. **Ross Bull (1994) Disaster Economics, UNDP, Disaster Management Training Programme.**

Reference Books

1. Agarwal S.K:(2006),*Perspectives on Organisational Disaster Management*,(Indian Books).
2. Benson, Charlotte and John Tuigg: (2007), *Tool for Mainstreaming Disaster Reduction* Geneva: Prevention consortium (online ed) (unit-3).
3. Bull Ross: (1994), *Disaster Economics* UNDP, DHA, (online ed) .
4. Institution of Civil Engineers: (1995), *Modalities: Reducing vulnerability to Natural disasters*, (London: ODA.)
5. Kamal Taori: (2007), *Disaster Management Through Panchayat Raj*, (Concept Publishers).
6. Richard Sylves: (2008), ***Disaster Policy and Politics***, (SAGE Publications.)
7. Satish Modh *Citizen's Guide to Disaster Management*. (2006), (Macmillan Press India.)

ISSC 96-SOFT SKILLS

For All the 5 Year Integrated PG Programmes of Arts Faculty

Objective:

To train students in soft skills in order to enable them to be professionally competent.

Unit 1: Soft Skills and Personality Development

Soft Skills: Meaning and Importance - Hard Skills versus Soft Skills - Self Concept: Self Awareness, Self Development and Self Realisation – Power of Positive Attitude – Etiquette and Manners.

Listening: Types of Listening, Effective Listening and Barriers to Listening – Assertive Communication.

Unit 2: Communication Skills

Oral Communication: Forms, Types of Speeches and Public Speaking – Presentation: Elements of Effective Presentation and Use of Visual Aids in Presentation.

Written Communication: Strategies of Writing – Business Letters: Form, Structure and Formats – Types of Business Letters – Memos – Agenda and Minutes.

Non-verbal Communication: Body Language and Proxemics.

Unit 3: Interpersonal Skills

Interpersonal Skills: Relationship Development and Maintenance and Transactional Analysis.

Conflict Resolution Skills: Levels of Conflict and Handling Conflict - Persuasion – Empathy – Managing Emotions – Negotiation: Types, Stages and Skills – Counselling Skills.

Unit 4: Employability Skills

Goal Setting – Career Planning – Corporate Skills – Group Discussion – Interview Skills – Types of Interview - Email Writing – Job Application – Cover Letter - Resume Preparation.

Unit 5: Professional Skills

Decision Making Skills – Problem Solving – Emotional Intelligence – Team Building Skills – Team Spirit – Time Management – Stress Management: Resolving Techniques.

References:

1. Ghosh, B.N. *Managing Soft Skills for Personality Development*. (Ed). New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.
2. Krishna Mohan and Meera Banerji. *Developing Communication Skills*. (2nd Edition). New Delhi: MacMillan Publishers India Ltd., 2009.
3. Neera Jain and Shoma Mukherji. *Effective Business Communication*. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.
4. Rao, M.S. *Soft Skills - Enhancing Employability: Connecting Campus with Corporate*. New Delhi: I.K International Publishing House Pvt. Ltd., 2011.
5. Ashraf Rizwi, M. *Effective Technical Communication*. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2010.
6. Bretag Tracey, Crossman Joanna and Bordia Sarbari. *Communication Skills*. New Delhi: Tata McGraw Hill Education Pvt. Ltd., 2012.

IECC-101 INDIAN ECONOMIC DEVELOPMENT AND POLICY

Objectives

1. To make the students familiar with the issues in Indian economic development.
2. To give an insight into the functioning of the economy through macroeconomic policies and instruments.
3. To train the students with working of diverse economic policies in India.

Module-1: Growth and Structural Change

1. Indian economy at Independence
2. The policy framework: statist policy, transition to market-oriented policy, role of erstwhile Planning Commission And NITI Ayog
3. Two phases of growth (1950-1980 and 1980 onwards), factors underlying turnaround
4. Structural change in Indian economy

Module 2: Agricultural and Industrial Sectors Agricultural Sector

1. Performance of agricultural sector, factors determining agricultural growth
2. Factors underlying food inflation
3. Agricultural price policy and food security
4. Industrial Growth - Industrial growth before and after reforms - Dualism in Indian manufacturing
5. Issues in performance of public sector enterprises and privatisation

Module-3: Fiscal Developments, Finance and External Sector

1. Expenditure trends
2. GST: rationale and impact
3. Evolution of the financial sector in post-liberalisation period
4. External sector performance: emergence of India as major exporter in services, performance of manufacturing sector

Module-4: Poverty and Inequality

1. Measuring poverty in India: Selection of poverty lines
2. Poverty in pre and post liberalization periods
3. Impact of growth on poverty
4. PDS vs cash transfers, feasibility of universal basic income in India
5. Inequality in India in pre and post liberalization periods

Module-5: Social Issues

1. Gender gap in India and trends in female labour force participation rates, factors determining female labour force participation
2. Employment : changing nature of employment in India, "jobless growth"
3. Labour in informal sector
4. India's demographic transition

Textbook

Indian Economy Since Independence Edited by Uma Kapila (New Delhi: Academic Foundation), the latest edition

Supplementary Reading

Economic Survey 2018 and subsequent editions (Government of India: Ministry of Finance)

IECC-102 ENVIRONMENTAL ECONOMICS

Learning Objectives

This course teaches students how to use the economic way of thinking to study environmental issues from the view point of economic incentives and placing monetary values on the environment.

Unit – I: Economy and the Environment

1. The interaction between the economic system and the environmental system –
The services provided by the environmental system to the economic system –
The Material Balance model.
2. Market and Environment : Public goods, externalités, absence of property rights.
3. “Government failure” and environmental damage.

Unit – II: Environmental Policy

1. The socially efficient level of emissions: the concept of optimum pollution.
2. Criteria for evaluating environmental control policies.
3. Command – and-control-policy.
4. “Market based instruments: Pollution taxes, tradable permits, subsidies, cap-and-trade
5. Property rights to internalize externalities: The Coase Theorem.

Unit – III: Environmental Valuation

1. Importance of environmental valuation
2. Cost-Benefit analysis
3. The categories of environmental value.
4. Methods of environmental valuation: Revealed preference methods: Hedonic pricing method, travel cost method:-State preference approach; Contingent Valuation method.

Unit – IV: Natural Resource Economics

1. Types of natural resources.
2. Non-renewable resources a) the McKelvey classification b) Allocating Non-renewable resources: The Hotelling Theorem.
3. Renewable resources – a) Forests: Frontier model and immiserisation models of deforestation; Consequences of deforestation; b) Water: Efficient allocation of sustainable yield”; - Water: Efficient allocation of surface and ground water.
4. Common Property Resources (CPRs) – Characteristics of CPRs -Dissipation of Hotelling rents (“tragedy of the commons”) - Ostrom’s “design principles” for sustainable local CPR governance.

Unit – V: Economic Growth and Sustainable Development

1. Growth and the environment: The environmental Kuznets curve.
2. Sustainable Development: a) weak sustainability and strong sustainability b) The “Hartwick rule” c) “green national accounts”, genuine savings
3. Poverty and environmental degradation
4. Economics of Climate Change: a) economic impact of climate change b) Climate Change Policy: mitigation and adaption c) International action for climate change.

Text Books

1. *Environmental Economics : An Introduction* by Barry C. Field ad Martha K. Field (New York:McGraw-Hill, 2017)
2. *Introduction to Environmental Economics (2001)* by Nick Hanley, J.F.Shogren, and Ben White (London:Oxford University Press,2001)

Supplementary Reading

For Unit 4

Natural Resource Economics: An Introduction Barry C Field (London: McGraw Hill, 2001)

ECC-103-1 ECONOMICS OF SUSTAINABLE DEVELOPMENT

Objectives

This course is concerned with the relationship between economic development, human well-being and environmental quality. You will learn about the various facets of sustainable development - which is one of the most widely discussed issues the world over - how it is defined, measured, and the institutions needed for promoting it.

Unit-I - The Rationale for Integrating “Sustainability” and “Development”

- 1 Distinction between “sustainability” and “development”
- 2 Inadequacy of growth as indicator of welfare
- 3 Environmental basis of economic growth
- 4 Economic development and environmental quality: the environmental Kuznets curve hypothesis
- 5 Negative Environmental and economic patterns of past development strategies

Unit-II - Conceptualizing Sustainable Development

- 1) Basic concepts-Capital stock and sustainability- Types of capital - Substitutability between types of capital- Weak sustainability-Strong sustainability
- 2) Brundtland Commission’s definition of sustainable development-Intergenerational equity- Intragenerational equity-The concept of “needs” -Critique of Brundtland Commission’s definition
- 3) Sustainable development as Non-declining well-being- The concept of “Pareto sustainability”-Distinction between “optimal” development and “sustainable” development -“optimality”, “survivability” and sustainability
- 4) A holistic definition of sustainable development: sustainable development as comprising-Economic sustainability-Environmental sustainability - Social sustainability

Unit-III - Sustainable Development Rules

- 1) Sustainability of free market outcomes
- 2) Placing correct prices on the environment
- 3) Hartwick-Solow rule
- 4) Daly’s “operational principles”
- 5) The “safe minimum standard” rule
- 6) London School approach

Unit-IV - Sustainability Indicators and Measurement

- 1) Global, national and local indicators of sustainability -Prescott-Allen’s Barometer of sustainability-Human Wellbeing Index-Ecosystem Wellbeing Index- Stress Index
- 2) AMOEBA approach
- 3) Green national accounts
- 4) Genuine savings index
- 5) Shadow project approach

Unit-V - Sectoral Policies for Sustainable Development

Institutions for sustainable development -Institutions coordinating human behavior- Market- Government- Civil society

2. Sustainable development in the agricultural sector-Environment and rural poverty- Agricultural biotechnology, poverty and the precautionary principle- Institutions for management of problems related to agriculture - Intensifying the use of land - Intensifying the use of water-Conversion of forests to agriculture
3. Sustainable urban development- Role of cities in sustainable development-Urban environmental problems by level of city development-Institutions for sustainable urban development

Textbooks

- 1) Hanley, Nick, Jason F.Shogren and Ben White (2001): *Introduction to Environmental Economics* (Oxford:Oxford University Press)
Units-I, III,IV : Chapter 6

- 2) **Karpagam,M (2006):** *Environmental Economics: A Textbook* (New Delhi: Sterling)
Unit-I : Chapter 14, Units-II, IV : Chapter 16
- 3) **Turner, Kerry R, David Pearce and Ian Bateman (1993):** *Environmental economics: An Elementary Introduction* (Baltimore: Johns Hopkins University Press) **Unit-II : Chapters 2, 4**

Reference Books

- 1) **World Bank (2003):** *Sustainable Development in a Dynamic World: Transforming Institutions, Growth, and the Quality of Life* (World Development Report 2003) (Washington, DC and New York: World Bank and Oxford University Press) . **Unit 1: Chapter 1; Unit 2: Chapter 2; Unit 5: Chapters 3, 5, 6**
- 2) **Kadekodi, Gopal K(2001): “Environment and Development” in** **Bhattacharya, Rabindra N (ed) (2001):** *Environmental Economics: An Indian Perspective* (New Delhi: Oxford University Press) **162-217 . Recommended for Units 3 and 4**
- 3) **Beckerman, Wilford (1995):** *Small is Stupid: Blowing the Whistle on the Greens* (London: Duckworth) **Recommended for Unit 2**
- 4) **Pearce, David and Jermy J. Warford (1993):** *World Without End: Economics, Environment, and Sustainable Development* (New York: Oxford University Press), **Chapters 1-4. Recommended for Units 3 and 4**
- 5) **Mathew, A Santhosh (2001) “How Sustainable is our Development?” in** **A. Santhosh Mathew (ed) (2002) : Rio, Johannesburg and Beyond: India’s Progress in Sustainable Development** (New Delhi: Orient Longman) **1-15. Recommended for Unit 1**
- 6) **Prasad, K.V. Devi (2001): ” Sustainable Development: Institutions and Practices”, in** **A. Santhosh Mathew (ed) (2002) : Rio, Johannesburg and Beyond: India’s Progress in Sustainable Development** (New Delhi: Orient Longman) , **264-294 Recommended for Unit 5**

IECC- 103-2 MODERN ECONOMIC DEVELOPMENT

Objectives

1. To compare the development performance of the Indian Economy with that of other major nations.
2. To train students in using economic reasoning to understand the development experience of different nations.

Unit – I: Development Experience in India

1. Economic and Non-economic factors in India's Development.
2. Explaining "The Hindu rate of growth" in pre-liberalization period.
3. Economic reforms and high growth rate of Indian economy.

Unit – II: Development Experience of China

1. The development of Chinese Economy under cultural revolution.
2. Economic reforms in China: Transformation of Chinese Economy and Impact of Global recession.
3. Strengths and weaknesses of development strategies of India and China: Dependence on Exports versus domestic market orientation.

Unit – III: Development Experience of Japan

1. Meiji Restoration and emergence of modern Japanese Economy.
2. The factors underlying Japanese economic miracle: Export orientation, non-economic factors.
3. Impact of Asian economic crisis and Global recession on Japanese economy.

Unit – IV: The African Experience

1. The impact of colonialism on African economic development.
2. Economic factors underlying Africa's development performance: Geographical factors, political factors and absence of industrialization.
3. Future development prospects of African nations.

Unit –V: The Economic Development of the West

1. Economic factors behind Western economic prosperity: Property rights, human capital and knowledge.
2. The Industrial Revolution: Why it took place in the West.
3. Non-economic factors in Western Development: Marx Weber's "protestant ethic" theory of Capitalist development, Political structure and separation of church and state.
4. Lessons of Western Development experience for world countries.

Text Books

1. David Landes (1998), *The Wealth and Poverty and Nations*, (New York: Norton).
2. Erik Reinert (2007), *How Rich Countries Got Rich and Why Poor Countries Stay Poor*, (New York: Public Affairs).

Reference Books

1. Bhagawati, Jagadish (2002), *Free Trade Today*, New Delhi: Oxford University Press.
2. Lal, Deepak, (1995), *India in the Global Economy*, New Delhi: Oxford University Press.
3. Thirlwall. A.P. (2006) *Growth and Development*, New York: Palgrave Macmillan.
4. Sachs, Jeffrey (2005), *The End of Poverty*, London: Penguin.

IECE-105 ENVIRONMENTAL AUDIT

Objectives

1. This course is intended to introduce accounting skills to enable decision makers to evaluate the environmental strategy of a firm.
2. The course deals with various facets of environmental accounting such as economic valuation of environment, corporate environmental accounting and green national accounts.

Unit – I: Approaches to Environmental Valuation

1. “Total Economic Value” of the Environment - Cost – Benefit Analysis
2. State Preference Approaches: Contingent Valuation Method
3. Revealed Preference Approaches: Travel Cost & Hedonic Pricing Method.
4. Production Function Approach: Dose-Response Model

Unit – II: Environmental Risk and Environmental Impact Assessment

1. Assessing Environmental Risks - Choice Under Risk - Valuing Risks to life - Regulating Risk
2. Environmental Impact Assessment - Information Gathering - Impact Assessment and Mitigation Measures - EIA Report and Review

Unit – III: Environmental Cost Accounting

1. Full Cost Accounting
2. Internal Environmental Cost Accounting
3. External Environmental Cost Accounting: Internalizing Externalities

Unit – IV: Environmental Information Management

1. Life Cycle Assessment
2. Environmental Share Holder Value
3. Environmental Reporting - Environmental Audit

Unit – V: Green National Accounts

1. Limitations of Conventional National Accounts
2. Genuine Savings - Environmentally Defensive Expenditures
3. Integrated Economic and Environmental Accounting (IEEA)

Text and Reference Books

1. Hanley, Shogren and White (2001) *Introduction to Environmental Economics* (Oxford University Press).
2. Richard Welford (1996) *Corporate Environmental Management*, Chapter 7, 8, and 9.
3. Schaltegger, Buritt and Peterson (2003) *Corporate Environmental Accounting* (Greenleaf Publishing).

ELECTIVE SUBJECTS OFFERED BY THE DEPARTMENT OF ECONOMICS

IECE – 75 ECONOMICS OF CLIMATE CHANGE

Objectives

To familiarize the students with the economic aspect of climate change

Unit-1: Introduction

4. The roots of climate change: greenhouse gas emissions and rising global temperature
5. Climate change and economic development: a) climate change–economy transmission mechanisms; b) impact of climate change on human well-being: known and uncertain impacts c) The “ tipping points” of dangerous climate change
6. Impact of climate change on developed and poor economies

Unit-2: Economic Policies for Climate change Mitigation

5. The need for climate change mitigation
6. Economic explanation of climate change: the concept of “market failure” and how it causes climate change
7. Using prices and markets for climate change mitigation: taxes, carbon emissions trading (‘cap-and-trade’) and regulations promoting green technology
8. Ethics of climate change : limits of cost-benefit analysis

Unit-3: Adapting to Climate Change

4. The case for Adaptation to climate change
5. Adaptive management of risk : managing physical, financial and social risks
6. International action and adaptation in developing nations

Unit-4: Natural Resources Management and Climate Change

5. The fundamentals for natural resource management
6. Economics of water use in context of climate change
7. Climate change and efficient management of agriculture and fisheries
8. Sustainable energy

Unit-5: Local and Global Action

4. Economic incentives for “climate smart” Individual action
5. The role of firms in climate change adaptation and mitigation
6. National and International policies for “climate smart” innovation and technology diffusion

Text & Reference Books

4. Nicholas Stern (2010), *A Blueprint For A Safer Planet* London :Vintage Books
5. United Nations development Programme (2007) *Human Development Report 2007/2008: Fighting Climate Change* Available online <http://hdr.undp.org/en/reports/global/hdr2007-2008/>
6. The World Bank (2010) *World Development Report 2010: Development and Climate Change* Full text online : <http://econ.worldbank.org>

IECE-85 ECONOMICS IN EVERYDAY LIFE

Objectives

3. To introduce the economic way of thinking about society.
4. The students will learn to use basic economic reasoning to reflect on a wide range of issues in a society.

Unit – I: Thinking about Prices

5. How are prices determined: The concept of willingness to Pay.
6. Understanding Inflation: Meaning of Inflation and how it is measured in India.
7. Inflation rate and the prices you pay in shops: why they diverge.
8. Application: why prices are higher in some locations than others although the production and selling costs are identical.

Unit – II: Economics of Social Customs

5. Economics of rising age of marriage and declining family size.
6. How economic globalization is changing the Indian family.
7. Economics of gift-giving: why value of gift in kind is higher compared to gift in cash.
8. Application: Reasoning about economic Inequality between men and women

Unit – III: Economics of Social Evils

6. Discrimination: Why discrimination can be “rational” and the economic harm it causes.
7. Pollution: The economic roots of the pollution problem.
8. Addiction: Economic case for legalizing drugs as solution to addiction.
9. Corruption – An Economists Perspective
10. Application: Why prohibition does more harm than good: An Economic Perspective.

Unit – IV: Economics of Arts, Sports, and Science

5. Understanding the declining demand for performing arts from economic perspective.
6. Economics of Sports: Role of economic competition in sporting activity.
7. Economics and Science: What motivates scientific research?
8. Application: How economic Globalization and commercialization enrich Indian music.

Unit – V: National Issues

5. The Union Budget and you – Taxes, Subsidies and Fiscal Deficit
6. How the stock market works – Bulls and Bears
7. The global economic crisis: Its origin and impact on India.
8. Application: Living through an economic downturn.

Text and Reference Books

3. Robert J. Stonebraker (2005), *The Joy of Economics: Making Sense of Life*, Online book available free at <http://www.facutly.winthrop.edu.stonebraker/book.html>
4. Tim Harford (2000), *The Logic of Life: Discovering the New Economics of Everything*, (London: Little)

IECE-95 ECONOMICS OF NATURAL DISASTERS

Objectives

3. To make the students understand economic impact of natural disasters.
4. To teach them appropriate economic policies.

Unit – I: Introduction

4. The goal of disaster economic analysis
5. Important terminology-hazard, vulnerability, disaster, disaster risk, mitigation, preparedness, rehabilitation and reconstruction.
6. Types of hazards - Natural hazards- Man made hazards

Unit – II: Economic Effects of Disasters

3. Direct effects-Indirect effects -Secondary effects
4. Consequences of disasters - measurement of consequence -Tangible losses - Intangible losses

Unit – III: Disaster Risk Reduction and Mitigation

6. Quantification of disaster risk: UNDP's Disaster Risk Index.
7. Components of disaster risk reduction –Role of market.
8. Integrating disaster risk in poverty reduction strategy and incorporating disaster risk in economic appraisal.
9. Vulnerability context - Source of Vulnerability - Tools for assessing hazard-induced Vulnerability - Vulnerability indicators.
10. Mitigation of economic and human impact.

Unit – IV: Intervention Policies

4. Differences in intervention for natural and human – made disasters
5. Policy instruments for disaster intervention
6. Interventions for general multi – sectoral disasters - Disasters involving displaced populations - Disasters leading to food insecurity - Disaster expected from climate change.

Unit – V: Finance Options

4. Debt swaps-Triangular food aid.
5. Disaster insurance
6. Revolving funds-Central bank assistance.

Text Books

4. Ahmad, Ayaz: (2003), *Disaster Management*, (Anmol Publications. New Delhi).
5. Ghosh, G.K: (2007), **Disaster Management; Saujanya Books.**
6. **Ross Bull (1994) Disaster Economics, UNDP, Disaster Management Training Programme.**

Reference Books

8. Agarwal S.K:(2006), *Perspectives on Organisational Disaster Management*, (Indian Books).
9. Benson, Charlotte and John Tuigg: (2007), *Tool for Mainstreaming Disaster Reduction* Geneva: Prevention consortium (online ed) (unit-3).
10. Bull Ross: (1994), *Disaster Economics* UNDP, DHA, (online ed) .
11. Institution of Civil Engineers: (1995), *Modalities: Reducing vulnerability to Natural disasters*, (London: ODA.)
12. Kamal Taori: (2007), *Disaster Management Through Panchayat Raj*, (Concept Publishers).
13. Richard Sylves: (2008), **Disaster Policy and Politics**, (SAGE Publications.)
14. Satish Modh *Citizen's Guide to Disaster Management*: (2006), (Macmillan Press India.)

IECE-105 ENVIRONMENTAL AUDIT

Objectives

3. This course is intended to introduce accounting skills to enable decision makers to evaluate the environmental strategy of a firm.
4. The course deals with various facets of environmental accounting such as economic valuation of environment, corporate environmental accounting and green national accounts.

Unit – I: Approaches to Environmental Valuation

5. “Total Economic Value” of the Environment - Cost – Benefit Analysis
6. State Preference Approaches: Contingent Valuation Method
7. Revealed Preference Approaches: Travel Cost & Hedonic Pricing Method.
8. Production Function Approach: Dose-Response Model

Unit – II: Environmental Risk and Environmental Impact Assessment

3. Assessing Environmental Risks - Choice Under Risk - Valuing Risks to life - Regulating Risk
4. Environmental Impact Assessment - Information Gathering - Impact Assessment and Mitigation Measures - EIA Report and Review

Unit – III: Environmental Cost Accounting

4. Full Cost Accounting
5. Internal Environmental Cost Accounting
6. External Environmental Cost Accounting: Internalizing Externalities

Unit – IV: Environmental Information Management

4. Life Cycle Assessment
5. Environmental Share Holder Value
6. Environmental Reporting - Environmental Audit

Unit – V: Green National Accounts

4. Limitations of Conventional National Accounts
5. Genuine Savings - Environmentally Defensive Expenditures
6. Integrated Economic and Environmental Accounting (IEEA)

Text and Reference Books

4. Hanley, Shogren and White (2001) *Introduction to Environmental Economics* (Oxford University Press).
5. Richard Welford (1996) *Corporate Environmental Management*, Chapter 7, 8, and 9.
6. Schaltegger, Buritt and Peterson (2003) *Corporate Environmental Accounting* (Greenleaf Publishing).

