JYOTI NIVAS COLLEGE AUTONOMOUS

VI SEMESTER – ELECTIVE

ENVIRONMENTAL ECONOMICS-VIII A

60 HOURS

OBJECTIVES

- To acquaint students with application of microeconomic principles to environmental issues
- To help students appreciate the role of economics in solving environmental problems.
- To sensitize students about environmental concerns

Learning outcome

- To have an understanding of environmental economics with its key concepts and theories.
- Use the principles of economic theory and apply it to the study of environmental problems.
- To grasp the concept of environmental valuation and apply it for decision making and policy making.
- The study will equip the students to effectively manage resources for sustainable development.

UNIT - I

INTRODUCTION TO ENVIRONMENTAL ECONOMICS 10 Hrs

Environmental Economics- definition, Nature and significance. Environmental goods-nature and types. Public goods and private goods. Externality- Pareto optimality-market failure-Pigouvian fees, Polluter pay principle. Cost-benefit approach to Environment. Limits to growth model, Relationship between development and Environment Economics.

UNIT - II

NATURAL RESOURCE ECONOMICS 10 Hrs

Concept and classification of resources-Renewable & non-renewable. Economics of Renewable & non-renewable resources-concept of User cost and optimum depletion rate, managing renewable resources, problem of Common Property resource, Economics of Recycling.

UNIT – III

NATURAL RESOURCES: DEGRADATION AND POLLUTION 10 Hrs

Land: Degradation: causes, effects, measures. Forests-deforestation: Causes, effects, measures for afforestation. Biodiversity-loss, measures to preserve biodiversity.

Wastes-types, problems and management. Air, water,noise pollution- causes, effects, remedies.

UNIT - IV

SUSTAINABLE DEVELOPMENT 10 Hrs

Concept, Conventional versus sustainable development. Rules of sustainable development-Hartwick-Solow, London school, Safe Minimum standards, Daly's operational rules. Indicator (Commission for Sustainable Development); Population and environment-Growth, density, migration, industrialization.

Sustainable agriculture

UNIT - V

ENVIRONMENTAL VALUATION 10 Hrs

Need for Environmental Valuation

Methods: contingent valuation, Hedonic pricing, travel cost, Pollution tax and Emission trading rights, subsidies for adopting cleaner technology, eco certification of products, environmental audit, deposit refund system.

UNIT - VI

ENVIRONMENTAL ISSUES/POLICIES. **10 Hrs**

Environmental Issues- global warming, greenhouse effect and ozone depletion.

Environment and trade-effects of trade on environment

Indian Environmental policies- Water (Prevention & Pollution control) Act, Central pollution control Board, Environmental Protection Act 1986.

BOOKS FOR REFRENCES

1. Bhattacharya N, Rabindra - Environmental Economics – An Indian Perspective. 2001, Oxford University Press, Delhi.
2. Karpagam, M- Environmental economics, 2001, Sterling publishers, revised and enlarged edition,.
3. S.Sanakaran- Environmental Economics; Margham Publications.

ADDITIONAL READING LIST

1. Kolstad, D Charles- Environmental Economics, Oxford University Press
2. Sengupta, Ram Prasad- Ecology and Economics – An approach to Sustainable Development, 2001, Oxford University Press, Delhi.
3. Ulaganathan, Shankar - Environmental Economics, 2001, Oxford University Press.
4. Our Common Future- World Commission on Environment and Development, 1987, Oxford University Press.

PRACTICAL COMPONENT OF THE SYLLABUS

1. 5 hours of project work in a paper recycling unit[JNC paper recycling unit]
2. A study of global environmental disasters like Chernobyl, oil spills etc.
3. Bhopal gas tragedy-a case study
4. problems of waste with special reference to E-waste
5. Environmental education and awareness.
6. IPCC, Climate Fund and Green Fund