Time : 3 Hrs.

Max. Marks : 100

External : 80

Internal : 20

ECONOMICS OF ENVIRONMENT AND SOCIAL SECTOR-1

Note: (i) Nine Question will be set in all and students will be required to attempt 5 questions.

- (ii) Question No. 1 will be compulsory and will consist of 8 short answer type questions of 2 marks spread over the entire syllabus (2*8=16 marks).
- (iii) For the remaining four questions, students will attempt 1 out of 2 questions from each of the four units (16 marks each).

PREAMBLE

This course is meant to provide some insights into the application of economic theory in the design and implementation of public policy related to the management of environment and social sectors. The course finds roots in welfare economics, national income accounting, macroeconomic policies and trade and development. Modules incorporated in this paper are devoted to issues of environmental economics, environmental and social services and the problem of valuation of these services, and designing of instruments and institutions for the management of environment. The models of optimal use of natural resources, macroeconomic issues, sustainable development, environmental resource problems in India and the economics of health and education constitute the other areas of the modules of this paper.

Unit - I

Environment, ecology and economy; Pareto optimality and perfect competition; External effects in production and consumption; Market failure in case of environmental goods - incomplete markets, externalities, non-exclusion; non-rivalry; non-convexities and asymmetric information.

Unit - II

Environmental policy framework in India - problems of command & control regime; New Environment Policy. Natural resources: types, classification and scarcity; Elementary capital theory; Economics of natural resources.

Unit – III

Economic instruments for environmental protection; Pollution charges, ambient charges, product charges, subsidies; Liability rules - non-compliance fees, deposit refund system, performance bonds. Marketable pollution permits; Evaluative criteria of and practical

conditions for use of the economic incentives; Mixed instruments; Choice among policy instruments. Estimation of marginal cost of pollution abatement for designing the pollution tax.

Unit - IV

Coase's bargaining solution and collective action. Measures of economic value of environment WTP and WTAC; Contingent valuation method; Travel cost method; Hedonic market methods; Averting behaviour approach - household health production function method.

Reading List

- Henderson, J.M. and R.E. Quandt (1980), Microeconomic Theory: A Mathematical Approach, McGraw Hill, New Delhi.
- Hanley, N., J.F. Shogern and B. White (1997), <u>Environmental Economics in Theory and Practice</u>, Macmillan.
- Cropper, Maureen (1999), Valuing Environmental Benefits, Edward Elgar.
- Sankar, U. (Ed.) (2001), <u>Environmental Economics</u>, Oxford University Press, New Delhi.
- James, A.J., M. N. Murty and Smita Misra (1999), Economics of Water Pollution The Indian Experience, Oxford University Press, New Delhi.