

**Semester VI**  
**B.A. (Honours) Economics**  
**DSE 8 (Group-II): ENVIRONMENTAL ECONOMICS (6 Credits)**  
**Full marks: 100 (Mid Term-20 + End Term-80)**

**Course Description**

This course focuses on economic causes of environmental problems. In particular, economic principles are applied to environmental questions and their management through various economic institutions, economic incentives and other instruments and policies. Economic implications of environmental policy are also addressed as well as valuation of environmental quality, quantification of environmental damages, tools for evaluation of environmental projects such as cost-benefit analysis and environmental impact assessments. Selected topics on international environmental problems are also discussed.

Units		No of Lecture Hours	No of Tutorial Hours	Marks
1.	<b>Introduction:</b> Basic Concepts: Ecology, Environment and Economy; what is environmental economics: Definition and evolution of the subject; Environmental economics and Resource economics; the economy and the environment: inter-linkages; Environment and development trade off: Environmental Kuznet curve; review of microeconomics and welfare economics: Pareto optimality, public good and private good, Common property resources, private and social cost, public good and bad	15	3	16
2.	<b>The Theory of Externalities:</b> Externality: Meaning and types; Pareto optimality and market failure in the presence of externalities; solution to market failure: property rights and the Coase theorem.	15	3	16
3.	<b>The Design and Implementation of Environmental Policy and Sustainable Development:</b> Environmental Policies: Overview; Economic instruments of environmental policies: Pigouvian taxes and effluent fees, tradable permits, liability rules. Sustainable Development: Concept; Notions of Sustainability: Strong and Weak sustainability, measurement and indicators of sustainability: The Pearce–Atkinson indicator.	15	3	16
4.	<b>International Environmental Problems:</b> Trans-boundary environmental problems as problems of international externalities: Global warming, Ozone layer depletion; economics of climate change; trade and environment; Pollution Haven Hypothesis;  Global intervention for sustainable development	15	3	16
5.	<b>Measuring the Benefits of Environmental Improvements:</b>	15	3	16

	Non-Market values: Types and definitions of non-market values; measurement or valuation methods: Contingent valuation and Travel cost methods; their comparative advantages and disadvantages			
<b>Total</b>		<b>75</b>	<b>15</b>	<b>80</b>

### Reading List:

1. Charles Kolstad, *Intermediate Environmental Economics*, Oxford University Press, 2<sup>nd</sup> edition, 2010.
2. Robert N. Stavins (ed.), *Economics of the Environment: Selected Readings*, W.W. Norton, 5th edition, 2005.
3. Roger Perman, Yue Ma, James McGilvray and Michael Common, *Natural Resource and Environmental Economics*, Pearson Education/Addison Wesley, 3rd edition, 2003.
4. Maureen L. Cropper and Wallace E. Oates, 1992, —Environmental Economics: A Survey *Journal of Economic Literature*, Volume 30:675-740.
5. Bhattacharyya R, *Environmental Economics*, Oxford University Press
6. Nick Hanley, Jason F. Shogren and Ben White, *Environmental Economics in Theory and Practice*, Macmillan India Ltd.