

ENVIRONMENTAL STUDIES (HONS./PG) [CODE-72]

MODULE 1: HUMAN SOCIETY AND ENVIRONMENT

- a) Basics of Environmental Science
- b) Environmental Education and Awareness
- c) Interaction between Environment and Civilization
- d) Ecological Footprints
- e) Genesis of Environmentalism

MODULE 2: SEGMENTS OF THE ENVIRONMENT

- a) Origin of Life and Evolution of Environment
- b) Atmosphere, Hydrosphere, Lithosphere and Biosphere
- c) Bio-geo chemical cycles
- d) Climate and Weather

MODULE 3: ECOLOGY AND BIODIVERSITY

- a) Principles of Ecology
- b) Ecosystems and Services
- c) Concepts of Biodiversity
- d) Threats to Wildlife
- e) Biodiversity Conservation Approaches

MODULE 4: NATURAL RESOURCES

- a) Concepts of Natural Resources
- b) Non-Renewable and Renewable Resources
- c) Wise Use of Resources
- d) Conservation and Management
- e) Natural Resource Availability in India

MODULE 5: ENERGY SECURITY

- a) Energy resources
- b) Global Energy Use Patterns
- c) Energy prospects of India
- d) Conventional Energy Sources
- e) Environmental Impacts
- f) Renewable Energy Resources
- g) Energy Budget of the Earth

MODULE 6: ENVIRONMENTAL POLLUTION

- a) Air, Vehicular and Noise Pollution
- b) Water, Soil and Marine Pollution
- c) Radioactive and Thermal Pollution
- d) Indoor Air Pollution
- e) Case studies

MODULE 7: WASTE MANAGEMENT

- a) Hazardous Wastes and Their Disposal
- b) Bioremediation
- c) Environmental Management in Industries
- d) Recycling of Waste Material
- e) Waste Minimization Technologies

MODULE 8: DISASTER MANAGEMENT

- a) Nature, Scale and Types of Disaster
- b) Natural Disaster
- c) Anthropogenic Disaster
- d) Effects on Environment
- e) Disaster Preparedness and Post Disaster Response
- f) Recovery Strategies
- g) Case Studies

MODULE 9: ENVIRONMENTAL LAW AND ETHICS

- a) Environmental Legislation in India
- b) Provisions for Environment in Indian Constitution
- c) Existing Acts and Laws in India
- d) Indian Organization of Standards and Ecomarks
- e) Environmental Ethics
- f) Environment Justice

MODULE 10: SUSTAINABLE DEVELOPMENT

- a) Nature vs nature
- b) Population growth and Carrying capacity
- c) Sustainability Indices
- d) Strategies of Sustainable Development
- e) Economic Development and Cost-Benefit Analysis
- f) Using Economics to Assess Environmental Quality.