

HIGHER SECONDARY (CLASSES XI AND XII)
ENVIRONMENTAL STUDIES (PG)

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.