

## Semester IV

<b>Course Code: EITG - 205</b>		
<b>Course Title: Environmental Studies</b>		
<b>Number of Credits: 03</b>	<b>Total Hours: 42</b>	<b>Total Marks: 75</b>
<b>Prerequisites for the course</b>		
Concern and watchfulness about current status of environment		
<b>Objectives of Course</b>		
To provide various awareness programs required for the welfare of the environment apart from the emphasis on the general and conventional issues surrounding the environment		
<b>Course Content</b>		
<b>Unit I</b>	<b>Introduction</b>	<b>10 Hours</b>
Definition, scope, and importance, need for public Awareness, Renewable and non- renewable resources. Natural resources: associated problems, Role of an individual in conservation, Equitable use for sustainable lifestyles. Ecosystems: Concept, Structure, and function of an ecosystem. Producers, consumers, and decomposers. Energy flow in the ecosystem. Ecological succession. Food chains, food webs and ecological pyramids.		
<b>Unit II</b>	<b>Biodiversity and its conservation</b>	<b>11 Hours</b>
India as a mega diversity Nation, Bio-geographically classification of India. Biodiversity: Hotspots, Value of biodiversity, Biodiversity at global, National, and local levels. Threats to biodiversity: habitat loss, poaching of wildlife, man- wildlife conflicts. Endangered and endemic species of India. Conservation of biodiversity: In- situ and Ex- situ conservation of biodiversity.		
<b>Unit III</b>	<b>Pollution</b>	<b>11 Hours</b>
Environmental Pollution: Definition, Cause, effects, and uncontrolled measures of: Air pollution, Water pollution, Soil pollution, Marine pollution, Noise pollution, Thermal pollution, nuclear hazards. Solid waste Management: Causes, effects, and control measures of urban and industrial wastes. Role of an individual in prevention of pollution. Pollution case studies. Disaster management: floods, earthquake, cyclone and landslides.		
<b>Unit IV</b>	<b>Social Issues and Ethics</b>	<b>10 Hours</b>
Social Issues and the Environment: From Unsustainable to Sustainable development. Urban problems related to energy. Water conservation: rainwater harvesting, watershed management. Resettlement and Rehabilitation of people; its problems and concerns. Case Studies. Environmental ethics: Issues and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents, and holocaust. Case Studies. Wasteland reclamation. Consumerism and waste products. Issues involved in enforcement of environmental legislation. Public awareness.		
<b>Pedagogy</b>		
Lectures/Tutorial/Assignments/ Practice Sessions		
<b>Course Outcome</b>		
Vigilance and actions to prevent degradation of environment will be inculcated		
<b>References/Readings</b>		
<ol style="list-style-type: none"> <li>1. Mike Hulme, Climates and Cultures.</li> <li>2. Mark Garrett, Encyclopaedia of Transportation Social Science and Policy.</li> <li>3. Steel, Science An A - to - Z Guide to Issues and Controversies.</li> <li>4. John A Matthews, Encyclopaedia of Environmental Change.</li> </ol>		