

Th5. ENVIRONMENTAL STUDIES

Period	Unit	Topic
1.	The Multidisciplinary nature of environmental studies	Definition, scope and importance
2.		Need for public awareness
3.	Natural Resources Renewable and non-renewable resources	a) Natural resources and associated problems. Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
4.		Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems
5.		Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
6.		Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,
7.		Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
8.		Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.
9.		b) Role of individual in conservation of natural resources.
10.		c) Equitable use of resources for sustainable life styles.
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12.	Systems	Concept of an eco-system. Structure and function of an eco-system
13.		Producers, consumers, decomposers. Energy flow in the eco systems.
14.		Ecological succession
15.		Food chains, food webs and ecological pyramids.
16.		Introduction, types, characteristic features, structure and function of the following eco system
17.		Forest ecosystem
18.		Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries
19.	Biodiversity and it's Conservation	Introduction-Definition: genetics, species and ecosystem diversity.
20.		Biogeographically classification of India
21.		Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values
22.		Biodiversity at global, national and local level
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24.		Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
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27.	Environmental Pollution.	Definition Causes, effects and control measures of Air pollution.
28.		Definition Causes, effects and control measures of Water pollution
29.		Definition Causes, effects and control measures of Soil pollution
30.		Definition Causes, effects and control measures of Marine pollution
31.		Definition Causes, effects and control measures of Noise pollution
32.		Definition Causes, effects and control measures of Thermal pollution
33.		Definition Causes, effects and control measures of Nuclear hazards
34.		Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
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38.	Social issues and the Environment	From unsustainable to sustainable development
39.		Urban problems related to energy.
40.		Water conservation, rain water harvesting, water shed management
41.		Resettlement and rehabilitation of people; its problems and concern.
42.		Environmental ethics: issue and possible solutions.
43.		Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
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45.		Air (prevention and control of pollution) Act.
46.		Water (prevention and control of pollution) Act
47.		Public awareness
48.	Human population and the environment	Population growth and variation among nations
49.		Population explosion- family welfare program
50.		Environment and human health
51.		Human rights
52.		Value education
53.		Role of information technology in environment and human health.
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55.	Revision	Revision Classes
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