

LESSON PLAN FOR ACADEMIC SESSION: 2023-24(Winter-23)

Discipline: Electrical Engineering		Semester : 3rd	Name of the Teaching Faculty :PRADIP KUMAR MOHANTY
Subject : ENVIRONMENTAL STUDIES	No. of days / week class allotted		Semester From : 01.08.2023 to 30.11.2023 Nos. of Weeks per semester : 15
Week	Class Day	Chapter	Theory Topics
1 ST	1 st	Chapter-1 The Multidisciplinary nature of environmental studies	1.1 Definition, scope and importance.
	2 nd		Continue.....
	3 rd		1.2 Need for public awareness
	4 th		Continue.....
2 ND	1 st	Chapter-2 Natural Resources:	2.1 Natural resources and associated problems. 2.1.1. Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	2 nd		2.1.2. Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	3 rd		2.1.3. Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	4 th		Continue.....
3 RD	1 st		2.1.4. Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,.
	2 nd		2.1.5. Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
	3 rd		Continue.....
	4 th		2.1.6. Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification
4 TH	1 st		2.2 Role of individual in conservation of natural resources.
	2 nd		2.3 Equitable use of resources for sustainable life styles.
	3 rd		3.1. Concept of an eco system.
	4 th		3.2. Structure and function of an eco system.
5 TH	1 st	Chapter-3 Systems	3.3. Producers, consumers, decomposers.
	2 nd		3.4. Energy flow in the eco systems.
	3 rd		3.5. Ecological succession.
	4 th		3.6. Food chains, food webs and ecological pyramids.
6 TH	1 st		3.7. Introduction, types, characteristic features, structure and function of the following eco system.

	2 nd		3.8. Forest ecosystem: 3.9. Aquatic eco systems (ponds, streams, lakes, rivers, oceans)
	3 rd		4.1. Introduction-Definition: genetics, species and ecosystem diversity.
	4 th		4.2. Biogeographically classification of India.
7 TH	1 st	Chapter-4 Biodiversity and it's Conservation	4.3. Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values.
	2 nd		Continue.....
	3 rd		4.4. Biodiversity at global, national and local level
	4 th		Continue.....
8 TH	1 st		4.5. Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
	2 nd		Continue.....
	3 rd		
9 TH	4 th	Chapter-5 Environmental Pollution	5.1. Definition Causes, effects and control measures of: 5.1.1 Air pollution.
	1 st		5.1.2 Water pollution.
	2 nd		5.1.3 Soil pollution.
	3 rd		5.1.4 Marine pollution.
10 TH	4 th		5.1.5 Noise pollution.
	1 st		5.1.6 Thermal pollution.
	2 nd		5.1.7 Nuclear hazards.
	3 rd		5.2. Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
11 TH	4 th		Continue.....
	1 st		5.3. Role of an individual in prevention of pollution.
	2 nd		5.4. Disaster management: Floods, earth quake, cyclone and landslides.
	3 rd		Continue.....
12 th	4 th	Chapter-6 Social issues and the Environment	6.1. Form unsustainable to sustainable development.
	1 st		6.2. Urban problems related to energy.
	2 nd		6.3. Water conservation, rain water harvesting, water shed management.
	3 rd		6.4. Resettlement and rehabilitation of people; its problems and concern.
13 th	4 th		6.5. Environmental ethics: issue and possible solutions
	1 st		6.6. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
	2 nd		Continue.....
	3 rd		6.7. Air (prevention and control of pollution) Act.
			6.8. Water (prevention and control of pollution) Act.

	4 th		6.9. Public awareness.
14 th	1 st	Chapter-7 Human population and the environment:	7.1. Population growth and variation among nations.
	2 nd		7.2. Population explosion- family welfare program.
	3 rd		Continue.....
	4 th		7.3. Environment and human health.
15 th	1 st		7.4. Human rights.
	2 nd		Continue.....
	3 rd		7.5. Value education
	4 th		Continue.....

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31.07.23

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