



DEPARTMENT OF ELECTRONICS & TELECOMMUNICATION ENGINEERING

<b>ACADEMIC LESSON PLAN FOR WINTER SEMESTER 2023-24</b>	
JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA	
Name of the Faculty: RAJENDRA DORA	Academic Year:2023-24
Course No.: TH-5	Course Name: ENVIRONMENTAL STUDIES
Program: Diploma	Branch: ETC
Year/Sem: 2 <sup>nd</sup> /3 <sup>rd</sup>	Section:
Total Period s : 60 P/ Sem	End Semester Exam : 80marks
Internal Assessment : 20 Marks	TOTAL MARKS :100 Marks

Sl. No.	Period	Time (min)	Unit/ Chapter	Topic to be covered	Teaching method
1.	1.	55	1	The Multidisciplinary nature of environmental studies	Black board
2.	2.	55		Definition, scope and	Black board
3.	3.	55		Importance Need for public awareness	Black board
4.	4.	55	2	Natural Resources: Renewable and non renewable resources	Black board
5.	5.	55		Natural resources and associated problems.	Black board
6.	6.	55		Forest resources: Use and over-exploitation, deforestation, case studies,	Black board
7.	7.	55		Timber extraction mining, dams and their effects on forests and tribal people	Black board
8.	8.	55		Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems	Black board
9.	9.	55		Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.	Black board
10.	10.	55		Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, and salinity.	Black board
11.	11.	55		Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.	Black board

12.	12.	55		Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.	Black board
13.	13.	55		Role of individual in conservation of natural resources.	Black board
14.	14.	55		Equitable use of resources for sustainable life styles.	Black board
15.	15.	55	3	Systems: Concept of an eco-system.	Black board
16.	16.	55		Structure and function of an eco-system.	Black board
17.	17.	55		Producers, consumers, decomposers.	
18.	18.	55		Energy flow in the eco systems.	Black board
19.	19.	55		Ecological succession.	Black board
20.	20.	55		Food chains, food webs and ecological pyramids.	Black board
21.	21.	55		Food chains, food webs and ecological pyramids.	Black board
22.	22.	55		Introduction, types, characteristic features, structure and function of the following eco system: Forest ecosystem	Black board
23.	23.	55		Introduction, types, characteristic features, structure and function of the following eco system: Forest ecosystem	Black board
24.	24.	55		Introduction, types, characteristic features, structure and function of the following eco system: Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries)	Black board
25.	25.	55		Introduction, types, characteristic features, structure and function of the following eco system: Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries)	Black board
26.	26.	55		4	Biodiversity and it's Conservation
27.	27.	55	Introduction-Definition: genetics, species and ecosystem diversity.		Black board
28.	28.	55	Biogeographically classification of India.		Black board
29.	29.	55	Value of biodiversity: consumptive use, productive use		Black board
30.	30.	55	social ethical, aesthetic and optin values		Black board
31.	31.	55	Biodiversity at global, national and local level.		Black board
32.	32.	55	Biodiversity at global, national and local level.		Black board
33.	33.	55	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts		Black board
34.	34.	55		Environmental Pollution: Definition Causes, effects and control measures of: Air pollution.	Black board
35.	35.	55		Environmental Pollution :Definition Causes, effects	Black board

				and control measures of: Water pollution		
36.	36.	55	5	Environmental Pollution :Definition Causes, effects and control measures of: Soil pollution	Black board	
37.	37.	55		Environmental Pollution :Definition Causes, effects and control measures of: Marine pollution	Black board	
38.	38.	55		Environmental Pollution :Definition Causes, effects and control measures of: Noise pollution	Black board	
39.	39.	55		Environmental Pollution :Definition Causes, effects and control measures of: Thermal pollution	Black board	
40.	40.	55		Environmental Pollution :Definition Causes, effects and control measures of: Nuclear hazards	Black board	
41.	41.	55		Solid waste Management: Causes, effects and control measures of urban and industrial wastes.	Black board	
42.	42.	55		Role of an individual in prevention of pollution.	Black board	
43.	43.	55		Disaster management: Floods, earth quake, cyclone and landslides	Black board	
44.	44.	55		6	Social issues and the Environment :From unsustainable to sustainable development,	Black board
45.	45.				Urban problems related to energy	
46.	46.	55	Water conservation, rain water harvesting,		Black board	
47.	47.	55	water shed management.		Black board	
48.	48.	55	Resettlement and rehabilitation of people; its problems and concern		Black board	
49.	49.	55	Environmental ethics: issue and possible solutions		Black board	
50.	50.	55	Climate change, global warming		Black board	
51.	51.	55	acid rain, ozone layer depletion		Black board	
52.	52.	55	nuclear accidents and holocaust, case studies,		Black board	
53.	53.	55	Air (prevention and control of pollution) Act		Black board	
54.	54.	55	Water (prevention and control of pollution) Act		Black board	
55.	55.	55	Public awareness	Black board		
56.	56	55	7	Human population and the environment.	Black board	
57.	57	55		Population growth and variation among nations	Black board	
58.	58	55		Population explosion-family welfare program, Environment and human health	Black board	
59.	59	55		Human rights, Value education	Black board	
60.	60	55		Role of information technology in environment and human health.	Black board	