

**BHUBANANANDA ORISSA SCHOOL OF  
ENGINEERING, CUTTACK**

**ELECTRICAL ENGG.DEPARTMENT**

**LESSON PLAN**

**SEMESTER : 3<sup>rd</sup> (A)**

**SESSION – Winter(2022-23)**

**SUBJECT: Environmental Studies**

**NAME OF FACULTY: PRIYANKA SAHU**

Discipline: <b>Electrical Engg.</b>	Semester: <b>3<sup>rd</sup> (A)</b>	Name of the teaching faculty: <b>PRIYANKA SAHU</b>
Subject- <b>Environmental Studies</b>	No. of Days/per week class allotted: <b>04 PERIODS/WEEK</b> <b>(MON,TUE,THU,SAT-1 period each)</b>	Semester: From Date: <b>15/09/2022</b> To Date: <b>22/12/2022</b> No. of weeks: <b>15 WEEKS</b>
Week	Class Day	Theory/Practical Topics
1 <sup>st</sup> (15/09/2022-17/09/2022)	15/09/2022	<b>1. The Multidisciplinary nature of environmental studies:</b> 1.1 Definition, scope and importance
2 <sup>nd</sup> (19/09/2022-24/09/2022)	19/09/2022	1.1 Definition, scope and importance 1.2 Need for public awareness
	20/09/2022	1.2 Need for public awareness.
	22/09/2022	<b>2. Natural Resources:</b> Renewable and non renewable resources:
		2.1 Natural resources and associated problems.
	24/09/2022	2.1.1 Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
3 <sup>rd</sup> (26/09/2022-01/10/2022)	26/09/2022	2.1.1 Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	27/09/2022	2.1.2 Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	29/09/2022	2.1.2 Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems
	01/09/2022	2.1.3 Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
4 <sup>th</sup> (03/10/2022-08/10/2022)		<b>PUJA HOLIDAYS</b>



5 <sup>th</sup> (10/10/2022-15/10/2022)	10/10/2022	2.1.3 Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	11/10/2022	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.
	13/10/2022	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.
	15/10/2022	2.1.5 Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies
6 <sup>th</sup> (17/10/2022-22/10/2022)	17/10/2022	2.1.5 Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies
	18/10/2022	2.1.6 Land Resources: Land resources, land degradation, man induces landslides, soil erosion, and desertification
	20/10/2022	<b>Class test 1</b>
	22/10/2022	2.1.6 Land Resources: Land resources, land degradation, man induces landslides, soil erosion, and desertification
7 <sup>th</sup> (24/10/2022-29/10/2022)	24/10/2022	<b>Kali Puja/Diwali</b>
	25/10/2022	2.2 Role of individual in conservation of natural resources
	27/10/2022	2.3 Equitable use of resources for sustainable life styles
	29/10/2022	<b>3. Systems:</b>
		3.1 Concept of an eco system.
8 <sup>th</sup> (31/10/2022-05/11/2022)	31/10/2022	3.2 Structure and function of an eco system.
	01/11/2022	3.3 Producers, consumers, decomposers.
	03/11/2022	3.4 Energy flow in the eco systems.
	05/11/2022	3.5 Ecological succession.

9 <sup>th</sup> (07/11/2022-12/11/2022)	07/11/2022	3.6 Food chains, food webs and ecological pyramids.
	08/11/2022	<b>Rasa Purnima</b>
	10/11/2022	3.7 Introduction, types, characteristic features, structure and function of the following eco system: 3.8 Forest ecosystem
	12/11/2022	3.9 Aquatic eco systems (ponds, streams, lakes, rivers, oceans estuaries).
10 <sup>th</sup> (14/11/2022-19/11/2022)	14/11/2022	<b>4. Biodiversity and it's Conservation:</b> 4.1 Introduction-Definition: genetics, species and ecosystem diversity.
	15/11/2022	4.2 Biogeographically classification of India.
	16/11/2022	<b>Internal Assessment</b>
	17/11/2022	4.3 Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values
	19/11/2022	4.4 Biodiversity at global, national and local level.
11 <sup>th</sup> (21/11/2022-26/11/2022)	21/11/2022	4.5 Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts
	22/11/2022	<b>5. Environmental Pollution:</b> 5.1. Definition Causes, effects and control measures of: 5.1.1 Air pollution. 5.1.2 Water pollution. 5.1.3 Soil pollution
	24/11/2022	5.1.4 Marine pollution 5.1.5 Noise pollution. 5.1.6 Thermal pollution. 5.1.7 Nuclear hazards.
	26/11/2022	5.2 Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
12 <sup>th</sup> (28/11/2022-03/12/2022)	28/11/2022	5.2 Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
	29/11/2022	<b>Quiz test</b>
	01/12/2022	5.3 Role of an individual in prevention of pollution.



	03/12/2022	5.4 Disaster management: Floods, earth quake, cyclone and landslides.
13 <sup>th</sup> (05/12/2022-10/12/2022)	05/12/2022	<b>6. Social issues and the Environment:</b> 6.1. Form unsustainable to sustainable development. 6.2. Urban problems related to energy.
	06/12/2022	6.3. Water conservation, rain water harvesting, water shed management.
	08/12/2022	6.4. Resettlement and rehabilitation of people; its problems and concern. 6.5. Environmental ethics: issue and possible solutions.
	10/12/2022	6.6. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
14 <sup>th</sup> (12/12/2022-17/12/2022)	12/12/2022	6.7. Air (prevention and control of pollution) Act. 6.8. Water (prevention and control of pollution) Act. 6.9. Public awareness.
	13/12/2022	<b>7. Human population and the environment:</b> 7.1 Population growth and variation among nations 7.2 Population explosion- family welfare program
	15/12/2022	7.3 Environment and human health. <b>Class test 2</b>
	17/12/2022	7.4 Human Rights
15 <sup>th</sup> (19/12/2022-22/12/2022)	19/12/2022	7.5 Value education
	20/12/2022	7.6 Role of information technology in environment and human health
	22/12/2022	<b>Revision</b>