

Branch: ETC	Semester :3rd	Name of the Teaching Faculty: Nibedeta Ray
Subject: <b>ENVIRONMENTAL STUDIES (Th.5)</b>	No. of days/per week class allotted:04	Semester From date : <b>15.10.2022</b> To Date: <b>22.12.2022</b>
<b>Week</b>	<b>Class Day</b>	<b>Theory Topics</b>
1 <sup>ST</sup>	1 <sup>ST</sup>	Multidisciplinary nature of environmental studies- Introduction,
	2 <sup>ND</sup>	
	3 <sup>RD</sup>	Definition , Scope and importance
	4 <sup>TH</sup>	Need for public awareness
2 <sup>ND</sup>	1 <sup>ST</sup>	Natural Resources: Renewable and non renewable resources Natural resources and associated problems.
	2 <sup>ND</sup>	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>	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	4 <sup>TH</sup>	. Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
3 <sup>RD</sup>	1 <sup>ST</sup>	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity
	2 <sup>ND</sup>	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
	3 <sup>RD</sup>	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.
	4 <sup>TH</sup>	Role of individual in conservation of natural resources.
4 <sup>TH</sup>	1 <sup>ST</sup>	Equitable use of resources for sustainable life styles
	2 <sup>ND</sup>	Concept of an eco system.
	3 <sup>RD</sup>	Structure and function of an eco system.
	4 <sup>TH</sup>	Producers, consumers, decomposers.
5 <sup>TH</sup>	1 <sup>ST</sup>	Energy flow in the eco systems
	2 <sup>ND</sup>	Ecological succession
	3 <sup>RD</sup>	Food chains, food webs and ecological pyramids
	4 <sup>TH</sup>	Introduction, types, characteristic features, structure and function of the following eco system
6 <sup>TH</sup>	1 <sup>ST</sup>	Forest ecosystem
	2 <sup>ND</sup>	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).
	3 <sup>RD</sup>	Introduction-Definition: genetics, species and ecosystem diversity
	4 <sup>TH</sup>	Biogeographically classification of India.



7 <sup>TH</sup>	1 <sup>ST</sup>	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values.
	2 <sup>ND</sup>	Biodiversity at global, national and local level
	3 <sup>RD</sup>	Threats to biodiversity
	4 <sup>TH</sup>	Habitats loss
8 <sup>TH</sup>	1 <sup>ST</sup>	poaching of wild life
	2 <sup>ND</sup>	man wildlife conflicts.
	3 <sup>RD</sup>	Definition Causes, effects and control measures of Environmental Pollution
	4 <sup>TH</sup>	Air pollution.
9 <sup>TH</sup>	1 <sup>ST</sup>	Water pollution
	2 <sup>ND</sup>	Soil pollution
	3 <sup>RD</sup>	Marine pollution
	4 <sup>TH</sup>	Noise pollution
10 <sup>TH</sup>	1 <sup>ST</sup>	Thermal pollution
	2 <sup>ND</sup>	Nuclear hazards
	3 <sup>RD</sup>	Solid waste Management
	4 <sup>TH</sup>	Causes, effects and control measures of urban and industrial wastes.
11 <sup>TH</sup>	1 <sup>ST</sup>	Role of an individual in prevention of pollution
	2 <sup>ND</sup>	Disaster management: Floods, earth quake,
	3 <sup>RD</sup>	cyclone and landslides
	4 <sup>TH</sup>	Social issues and the Environment: Form unsustainable to sustainable development.
12 <sup>TH</sup>	1 <sup>ST</sup>	Urban problems related to energy
	2 <sup>ND</sup>	Water conservation, rain water harvesting, water shed management.
	3 <sup>RD</sup>	Resettlement and rehabilitation of people; its problems and concern
	4 <sup>TH</sup>	Environmental ethics: issue and possible solutions
13 <sup>TH</sup>	1 <sup>ST</sup>	Climate change, global warming, acid rain
	2 <sup>ND</sup>	ozone layer depletion, nuclear accidents and holocaust, case studies.
	3 <sup>RD</sup>	Air (prevention and control of pollution) Act.
	4 <sup>TH</sup>	Water (prevention and control of pollution) Act
14 <sup>TH</sup>	1 <sup>ST</sup>	Public awareness.
	2 <sup>ND</sup>	Population growth and variation among nations.
	3 <sup>RD</sup>	Population explosion- family welfare program
	4 <sup>TH</sup>	Environment and human health
15 <sup>TH</sup>	1 <sup>ST</sup>	Human rights
	2 <sup>ND</sup>	Value education
	3 <sup>RD</sup>	Role of information technology in environment
	4 <sup>TH</sup>	Role of information technology in human health

N. Jey  
3/11/22  
Teaching Faculty

HOD, ETC  
3/11/22

Principal  
3/11/22  
Academic Coordinator

Govt. Polytechnic  
Dhenkanal  
Government Polytechnic, Dhenkanal