

Discipline :- ELECTRICAL ENGG.	Semester:- 3rd	Name of the Teaching Faculty:- Tushar Ranjan Mohanta Sr. Lecturer in Math & Sc. (Chemistry)
Subject:- ENVIRONMENTAL STUDIES	No of Days/per Week Class Allotted :- 4	Semester From date : 1/08/2023 To Date:30/12/2023 No of Weeks:- 15
Week	Class Day	Theory/ Practical Topics
1st	1st	Definition, scope of Environmental studies
	2nd	Multidisciplinary nature of environment
	3rd	Importance
	4th	Need for public awareness
2nd	1st	Natural resources and associated problems.
	2nd	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining
	3rd	Forest resources: dams and their effects on forests and tribal people.
	4th	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water
3rd	1th	Water resources: dam's benefits and problems
	2nd	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources
	3rd	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity
	4th	Energy Resources: Growing energy need, renewable and non renewable energy sources, use of alternate energy sources, case studies
4th	1st	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion and desertification
	2nd	Role of individual in conservation of natural resources. Equitable use of resources for sustainable life styles
	3rd	Concept of an eco system. Structure and function of an eco system.
	4th	Producers, consumers, decomposers
5th	1st	Energy flow in the eco systems
	2nd	Ecological succession
	3rd	Food chains, food webs and ecological pyramids
	4th	Introduction, types, characteristic features, structure and function of Forest ecosystem
6th	1st	Introduction, types, characteristic features, structure and function of Aquatic eco systems (ponds, streams)
	2nd	Introduction, types, characteristic features, structure and function of Aquatic eco systems (rivers, oceans, estuaries)
	3rd	Introduction: Biodiversity and it's Conservation
	4th	Definition: genetics, species and ecosystem diversity
7th	1st	Biogeographically classification of India
	2nd	Value of biodiversity: consumptive use, productive use
	3rd	Value of biodiversity: social ethical, aesthetic and optin values
	4th	Biodiversity at global, national and local level

8 th	1 st	Threats to biodiversity: Habitats loss, poaching of wild life
	2 nd	Threats to biodiversity: man wildlife conflicts.
	3 rd	Air pollution: Causes, effects
	4 th	Air pollution: Control measures
9 th	1 st	Water pollution: Causes, effects
	2 nd	Water pollution: Control measures
	3 rd	Soil pollution
	4 th	Marine pollution
10 th	1 st	Noise pollution
	2 nd	Thermal pollution
	3 rd	Nuclear hazards
	4 th	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
11 th	1 st	Role of an individual in prevention of pollution
	2 nd	Disaster management: Floods, earth quake, cyclone and landslides
	3 rd	Form unsustainable to sustainable development
	4 th	Urban problems related to energy
12 th	1 st	Water conservation, rain water harvesting, water shed management
	2 nd	Resettlement and rehabilitation of people; its problems and concern
	3 rd	Environmental ethics: issue and possible solutions.
	4 th	Climate change, global warming, acid rain
13 th	1 st	Ozone layer depletion, nuclear accidents and holocaust, case studies.
	2 nd	Air (prevention and control of pollution) Act
	3 rd	Water (prevention and control of pollution) Act
	4 th	Public awareness
14 th	1 st	Population growth
	2 nd	Population explosion- family welfare program.
	3 rd	Environment and human health.
	4 th	Human rights.
15 th	1 st	Value education
	2 nd	Role of information technology in environment
	3 rd	Role of information technology in Human health
	4 th	Previous Year Question paper discussion

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