

Branch: ELECTRICAL	Semester: 3rd	Name of the Teaching Faculty: Anchal Sundar Ray
Subject: ENVIRONMENTAL STUDIES (Th.5)	No. of days/per week class allotted: 04	Semester From date : 15.09.2022 To Date: 22.12.2022
Week	Class Day	Theory Topics
1 ST	1 ST	Multidisciplinary nature of environmental studies- Introduction,
	2 ND	Definition , Scope and importance
	3 RD	Need for public awareness
	4 TH	
2 ND	1 ST	Natural Resources: Renewable and non renewable resources Natural resources and associated problems.
	2 ND	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction, mining, dams and their effects on forests and tribal people
	3 RD	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	4 TH	. Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
3 RD	1 ST	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity
	2 ND	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
	3 RD	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.
	4 TH	Role of individual in conservation of natural resources. Equitable use of resources for sustainable life styles
4 TH	1 ST	Concept of an eco system.
	2 ND	Structure and function of an eco system.
	3 RD	Producers, consumers, decomposers.
	4 TH	Energy flow in the eco systems
5 TH	1 ST	Ecological succession
	2 ND	Food chains, food webs and ecological pyramids
	3 RD	Introduction, types, characteristic features, structure and function of the following eco system
	4 TH	Forest ecosystem
6 TH	1 ST	Aquatic eco systems (ponds, streams, lakes, rivers, oceans,
	2 ND	

		estuaries).
	3 RD	Introduction-Definition: genetics, species and ecosystem diversity
	4 TH	Biogeographically classification of India.
7 TH	1 ST	Value of biodiversity: consumptive use, productive use, social, ethical, aesthetic and option values.
	2 ND	Biodiversity at global, national and local level
	3 RD	Threats to biodiversity
	4 TH	Habitats loss
8 TH	1 ST	poaching of wild life
	2 ND	man wildlife conflicts.
	3 RD	Definition Causes, effects and control measures of Environmental Pollution
	4 TH	Air pollution.
9 TH	1 ST	Water pollution
	2 ND	Soil pollution
	3 RD	Marine pollution
	4 TH	Noise pollution
10 TH	1 ST	Thermal pollution
	2 ND	Nuclear hazards
	3 RD	Solid waste Management
	4 TH	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,
	3 RD	cyclone and landslides
	4 TH	Social issues and the Environment: Form unsustainable to sustainable development.
12 TH	1 ST	Urban problems related to energy
	2 ND	Water conservation, rain water harvesting, water shed management.
	3 RD	Resettlement and rehabilitation of people; its problems and concern
	4 TH	Environmental ethics: issue and possible solutions
13 TH	1 ST	Climate change, global warming, acid rain
	2 ND	ozone layer depletion, nuclear accidents and holocaust, case studies.
	3 RD	Air (prevention and control of pollution) Act.
	4 TH	Water (prevention and control of pollution) Act
14 TH	1 ST	Public awareness.
	2 ND	Population growth and variation among nations.
	3 RD	Population explosion- family welfare program

	4 TH	Environment and human health
15 TH	1 ST	Human rights
	2 ND	Value education
	3 RD	Role of information technology in environment
	4 TH	Role of information technology in human health

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