

JHARSUGUDA ENGINEERING SCHOOL, JHARSUGUDA
MECHANICAL ENGINEERING DEPARTMENT

Name of the Faculty: M Soren	Session: 2022-23
Course code.:	Course Name: EVS
Programme: Diploma	Department: Mech. Dept.
Semester: 3rd	Section: M1&M2
Branch: MECHANICAL	

WEEK	PERIOD	UNIT	HOUR	Topic to be Covered		
1	1	1	4	Definition of environmenta		
	2			scope of environmental studies		
	3			importance of environmental studies		
	4			Need for public awareness.		
2	5	1	4	Natural Resources : Renewable and non renewable resources		
	6			Forest resources: Use and over-exploitation, deforestation, case studies ,Timber extraction		
	7			mining, dams and their effects on forestsand tribal people		
	8			Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.		
3	9			1	4	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources
	10					Food Resources: World food problems
	11					overgrazing, effectsofmodernagriculture, fertilizerspesticidesproblems, water logging, salinity
	12					Energy Resources: Growing energy need, renewable and nonrenewable energy sources, use of alternate energy sources, case studies.

	13			Land Resources: Land as a resource ,land degradation ,man induces landslides, soil erosion, and desertification
	14	2	10	Role of individual in conservation of natural resources, Equitable use of resources for sustainable lifestyles.
4	15			Concept of an ecosystem, Structure and function of an ecosystem
	16			Producers, consumers, decomposers
	17			Energy flow in the ecosystems, Ecological succession.
	18			Food chains, food web
	19			ecological pyramids
5	20			Forest ecosystem
	21			Aquatic ecosystems (ponds, streams, rivers)
	22	3	8	Aquatic ecosystems (lakes, , oceans, estuaries)
	23			Definition of Biodiversity, Types of Biodiversity : genetics, species and ecosystem
6	24			Biogeographically classification of India.
	25			Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optional values
	26			Biodiversity at global level.
	27			Biodiversity at national level.
7	28			Biodiversity at local level.
	29			Threats to biodiversity: Habitats loss
	30	4	8	Threats to biodiversity: poaching of wild life, man wildlife conflicts
	31			Air pollution.
8	32			Water pollution.
	33			Soil pollution
	34			Marine pollution
	35			Noise pollution
9	36			Thermal pollution
	37			Nuclear hazards.
	38			Solid waste Management

5	12	<p>Causes, effects and control measures of urban and industrial wastes.</p> <p>Role of an individual in prevention of pollution</p> <p>Disaster management: Floods, earth quake</p> <p>Disaster management: cyclone and landslides.</p>
6	10	<p>From unsustainable to sustainable development, Urban problems related to energy</p> <p>Water conservation, rain water harvesting water shed management</p> <p>Resettlement and rehabilitation of people; its problems and concern</p> <p>Environmental ethics: issue and possible solutions</p> <p>Climate change, global warming, acid rain, ozone layer depletion</p> <p>nuclear accidents and holocaust, case studies</p> <p>Air (prevention and control of pollution) Act.</p> <p>Water (prevention and control of pollution) Act.</p> <p>Public awareness.</p>
7	8	<p>Population growth and variation among nations.</p> <p>Population growth and variation among nations.</p> <p>Population explosion-family welfare program</p> <p>Environment and human health</p> <p>Human rights.</p> <p>Value education</p> <p>Value education</p> <p>Role of information technology in environment and human health</p>