

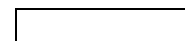
GOVT POLYTECHNIC MAYURBHANJ

LESSON PLAN

ACADEMIC YEAR 2022-23

Discipline: Mechanical Engg.		Semester: 3rd sem	Name of the teaching Faculty: SAGAR KU. MOHAPATRA
Subject: Enviromental Studies		No of Days/ Week class allotted (4)	Semester: From date: 15/09/2022 To Date: 21/01/2023
MONTH	WEEK	CLASS DAY	TOPICS
SEPTEMBER	3rd	5th	Unit 1: The Multidisciplinary nature of environmental studies Definition, scope and importance
	4th	2nd	Definition, scope and importance, Need for public awareness.
		3rd	Unit 2: Natural Resources, Renewable and non renewable resources: Natural resources and associated problem
		3rd	Renewable and non renewable resources:
		5th	Natural resources and associated problem
	5th	2nd	Forest resources: Use and over-exploitation, deforestation, case studies,
		3rd	Timber extraction mining, dams and their effects on forests and tribal people.
		3rd	Water resources: Use and over-utilization of surface and ground water
5th		floods, drought, conflicts over water, dam's benefits and problems	
OCTOBER	3rd	2nd	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
		3rd	Food Resources: World food problems ,changes caused by agriculture
		3rd	Overgrazing, effectsofmodernagriculture, fertilizers pesticidesproblems, water logging, salinity,
		5th	Energy Resources: Growing energy need
	4th	2nd	renewable and non renewable energy sources, use of alternate energy sources, case studies
		3rd	CLASS TEST-1
		3rd	Land Resources: Land as a resource ,land degradation ,man induces landslides, soil erosion, and desertification.
	5th	5th	Role of individual in conservation of natural resources
		2nd	Equitable use of resources for sustainable lifestyles.
		3rd	Unit 3: Systems , Concept of an ecosystem
3rd		Concept of an ecosystem	
NOVEMBER	1st	5th	Structure and function of an ecosystem.
		2nd	Producers, consumers, decomposers.
		3rd	Energy flow in the ecosystems.
		3rd	Ecological succession.
	2nd	5th	Food chains, food web sand ecological pyramids.
		3rd	Introduction, types, characteristic features, structure and function of the following ecosystem:
		3rd	Forest ecosystem:
	3rd	5th	Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries
		2nd	REVISION
		3rd	Unit 4: Biodiversity and it's Conservation ; Introduction-Definition: genetics, species
		3rd	Introduction-Definition: genetics, species and ecosystem diversity.
		5th	Biogeographically classification of India

	4th	2nd	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and opt in values.	
		3rd	Biodiversity at global, national and local level.	
		3rd	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.	
		5th	REVISION	
	5th	2nd	Unit 5: Environmental Pollution. Definition Causes, effects and control measures of: Air pollution.	
		3rd	Definition Causes, effects and control measures of: Air pollution. Water pollution.	
3rd		Soil pollution , Marine pollution		
DECEMBER	1st	5th	Noise pollution, Thermal pollution	
	2nd	2nd	Nuclear hazards.	
		3rd	INTERNAL	
		3rd	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.	
		5th	Role of an individual in prevention of pollution	
	3rd	2nd	Disaster management: Floods, earth quake, cyclone and landslides.	
		3rd	REVISION	
		3rd	Unit 6: Social issues and the Environment. Introduction	
		5th	unsustainable to sustainable development	
	4th	2nd	Urban problems related to energy	
		3rd	Water conservation, rain water harvesting, water shed management	
		3rd	Resettlement and rehabilitation of people; its problems and concern.	
		5th	Environmental ethics: issue and possible solutions.	
	JANUARY	1st	2nd	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
			3rd	Air (prevention and control of pollution) Act.
			3rd	Water (prevention and control of pollution) Act
5th			Public awareness.	
2nd		2nd	REVISION	
		3rd	Unit 7: Human population and the environment. Introduction	
		3rd	Population growth and variation among nations	
		5th	Population explosion-family welfare program	
3rd		2nd	Environment and human health.	
		3rd	Human rights.	
		3rd	Value education ,Role of information technology in environment and human health.	
		5th	CLASS TEST-2	



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Academic Co-ordinator
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