

GOVT. POLYTECHNIC MAYURBHANJ LESSON PLAN

Discipline : METALLURGY ENGG.		Semester: 3rd Sem		Name of the Teaching Faculty : SATYA BRATA GIRI	
Subject : ES		No. of Days / per week class allotted : 04		Semester From date : 01.08.2023 To Date : 30.11.2023	
MONTH	Week	Day	Unit	Topics	
AUGUST	1ST	2ND	UNIT-1	The Multidisciplinary nature of environmental studies	
		3RD		Definition, scope and importance, Need for public awareness	
		4TH		Definition, scope and importance, Need for public awareness	
		6TH		Definition, scope and importance, Need for public awareness	
	2ND	2ND	UNIT-2	Natural Resources	
		3RD		Natural resources and associated problems	
		4TH		Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and	
		6TH		Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and	
	3rd	2ND		Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and	
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		4TH		INDEPENDENCE DAY 15 AUG	
		6TH		Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.	
	4TH	2ND		Food Resources: World food problems, changes caused by agriculture and overgrazing, effect of modern agriculture, fertilizers-	
		3RD		Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.	
		4TH		Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.	
		6TH		Equitable use of resources for sustainable lifestyles	
	5TH	2ND	UNIT-3	Systems	
		3RD		Concept of an ecosystem Structure and function of an ecosystem.	
		4TH		Producers, consumers, decomposers.	
		6TH		Energy flow in the ecosystems.	
2ND	2ND	Ecological succession			
	3RD	JHULANA PURNIMA			
	4TH	Food chains, food web and ecological pyramids			
	6TH	Introduction, types, characteristic features,			
2ND	2ND	Forest ecosystem			
	2ND	Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries)			
2ND	2ND	JANMASTAMI			
	2ND	Biodiversity and it's Conservation			
			Introduction-Definition: genetics, species and ecosystem diversity		

SEPTEMBER	3rd	3RD	UNIT-4	Introduction-Definition: genetics, species and ecosystem diversity		
		4TH		Biogeographically classification of India.		
		2ND		CLASS TEST-1		
	4TH	3RD		Value of biodiversity:consumptive use, productive use, social ethical, aesthetic and opt in values.		
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		3RD		GANESH PUJA		
	5TH	4TH		NUAKHAI		
		4TH		Biodiversity at global, national and local level.		
		6TH		Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.		
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				Explain the types of waste heat recovery system such as regenerator & recuperates.		
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	OCTOBER	1ST		2ND	UNIT-5	Explain the types of waste heat recovery system such as regenerator & recuperates.
				3RD		Environmental Pollution.
				4TH		Definition Causes, effects and control measures of:
2ND		6TH	Air pollution			
		3RD	Water pollution.			
		4TH	Soil pollution			
3RD		6TH	Marine pollution			
		2ND	Noise pollution			
		3RD	Thermal pollution			
		4TH	Nuclear hazards			
4TH		6TH	Solid waste Management : Causes, effects and control measures of urban and industrial wastes			
			Role of an individual in prevention of pollution			
			INTERNAL EXAM			
5TH		3RD	DURGA PUJA			
			Disaster management: Floods, earth quake, cyclone and landslides			
		9-Smart Technology				
3R	1ST		UNIT-6	Social issues and the Environment		
		6TH		From unsustainable to sustainable development.		
	2ND	2ND		Urban problems related to energy		
		3RD		Water conservation, rain water harvesting, water shed management.		
		4TH		Resettlement and rehabilitation of people; its problems and concern		
	3RD	6TH		Resettlement and rehabilitation of people; its problems and concern		
				Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies		
		CLASS TEST-2				

NOVEMBER		3RD	UNIT-7	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
		4TH		Air (prevention and control of pollution) Act. Water
		6TH		Water (prevention and control of pollution) Act
	4TH	2ND		Public awareness.
	5TH			Human population and the environment
		4TH		Population growth and variation among nations.
		2ND		Population explosion-family welfare program
		3RD		Environment and human health.
		4TH		Human rights
		6TH		Value of biodiversity:consumptive use, productive use, social ethical, aesthetic and opt in values.
				Role of information technology in environment and human health.