

<b>GOVERNMENT POLYTECHNIC JAJPUR</b>		
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<b>Discipline:</b> Metallurgy	<b>Semester:</b> 3rd	<b>Name of the Teaching faculty:</b> P ARADHANA
<b>Subject:</b> Environmental studies	<b>No of Days/Week class allotted:</b> 4	<b>Semester from Date:</b> 15/09/22 <b>To Date:</b> 22/12/22 <b>No of weeks:</b> 16
<b>Week</b>	<b>Class Day</b>	<b>Topics</b>
1st	1 <sup>st</sup>	Unit 1: Definition & Scope And Importance Of Environmental Studies
	2 <sup>nd</sup>	Need For Public Awareness
	3 <sup>rd</sup>	Unit 2: Natural Resources: Use And Over-Exploitation Of Forest Resources, Deforestation
	4 <sup>th</sup>	Dams And Their Effects On Forests And Tribal People
2nd	1 <sup>st</sup>	Use & Over Utilization Of Surface & Ground Water
	2 <sup>nd</sup>	Drought & Conflicts Over Water, Dam's Benefits And Problems.
	3 <sup>rd</sup>	Mineral Resources
	4 <sup>th</sup>	Food Resources & Changes Caused by agriculture and over grazing, Effects of modern agriculture,
3rd	1 <sup>st</sup>	Fertilizers- Pesticides Problems, Water Logging, Salinity.
	2 <sup>nd</sup>	Energy Resources: Renewable And non-Renewable Energy Sources
	3 <sup>rd</sup>	land resources & land degradation
	4 <sup>th</sup>	land slide, soil erosion & desertification
4th	1 <sup>st</sup>	Role of individual in conservation of natural resources.
	2 <sup>nd</sup>	Unit 3: Systems: Concept of an ecosystem
	3 <sup>rd</sup>	Structure of an ecosystem.
	4 <sup>th</sup>	Function of an ecosystem.
5th	1 <sup>st</sup>	Producers, Consumers, Decomposers.
	2 <sup>nd</sup>	Energy flow in the ecosystems
	3 <sup>rd</sup>	Ecological succession, Food chains, Food webs
	4 <sup>th</sup>	Ecological pyramids.
6th	1 <sup>st</sup>	Forest ecosystem
	2 <sup>nd</sup>	Pond Ecosystems
	3 <sup>rd</sup>	River Ecosystems
	4 <sup>th</sup>	Lake Ecosystems
7th	1 <sup>st</sup>	Stream Ecosystems
	2 <sup>nd</sup>	Unit 4: Biodiversity and its conservation: Introduction- Definition
	3 <sup>rd</sup>	Genetics, Species and ecosystem diversity

	4 <sup>th</sup>	Biogeographically classification of india
8th	1 <sup>st</sup>	Value of biodiversity: Consumptive use, Productive use Values
	2 <sup>nd</sup>	Social ethical, Aesthetic And option values
	3 <sup>rd</sup>	Biodiversity at global, National and local level.
	4 <sup>th</sup>	Biodiversity at global, National and local level.
9th	1 <sup>st</sup>	Threats of biodiversity: Habitats loss
	2 <sup>nd</sup>	Poaching of wild life, Man wild life Conflicts.
	3 <sup>rd</sup>	Environmental pollution: Air pollution.
	4 <sup>th</sup>	Causes & Remedies Of Air pollution.
10th	1 <sup>st</sup>	Causes & Remedies Of water pollution.
	2 <sup>nd</sup>	Causes & Remedies Of water pollution.
	3 <sup>rd</sup>	Causes & Remedies Of Soil pollution
	4 <sup>th</sup>	Causes & Remedies Of Soil pollution
11th	1 <sup>st</sup>	Causes & Remedies Of Marine pollution
	2 <sup>nd</sup>	Causes & Remedies Of Marine pollution
	3 <sup>rd</sup>	Causes & Remedies Of Noise pollution.
	4 <sup>th</sup>	Causes & Remedies Of Noise pollution.
12th	1 <sup>st</sup>	Causes & Remedies Of thermal pollution
	2 <sup>nd</sup>	Causes & Remedies Of thermal pollution
	3 <sup>rd</sup>	Nuclear hazards
	4 <sup>th</sup>	Nuclear hazards
13th	1 <sup>st</sup>	Solid waste management: Causes And Effects
	2 <sup>nd</sup>	Control measures of urban and Industrial Wastes
	3 <sup>rd</sup>	Role of an individual in prevention of pollution.
	4 <sup>th</sup>	Disaster management: Floods & Earthquake
14th	1 <sup>st</sup>	Cyclone and landslides.
	2 <sup>nd</sup>	Unit6: Social issues and the environment: Unsustainable & Sustainable development.
	3 <sup>rd</sup>	Water conservation, Rain water harvesting, Water shed management.
	4 <sup>th</sup>	Resettlement and rehabilitation of people
15th	1 <sup>st</sup>	Global warming, Acid rain, Ozone layer depletion, Nuclear Accidents And Holocaust
	2 <sup>nd</sup>	Air (Prevention and control of pollution) Act.
	3 <sup>rd</sup>	Water (Prevention and control of pollution) Act.
	4 <sup>th</sup>	Public awareness.
16th	1 <sup>st</sup>	Human population And the Environment: Population growth and population explosion-Family Welfare program.
	2 <sup>nd</sup>	Value Of education & Human Rights
	3 <sup>rd</sup>	Role of information technology in environment and human health.
	4 <sup>th</sup>	Revision