

Discipline:- <b>ELECTRICAL ENGG.</b>	Semester:- <b>3rd</b>	Name of the Teaching Faculty:-  <b>TUSHAR RANJAN MOHANTA</b> Sr. Lect. Math & Sc. (CHEMISTRY)
Subject:- <b>ENVIRONMENTAL STUDIES</b>	No of Days/per Week Class Allotted :-4	Semester From date :15/09/2022 To Date:22/12/2022  No of Weeks:-15
<b>Week</b>	<b>Class Day</b>	<b>Theory/Practical Topics</b>
1 <sup>st</sup>	1 <sup>st</sup>	Definition, scope of Environmental studies
	2 <sup>nd</sup>	Multidisciplinary nature of environment
	3 <sup>rd</sup>	Importance
	4 <sup>th</sup>	Need for public awareness
2 <sup>nd</sup>	1 <sup>st</sup>	Natural resources and associated problems.
	2 <sup>nd</sup>	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining
	3 <sup>rd</sup>	Forest resources: dams and their effects on forests and tribal people.
	4 <sup>th</sup>	Water resources: Use and over-utilization of surface and groundwater, floods, drought, conflicts over water
3 <sup>rd</sup>	1 <sup>th</sup>	Water resources: dam's benefits and problems
	2 <sup>nd</sup>	Mineral Resources: Use and exploitation, environmental effects of Extracting and using mineral resources
	3 <sup>rd</sup>	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers-pesticides problems, water logging, salinity
	4 <sup>th</sup>	Energy Resources: Growing energy need, renewable and non renewable energy sources, use of alternate energy sources, case studies
4 <sup>th</sup>	1 <sup>st</sup>	Land Resources: Land resource, land degradation, man induced land slides, soil erosion and desertification
	2 <sup>nd</sup>	Role of individual in conservation of natural resources. Equitable use of Resources for sustainable lifestyles
	3 <sup>rd</sup>	Concept of an ecosystem, Structure and function of an ecosystem.
	4 <sup>th</sup>	Producers, consumers, decomposers
5 <sup>th</sup>	1 <sup>st</sup>	Energy flow in the ecosystems
	2 <sup>nd</sup>	Ecological succession
	3 <sup>rd</sup>	Food chains, food webs and ecological pyramids
	4 <sup>th</sup>	Introduction, types, characteristic features, structure and function of Forest ecosystem
6 <sup>th</sup>	<b>CLASS TEST-1</b>	
	1 <sup>st</sup>	Introduction, types, characteristic features, structure and function of Aquatic ecosystems (ponds, streams)
	2 <sup>nd</sup>	Introduction, types, characteristic features, structure and function of Aquatic ecosystems (rivers, oceans, estuaries)
	3 <sup>rd</sup>	Introduction: Biodiversity and its Conservation
7 <sup>th</sup>	4 <sup>th</sup>	Definition: genetics, species and ecosystem diversity
	1 <sup>st</sup>	Biogeographically classification of India
	2 <sup>nd</sup>	Value of biodiversity: consumptive use, productive use
	3 <sup>rd</sup>	Value of biodiversity: social ethical, aesthetic and option values
	4 <sup>th</sup>	Biodiversity at global, national and local level

