

Discipline :- <b>MECHANICAL ENGG.</b>	Semester:- <b>3rd</b>	Name of the Teaching Faculty:-  <b>SWATILEENA SATPATHY LECTURER (CHEMISTRY)</b>
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 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 ground water, floods, drought, conflicts over water
3 <sup>rd</sup>	1 <sup>st</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 as a resource, land degradation, man induces landslides, soil erosion and desertification
	2 <sup>nd</sup>	Role of individual in conservation of natural resources. Equitable use of resources for sustainable life styles
	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 eco systems
	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
<b>CLASS TEST-1</b>		
6 <sup>th</sup>	1 <sup>st</sup>	Introduction, types, characteristic features, structure and function of Aquatic eco systems (ponds, streams)
	2 <sup>nd</sup>	Introduction, types, characteristic features, structure and function of Aquatic eco systems (rivers, oceans, estuaries)
	3 <sup>rd</sup>	Introduction: Biodiversity and it's Conservation
	4 <sup>th</sup>	Definition: genetics, species and ecosystem diversity
7 <sup>th</sup>	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 optin values
	4 <sup>th</sup>	Biodiversity at global, national and local level

