## **LESSON PLAN**

<b>Discipline:</b> Civil Engg	Semester: Third (3 <sup>rd</sup> )	Name of the Faculty: Er Rajashree Rout
Subject: Environmental Studies.	No. of days/week class allotted: Five (5)	Semester from Date: 15.09.22 to Date: 22.12.22 No. of Weeks: 15
WEEK	CLASS DAY	THEORY TOPICS
	1 <sup>st</sup>	Definition.
	2 <sup>nd</sup>	Scope.
st 1	3 <sup>rd</sup>	Importance.
-	4 <sup>th</sup>	Need for Public Awareness.
	5 <sup>th</sup>	Review Class.
2 <sup>nd</sup>	1 <sup>st</sup>	Natural Resources, Renewable and Non-renewable resources
	2 <sup>nd</sup>	Forest Resources and their use, Over-exploitation
	3 <sup>rd</sup>	Deforestation and Case studies Timber extraction mining
	4 <sup>th</sup>	dams, benefits and problems and their effect on tribal people,
	5 <sup>th</sup>	Water Resources Use & over utilization of surface & ground water, flood. draught Conflict over Water, dam benefits & problems.
3 <sup>rd</sup>	st 1	Mineral Resources – Use & exploitation, environmental effects on extracting & using mineral resources.
	2 <sup>nd</sup>	Food Resources – World food problems, changes cause by agriculture, fertilizer- pesticides problems, water logging, salinity.
	3 <sup>rd</sup>	Energy Resources-Growing energy need Renewable and Non-renewable energy resources. Use of alternate energy source. case studies.
	4 <sup>th</sup>	Land resources- land as a resources land degradation, man induces landslides, Soil erosion & Desertification
	5 <sup>th</sup>	Role of individual in conservation of natural resources.
4 <sup>th</sup>	1 <sup>st</sup>	Monthly Test.

	2 nd	Equitable use of resources for sustainable life styles.
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	3 <sup>rd</sup>	Review Class.
	4 <sup>th</sup>	Review Class.
	5 <sup>th</sup>	Concept of an eco-system.
	1 <sup>st</sup>	Structure and function of an eco-system.
	2 <sup>nd</sup>	Producers, consumers, decomposers.
5 <sup>th</sup>	3 <sup>rd</sup>	Energy flow in the eco systems.
	4 <sup>th</sup>	Ecological succession.
	5 <sup>th</sup>	Food chains, food webs, Ecological pyramids.
	st 1	Introduction, types, characteristic features, Structure and function of the following Eco system:
	2 <sup>nd</sup>	Forest ecosystem:
6 <sup>th</sup>	3 <sup>rd</sup>	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).
	4 <sup>th</sup>	Review Class.
	5 <sup>th</sup>	Review Class.
	st 1	Introduction-Definition: genetics, species and ecosystem diversity
	2 <sup>nd</sup>	Monthly Test.
7 <sup>th</sup>	3 <sup>rd</sup>	Biogeographically classification of India.
	th 4	Value of biodiversity: consumptive use, productive use,
	5 <sup>th</sup>	social ethical, aesthetic and option values.
	st 1	Biodiversity at global, national and local level.
8 <sup>th</sup>	2 <sup>nd</sup>	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
	3 <sup>rd</sup>	Review Class.

	4 <sup>th</sup>	Definition causes, effects & control measure
	5 <sup>th</sup>	Air pollution
9 <sup>th</sup>	st 1	Water pollution
	2 <sup>nd</sup>	Soil pollution
	3 <sup>rd</sup>	Marine pollution
	4 <sup>th</sup>	Noise pollution.
	5 <sup>th</sup>	Thermal pollution
	st 1	Nuclear hazards
	2 <sup>nd</sup>	Solid Waste Management- causes, effects Control measure of urban & industrial waste
10 <sup>th</sup>	3 <sup>rd</sup>	Monthly Test.
	4 <sup>th</sup>	Role of individual in prevention of pollution.
	5 <sup>th</sup>	Disaster Management – Floods, Earth Quake, cyclone, & Land Slides
	1 <sup>st</sup>	Review Class
	2 <sup>nd</sup>	Review Class
11 <sup>th</sup>	3 <sup>rd</sup>	Form unsustainable to sustainable development
11	4 <sup>th</sup>	Urban problems related to energy.
	5 <sup>th</sup>	Water conservation, rain water harvesting, water shed management.
12 <sup>th</sup>	1 <sup>st</sup>	Resettlement and rehabilitation of people; its problems and concern.
	2 <sup>nd</sup>	Environmental ethics: issue and possible solutions.
	3 <sup>rd</sup>	Climate change, global warming, acid rain,
	4 <sup>th</sup>	Ozone layer depletion, nuclear accidents and holocaust, case studies.
	5 <sup>th</sup>	Air (prevention and control of pollution) Act.

13 <sup>th</sup>	st 1	Water (prevention and control of pollution) Act.
	nd 2	Public awareness.
	3 rd	Review Class.
	4 <sup>th</sup>	Review Class.
	5 <sup>th</sup>	Population growth and variation among nations
14 <sup>th</sup>	1 <sup>st</sup>	Population explosion.
	2 <sup>nd</sup>	Family welfare program.
	3 <sup>rd</sup>	Monthly test.
	4 <sup>th</sup>	Environment and human health.
	5 <sup>th</sup>	Human rights
	1 <sup>st</sup>	Value education
15 <sup>th</sup>	2 <sup>nd</sup>	Role of information technology in environment and human health.
	3 <sup>rd</sup>	Review Class.
	4 <sup>th</sup>	Review Class.
	5 <sup>th</sup>	Revision