KIIT POLYTECHNIC, BHUBANESWAR

LESSON PLAN

Session (2023-2024)

Discipline: Civil Engineering	**Semester:** 3rd , Winter/2023	**Name of the Teaching Faculty:** Mr. Jiban Kumar Jena, Lecturer **Email ID:** jiban.jenafet@kp.kiit.ac.in
Subject: Environmental Studies, Theory-5	**No. of Days/Week:** 04	**Start Date: 16/08/2023** **End Date: 30/11/2023**

Week	Class Day	Theory Topics
1st	1st	Definition, scope, and importance of Environmental Studies
	2nd	Need for public awareness.
	3rd	*Doubt Clearing class*
	4th	Forest resources: Use and over-exploitation
2nd	1st	Forest resources: deforestation, case studies, Timber extraction.
	2nd	Mining, dams and their effects on forests and tribal people.
	3rd	Water resources: Use and over-utilization of surface and ground water, floods.
	4th	Drought, conflicts over water, dams benefits and problems
3rd	1st	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources
	2nd	Food Resources: World food problems, changes caused by agriculture and over grazing.
	3rd	Effects of modern agriculture, fertilisers-pesticides problems, water logging, salinity.
	4th	Energy Resources: Growing energy need, renewable and non-renewable energy.
4th	1st	Difference between renewable and nonrenewable energy source
	2nd	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.
	3rd	Soil erosion and desertification
	4th	*Doubt Clearing class*

5th	1st	*Assignment Evaluation & Class Test*
	2nd	*QUIZ Test-1*
	3rd	Concept of an eco-system. Structure and function of an eco-system. Producers, consumers, decomposers
	4th	Producers, consumers, decomposers.
6th	1st	Energy flow in Ecosystem
	2nd	Ecological succession Food chains
	3rd	Food webs and ecological pyramid
	4th	Introduction, types, characteristic features, structure and function of the following eco system: Forest ecosystem: Aquatic eco systems (ponds, streams, lakes)
7th	1st	Forest ecosystem.
	2nd	Aquatic eco systems-
	3rd	Aquatic eco systems- rivers, Oceans, estuaries
	4th	*Doubt Clearing class*
8th	1st	*Assignment Evaluation & Class Test*
	2nd	Introduction-Definition: genetics, species and ecosystem diversity.
	3rd	Biogeographically classification of India.
	4th	Biodiversity at global
	1st	Threats to biodiversity: Habitats loss
	2nd	*Doubt Clearing class*
	3rd	Define Environmental pollution & types of pollution.
	4th	Air pollution- Sources, Effects, and control
10th	1st	Water pollution- Sources, Effects and control
	2nd	Soil pollution- Sources, Effects and control
	3rd	Marine pollution- Sources, Effects, and control
	4th	Noise pollution- Sources, Effects, and control
11th	1st	Thermal pollution- Sources, Effects, and control
	2nd	Nuclear hazards- Sources, Effects, and control
	3rd	*Doubt Clearing class*
	4th	Assignment evaluation, class test
12th	1st	*QUIZ Test-11*
	2nd	Form unsustainable to sustainable development
	3rd	Urban problems related to energy.
	4th	Water conservation, rain water harvesting, water shed management.

13th	1st	Resettlement and rehabilitation of people; its problems nd concern
	2nd	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
	3rd	Air and water (prevention and control of pollution) Act.
	4th	Public awareness
14th	1st	Population growth and variation among nations.
	2nd	Population explosion- family welfare program.
	3rd	Environment and human health, Human rights and Value education
	4th	Role of information technology in environment and human health
15th	1st	*Doubt Clearing class*
	2nd	*Assignment Evaluation & Class Test*
	3rd	*Discussion of Previous year questions*
	4th	*Discussion of Previous year questions*