

KIIT POLYTECHNIC

Department of Electronics & Telecommunication Engineering

LESSON PLAN

Session	::	Winter – 2022
Course Type	::	Theory
Semester/Branch	::	3rd Semester/Electronics & Telecomm. Engineering
Subject (with code)	::	ENVIRONMENTAL SCIENCE (TH5)
Contact hours/week	::	4 hours
Name of Faculty	::	Mr Jiban Kumar Jena

SL. No.	CLASS ID	COURSE CONTENT	MODE OF DELIVERY	EXHIBIT/REFERENCE
1	1	Definition, scope and importance	Lecture (Explanation) by using PPT	Giving Study materials
2	2	Need for public awareness	Lecture (Explanation) by using PPT	Giving Study materials
3	3	Natural resources and associated problems	Lecture (Explanation) by using PPT	Giving Study materials
4	4	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people	Lecture (Elaboration) by using PPT	Giving Study materials
5	5	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems	Lecture (Elaboration) by using PPT	Giving Study materials
6	6	Revising the taught portions	Lecture (Elaboration) by using PPT	Giving Study materials
7	7	Doubt clearance	Lecture (Elaboration) by using PPT	
8	8	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.	Lecture (Explant ion) by using PPT	Giving Study materials
9	9	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,.	Lecture (Explant ion) by using PPT	Giving Study materials
10	10	Energy Resources: Growing energy need, renewable and	Lecture (Explant ion) by using PPT	Giving Study materials

		non-renewable energy sources, use of alternate energy sources, case studies.		
11	11	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification. Role of individual in conservation of natural resources.	Lecture (Explantation) by using PPT	Giving Study materials
12	12	Equitable use of resources for sustainable life styles. Concept of an eco-system Structure and function of an eco- system.	Lecture (Explantation) by using PPT	Giving Study materials
13	13	Producers, consumers, decomposers. Energy flow in the eco systems, Ecological succession.	Lecture (Explantation) by using PPT	Giving Study materials
14	14	Food chains, food webs and ecological pyramids	Lecture (Explantation) by using PPT	Giving Study materials
15	15	Introduction, types, characteristic features, structure and function of the following eco system	Lecture (Explantation) by using PPT	Giving Study materials
16	16	Forest ecosystem, Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries)	Video Presentation	Video link
17	17	Introduction-Definition: genetics, species and ecosystem diversity. Biogeographically classification of India	Video Presentation	Video link
18	18	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values Biodiversity at global, national and local level.	Demonstration by using PPT	Giving Study Materials
19	19	Threats to biodiversity: Habitat loss, poaching of wild life, man wildlife conflicts	Demonstration by using PPT	Study Materials
20	20	Revision with Doubt clearance	Lecture (Elaboration) by using PPT	Giving of Study Materials
21	21	Class test		
22	22	Definition Causes, effects and control measures of: Air pollution, Water pollution. Soil pollution by the help of guest lecturer	Guided Thinking by using PPT	Giving Study materials
23	23	Noise pollution , Thermal pollution Marine pollution & Water pollution	Guided Thinking by using PPT	Giving Study materials

24	24	Preparation for Internal Examination by doubt clearing if any	Guided Thinking by using PPT	Giving Study materials
25	25	Internal Exam	Test	
26	26	Revision of taught theories, Checking of Assignment	Recap/Summarize	Giving Study materials
27	27	Class test	Test	
28	28	Solid waste Management:	Problem based learning by using PPT	Giving Study materials
29	29	Causes, effects and control measures of urban and industrial wastes of solid waste management.	Problem based learning by using PPT	Giving Study materials
30	30	Role of an individual in prevention of pollution.	Problem based learning by using PPT	Giving Study materials
31	31	Disaster management:	Problem based learning by using PPT	Giving Study materials
32	32	Floods, earth quake, cyclone and landslides.	Demonstration by using PPT	Giving Study materials
33	33	Form unsustainable to sustainable development.	Demonstration by using PPT	Giving Study materials
34	34	Urban problems related to energy.	Demonstration by using PPT	Giving Study materials
35	35	Water conservation,	Demonstration by using PPT	Giving Study materials
36	36	Rain water harvesting, water shed management.	Demonstration by using PPT	
37	37	Resettlement and rehabilitation of people; its problems and concern.	Collaborative Thinking by using PPT	Giving Study materials
38	38	Environmental ethics: issue and possible solutions.	Collaborative Thinking by using PPT	Giving Study materials
39	39	climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust.	Collaborative Thinking by using PPT	Giving Study materials
40	40	case studies.	Video Presentation	Video Link
41	41	Air (prevention and control of pollution) Act. Water (prevention and control of pollution) Act.	Lecture (Explanation) by using PPT	Giving Study materials
42	42	Public awareness. Population growth and variation among nations.	Lecture (Explanation) by using PPT	Giving Study materials
43	43	Population explosion- family welfare program.	Lecture (Explanation) by using PPT	Giving Study materials
44	44	Environment and human health. Human rights	Lecture (Explanation) by using PPT	Giving Study materials
45	45	Value education	Lecture (Explanation) by using PPT	Giving Study materials
46	46	Role of information technology	Lecture (Explanation)	Giving Study

		in environment and human health.	by using PPT	materials
47	47	Previous year question discussion	Recap/Summarize	Giving Study materials
48	48	Revision	Lecture (Elaboration)	Giving Study materials

Signature of Concern Teacher