KIIT POLYTECHNIC Department of Civil Engineering

LESSON PLAN

Session	::	Winter – 2022
Course Type	::	Theory
Semester/Branch	::	3rd Semester/ETC/CIVIL
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,		
11	11	case studies.		
11	11	Land Resources: Land as a	Lecture (Explant ion)	Giving Study
		resource, land degradation, man	by using PPT	materials
		induces landslides, soil erosion,		
		and desertification. Role of		
		individual in conservation of		
		natural resources.		
12	12	Equitable use of resources for	Lecture (Explant ion)	Giving Study
		sustainable life styles.	by using PPT	materials
		Concept of an eco-system		
		Structure and function of an		
		eco- system.		
13	13	Producers, consumers,	Lecture (Explant ion)	Giving Study
		decomposers.	by using PPT	materials
		Energy flow in the eco systems,		
		Ecological succession.		
14	14	Food chains, food webs and	Lecture (Explant ion)	Giving Study
		ecological pyramids	by using PPT	materials
15	15	Introduction, types,	Lecture (Explant ion)	Giving Study
10	10	characteristic features, structure	by using PPT	materials
		and function of the following	by using 111	materials
		eco system		
16	16	Forest ecosystem, Aquatic eco	Video Presentation	Video link
10	10	systems (ponds, streams, lakes,	video i resentation	v luco lilik
		rivers, oceans, estuaries)		
17	17	Introduction-Definition:	Video Presentation	Video link
1/	1 /	genetics, species and ecosystem	video rresentation	video mik
		diversity. Biogeographically		
10	10	classification of India	Democratica	Circles Cto la
18	18	Value of biodiversity:	Demonstration	Giving Study
		consumptive use, productive	by using PPT	Materials
		use, social ethical, aesthetic and		
		option values Biodiversity at		
10	10	global, national and local level.		
19	19	Threats to biodiversity: Habitat	Demonstration	Study Materials
		loss, poaching of wild life, man	by using PPT	
		wildlife conflicts		
20	20	Revision with Doubt clearance	Lecture (Elaboration)	Giving of Study
			by using PPT	Materials
21	21	Class test		
22	22	Definition Causes, effects and	Guided Thinking	Giving Study
		control measures of: Air	by using PPT	materials
		pollution, Water pollution.		
		Soil pollution by the help of		
		guest lecturer		
23	23	Noise pollution, Thermal	Guided Thinking	Giving Study
		pollution	by using PPT	materials
		Marine pollution & Water	,	
		pollution		
L	1	Pollation		

24	24	Preparation for Internal	Guided Thinking	Giving Study
27	27	Examination by doubt clearing	by using PPT	materials
		if any	by using 111	materials
25	25	Internal Exam	Test	
26	26	Revision of taught theories,	Recap/Summarize	Giving Study
20	20	Checking of Assignment	Recup/ Summarize	materials
27	27	Class test	Test	
28	28	Solid waste Management:	Problem based learning	Giving Study
20	20	Sona waste management.	by using PPT	materials
29	29	Causes, effects and control	Problem based learning	Giving Study
		measures of urban and	by using PPT	materials
		industrial wastes of solid waste	5 6	
		management.		
30	30	Role of an individual in	Problem based learning	Giving Study
		prevention of pollution.	by using PPT	materials
31	31	Disaster management:	Problem based learning	Giving Study
			by using PPT	materials
32	32	Floods, earth quake, cyclone	Demonstration	Giving Study
		and landslides.	by using PPT	materials
33	33	Form unsustainable to	Demonstration	Giving Study
		sustainable development.	by using PPT	materials
34	34	Urban problems related to	Demonstration	Giving Study
		energy.	by using PPT	materials
35	35	Water conservation,	Demonstration	Giving Study
			by using PPT	materials
36	36	Rain water harvesting, water	Demonstration	
		shed management.	by using PPT	
37	37	Resettlement and rehabilitation	Collaborative Thinking	Giving Study
		of people; its problems and	by using PPT	materials
20	20	concern.		C^{\prime} , C^{\prime} , C^{\prime} , C^{\prime}
38	38	Environmental ethics: issue and	Collaborative Thinking	Giving Study
20	20	possible solutions.	by using PPT	materials
39	39	climate change, global	Collaborative Thinking by using PPT	Giving Study materials
		warming, acid rain, ozone layer depletion, nuclear accidents and	by using PP1	materials
		holocaust.		
40	40	case studies.	Video Presentation	Video Link
70	10	case studies.	video i resentation	VIGCO LIIIK
41	41	Air (prevention and control of	Lecture (Explanation)	Giving Study
		pollution) Act. Water	by using PPT	materials
		(prevention and control of	5 6	
		pollution) Act.		
42	42	Public awareness. Population	Lecture (Explanation)	Giving Study
		growth and variation among	by using PPT	materials
		nations.		
43	43	Population explosion- family	Lecture (Explanation)	Giving Study
		welfare program.	by using PPT	materials
44	44	Environment and human health.	Lecture (Explanation)	Giving Study
		Human rights	by using PPT	materials
45	45	Value education	Lecture (Explanation)	Giving Study
			by using PPT	materials
46	46	Role of information technology	Lecture (Explanation)	Giving Study

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

Signature of Concern Teacher