

LESSON PLAN

Session	::	Winter – 2022
Course Type	::	Theory
Semester/Branch	::	3 rd Semester, Mechanical Engineering
Subject (with code)	::	Environmental Studies (Th.5)
Contact hours/week	::	4
Name of Faculty	::	Namita Behera

SL. No.	CLAS S ID	COURSE CONTENT	MODE OF DELIVERY	EXHIBIT/ REFERENCE
1	1	Definition, scope and importance, Need for public awareness	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.Mishra
2	2	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.Mishra
3	3	Mining resources	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.Mishra
4	4	Dams and their effects on forests and tribal people	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.Mishra
5	5	Water resources: Use and over-utilization of surface and ground water, floods.	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.Mishra
6	6	Drought	Lecture (Explanation)	
7	7	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resource	Lecture (Explanation)	
8	8	Food Resources: World food problems, changes caused by agriculture and over grazing	Lecture (Explanation)	https://youtu.be/1m1JAAjFbeQ
9	9	Effects of modern agriculture, fertilizer, pesticides problems, water logging, salinity	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.Mishra
10	10	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case study.	Lecture (Explanation)	.Study Material 2. Environmental studies by D.D. Mishra
11	11	Difference between renewable and non-renewable energy source	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D. Mishra

12	12	Land Resources: Land as a resource, land degradation.	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.
13	13	Soil erosion and desertification	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.
14	14	Revision/ Summarize		
15	15	Assignment Evaluation & Class Test		
16	16	Concept of an ecosystem. Structure and function of an ecosystem. Producers, consumers, decomposer	Student Presentation	
17	17	Energy flow in Ecosystems, Ecological succession Food chains, food webs.	Lecture (Explanation)	https://youtu.be/E32vI8anQog
18	18	Food webs and ecological pyramids	Lecture (Explanation)	1.Study Material
19	19	Introduction, types, characteristic features, structure and function of the Forest ecosystem	Lecture (Explanation)	2. Environmental studies by D.D. Mishra
20	20	Structure and function of Aquatic eco systems-ponds, streams, lakes, Oceans, Estuaries.	Lecture (Explanation)	https://youtu.be/6arGb8uAb4s
21	21	Introduction-Definition: genetics, species and ecosystem diversity	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D. Mishra
22	22	Biogeographically classification of India, Biodiversity at global.	Lecture (Explanation)	
23	23	Threats to biodiversity: Habitats loss	Lecture (Explanation)	https://youtu.be/vINK9ujrRwM
24	24	Revision/ Summarize		
25	25	Assignment evaluation& class test		
26	26	Air pollution- Sources, Effects and control	Lecture (Explanation)	https://youtu.be/e6rglsLy1Ys
27	27	Water pollution- Sources, Effects and control	Lecture (Explanation) PPT Presentation	1.Study Material
28	28	Soil pollution- Sources, Effects and control	Lecture (Explanation)	
29	29	Marine pollution- Sources, Effects and control	Lecture (Explanation) PPT Presentation	2. Environmental studies by D.D. Mishra
30	30	Noise pollution- Sources, Effects and control	Lecture (Explanation)	
31	31	Thermal pollution- Sources, Effects and control	Lecture (Explanation)	
32	32	Nuclear hazards- Sources, Effects and control	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D, Mishra
33	33	Revision/ Summarize		
34	34	Assignment evaluation &class test		

35	35	Unsustainable to sustainable development	Student Presentation	1.Study Material 2.Environmental Studies by D.D. Mishra
36	36	Urban problems related to energy	Hybrid	1.Study Material 2.Environmental Studies by D.D. Mishra
37	37	Water conservation	Hybrid	1.Study Material 2.Environmental Studies by D.D. Mishra
38	38	Rain water harvesting, water shed management	Lecture (Explanation)	https://youtu.be/Z6-m-3Md1ug
39	39	Resettlement and rehabilitation of people; its problems and concern	Lecture (Explanation)	1.Study Material 2. Environmental studies by D.D.Mishra
40	40	Climate change, global warming, acid rain, ozone layer depletion,	Lecture (Explanation)	1. Study Material 2. Environmental studies by D.D. Mishra
41	41	Nuclear accidents and holocaust, case studies	Lecture (Explanation)	1. Study Material 2. Environmental studies by D.D. Mishra
42	42	Air and water (prevention and control of pollution) Act	Lecture (Explanation)	1. Study Material 2. Environmental studies by D.D. Mishra
43	43	Public awareness	Lecture (Explanation)	1. Study Material 2. Environmental studies by D.D. Mishra
44	44	Population growth and variation among nations, Population explosion- family welfare program	Hybrid	1.Study Material 2. Environmental studies by D.D. Mishra
45	45	Role of information technology in environment and human health and human right and Role of information technology	Hybrid	1.Study Material 2.Environmental Studies by D.D. Mishra
46	46	<i>Assignment Evaluation & Class Test</i>		
47	47	Revision		
48	48	Revision		

Signature of Concern Teacher