LESS0N PLAN

Name of the Institute :	**C.V. Raman Polytechnic, BHUBANESWAR**
Department :	**CIVIL ENGINEERING**
Semester/Division/Branch :	**3RD SEM/CIVIL**
Subject Name with code :	**EVS/Th5**
Total No. of Class (Required) :	**60**
Faculty Name :	**AMBIKA PRASAD MOHANTY**

Class No.	Brief Description of the Topic/Chapter to be taught	Remarks
1	The Multidisciplinary nature of environmental studies	
2	Definition, scope and importance, Need for public awareness.	
3	……DO…….	
4	……DO…….	
5	**Natural Resources**-Renewable and non renewable resources:	
6	Natural resources and associated problems.	
7	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.	
8	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.	
9	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.	
10	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity, .	
11	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.	
12	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.	
13	Role of individual in conservation of natural resources.	
14	Equitable use of resources for sustainable life styles.	
15	**Systems-**Concept of an eco system.	
16	Structure and function of an eco system.	
17	Producers, consumers, decomposers.	
18	Energy flow in the eco systems.	
19	Ecological succession.	

20	Food chains, food webs and ecological pyramids.	
21	Introduction, types, characteristic features, structure and function of the following eco system:	
22	Forest ecosystem, Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).	
23	**Biodiversity and it's Conservation**	
24	Introduction-Definition: genetics, species and ecosystem diversity.	
25	Biogeographically classification of India.	
26	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and opting values.	
27	Biodiversity at global, national and local level.	
28	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.	
29	……DO…….	
30	……DO…….	
31	**Environmental Pollution.** Definition Causes, effects and control measures of:	
32	Air pollution.	
33	Water pollution.	
34	Soil pollution	
35	Marine pollution	
36	Noise pollution	
37	Thermal pollution	
38	Nuclear hazards.	
39	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.	
40	……DO…….	
41	Role of an individual in prevention of pollution.	
42	Disaster management: Floods, earth quake, cyclone and landslides.	
43	**Social issues and the Environment**	
44	Form unsustainable to sustainable development.	
45	Urban problems related to energy.	
46	Water conservation, rain water harvesting, water shed management.	
47	Resettlement and rehabilitation of people; its problems and concern.	
48	Environmental ethics: issue and possible solutions.	
49	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.	
50	Air (prevention and control of pollution) Act.	
51	Water (prevention and control of pollution) Act.	
52	Public awareness.	
53	**Human Population and the Environment**	
54	Population growth and variation among nations.	
55	Population explosion- family welfare program.	

56	Environment and human health.	
57	Human rights.	
58	Value education	
59	Role of information technology in environment and human health.	
60	……DO…….	

Signature of the Faculty **Signature of the H.O.D**