Lesson Plan

Name of the Institute:	**C. V. Raman Polytechnic**
Department:	**Mechanical Engineering**
Semester/Division/Branch:	**3rd Sem/ME**
Subject Name with code:	**Environmental Studies (Th-5)**
Total No. of Class (Required):	**60**
Faculty Name:	**Mr. Prakash Kumar Parida**

Class No.	Brief Description of the Topic/Chapter to be taught	Remarks
1	Definition, scope and importance, Need for public awareness.	
2	Definition, scope and importance, Need for public awareness.	
3	Renewable and non renewable resources:	
4	Natural resources and associated problems.	
5	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.	
6	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.	
7	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.	
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 overgrazing,effectsofmodernagriculture,fertilizers-pesticidesproblems, water logging, salinity,.	
11	Food Resources: World food problems ,changes caused by agriculture and overgrazing,effectsofmodernagriculture,fertilizers-pesticidesproblems, water logging, salinity,.	
12	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.	
13	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.	
14	Land Resources: Land as a resource ,land degradation ,man induces landslides, soil erosion, and desertification.	
15	Role of individual in conservation of natural resources.	
16	Equitable use of resources for sustainable lifestyles.	

17	Concept of an ecosystem.	
18	Structure and function of an ecosystem.	
19	Producers, consumers, decomposers.	
20	Energy flow in the ecosystems.	
21	Ecological succession.	
22	Food chains, food web sand ecological pyramids.	
23	Introduction, types, characteristic features, structure and function of the following ecosystem: Forest ecosystem	
24	Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).	
25	Revision and Doubt Clearing	
26	Introduction-Definition: genetics, species and ecosystem diversity.	
27	Biogeographically classification of India.	
28	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and opt in values.	
29	Biodiversity at global, national and local level.	
30	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.	
31	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.	
32	Definition Causes, effects and control measures of: Air pollution.	
33	Air pollution.	
34	Water pollution.	
35	Soil pollution	
36	Marine pollution	
37	Noise pollution.	
38	Thermal pollution	
39	Nuclear hazards.	
40	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.	
41	Role of an individual in prevention of pollution.	
42	Disaster management: Floods, earth quake, cyclone and landslides.	
43	From unsustainable to sustainable development.	
44	Urban problems related to energy.	
45	Water conservation, rain water harvesting, water shed management.	
46	Resettlement and rehabilitation of people; its problems and concern.	
47	Environmental ethics: issue and possible solutions.	

48	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.	
49	Air (prevention and control of pollution) Act.	
50	Water (prevention and control of pollution) Act.	
51	Public awareness.	
52	Population growth and variation among nations.	
53	Population growth and variation among nations.	
54	Population explosion-family welfare program.	
55	Environment and human health.	
56	Environment and human health.	
57	Human rights.	
58	Value education	
59	Role of information technology in environment and human health.	
60	Role of information technology in environment and human health.	

Signature of the Faculty

Signature of the H.O.D