

**UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA**  
**Academic Lesson Plan for Winter Semester- 2022**

Name of the Teaching Faculty: Er. Saroj Kumar Sahu

Department: Mechanical Engineering

Semester: 3<sup>rd</sup>

Subject: ENVIRONMENTAL STUDIES

No. of Periods per Week: 4

Total Periods: 60

End Semester Exam: 80

Class Test: 20

Total Marks: 100

Theory – 5

Sl. No.	Week	Period	Topic to be covered
1.	1 <sup>st</sup>	1 <sup>st</sup>	Definition, scope and importance
2.		2 <sup>nd</sup>	Need for public awareness
3.		3 <sup>rd</sup>	Do
4.		4 <sup>th</sup>	About Renewable and non renewable resources
5.	2 <sup>nd</sup>	1 <sup>st</sup>	Do
6.		2 <sup>nd</sup>	Natural resources and associated problems
7.		3 <sup>rd</sup>	Do
8.		4 <sup>th</sup>	Do
9.	3 <sup>rd</sup>	1 <sup>st</sup>	Do
10.		2 <sup>nd</sup>	Do
11.		3 <sup>rd</sup>	Role of individual in conservation of natural resources
12.		4 <sup>th</sup>	Do
13.	4 <sup>th</sup>	1 <sup>st</sup>	Equitable use of resources for sustainable lifestyles.
14.		2 <sup>nd</sup>	Concept of an ecosystem.
15.		3 <sup>rd</sup>	Structure and function of an ecosystem.
16.		4 <sup>th</sup>	Producers, consumers, decomposers.
17.	5 <sup>th</sup>	1 <sup>st</sup>	Energy flow in the ecosystems.
18.		2 <sup>nd</sup>	Ecological succession.
19.		3 <sup>rd</sup>	Food chains, food web sand ecological pyramids.
20.		4 <sup>th</sup>	Introduction, types, characteristic features,
21.	6 <sup>th</sup>	1 <sup>st</sup>	structure and function of the Forest ,Aquatic ecosystems.
22.		2 <sup>nd</sup>	Introduction-Definition: genetics,
23.		3 <sup>rd</sup>	species and ecosystem diversity.
24.		4 <sup>th</sup>	Biogeographically classification of India.
25.	7 <sup>th</sup>	1 <sup>st</sup>	Value of biodiversity: consumptive use,
26.		2 <sup>nd</sup>	productive use, social ethical, aesthetic and opt in values.
27.		3 <sup>rd</sup>	Biodiversity at global, national and local level.
28.		4 <sup>th</sup>	Threats to biodiversity: Habitats loss,
29.	8 <sup>th</sup>	1 <sup>st</sup>	poaching of wild life, man wildlife conflicts.
30.		2 <sup>nd</sup>	About Environmental Pollution
31.		3 <sup>rd</sup>	Air pollution.
32.		4 <sup>th</sup>	Water pollution.
33.	9 <sup>th</sup>	1 <sup>st</sup>	Soil pollution
34.		2 <sup>nd</sup>	Marine pollution

35.		3 <sup>rd</sup>	Noise pollution.
36.		4 <sup>th</sup>	Thermal pollution
37.	10 <sup>th</sup>	1 <sup>st</sup>	Nuclear hazards.
38.		2 <sup>nd</sup>	Solid waste Management
39.		3 <sup>rd</sup>	Do
40.		4 <sup>th</sup>	Role of an individual in prevention of pollution.
41.	11 <sup>th</sup>	1 <sup>st</sup>	Disaster management
42.		2 <sup>nd</sup>	Urban problems related to energy.
43.		3 <sup>rd</sup>	Water conservation, rain water harvesting,
44.		4 <sup>th</sup>	water shed management.
45.	12 <sup>th</sup>	1 <sup>st</sup>	Resettlement and rehabilitation of people
46.		2 <sup>nd</sup>	Environmental ethics: issue and possible solutions.
47.		3 <sup>rd</sup>	Climate change, global warming, acid rain, ozone layer
48.		4 <sup>th</sup>	depletion, nuclear accidents and holocaust, case studies.
49.	13 <sup>th</sup>	1 <sup>st</sup>	Air (prevention and control of pollution) Act.
50.		2 <sup>nd</sup>	Water (prevention and control of pollution) Act.
51.		3 <sup>rd</sup>	Public awareness.
52.		4 <sup>th</sup>	Population growth and variation among nations.
53.	14 <sup>th</sup>	1 <sup>st</sup>	Population explosion-family welfare program.
54.		2 <sup>nd</sup>	Environment and human health.
55.		3 <sup>rd</sup>	Do
56.		4 <sup>th</sup>	Human rights.
57.	15 <sup>th</sup>	1 <sup>st</sup>	Value education
58.		2 <sup>nd</sup>	Role of information technology in environment and human
59.		3 <sup>rd</sup>	Do
60.		4 <sup>th</sup>	Do

The above lesson plan prepared by the concerned faculty.

**Er. Saroj Kumar Sahu**

**LECTURER, MECHANICAL DEPARTMENT**