



NILASAIL INSTITUTE OF SCIENCE & TECHNOLOGY
SERGARH-756060, BALASORE (ODISHA)
(Approved by AICTE & affiliated to SCTE & VT, Odisha)



LESSON PLAN

SUBJECT: Th-5 (ENVIRONMENTAL STUDIES)

CHAPTER WISE DISTRIBUTION OF PERIODS

Sl. No.	Name of the chapter as per the Syllabus	No. of Periods as per the Syllabus	No. of periods actually needed
1	The Multidisciplinary nature of environmental studies	4	2
2	Natural Resources	11	14
3	Systems	8	9
4	Biodiversity and its Conservation	8	10
5	Environmental Pollution	11	11
6	Social issues and the Environment	11	12
7	Human population and the environment	7	7
	Total Period:	60	65

Discipline: AUTOMOBILE ENGINEERING	Semester: 3rd	Name of the Teaching Faculty: Er. Saroj kumar Patra	
		SESSION:2023-24	EXAMINATION: 2023(W)
Week	Class Day	Topics to be covered	
1 st	1 st	Introduction to The Multidisciplinary nature of environmental studies	
	2 nd	unit-1: The Multidisciplinary nature of environmental studies The Multidisciplinary nature of environmental studies: Definition, scope and importance.	
	3 rd	Need for public awareness.	
	4 th	unit-2 : Natural Resources Renewable and non renewable resources	
2 nd	1 st	Natural resources and associated problems.	
	2 nd	Forest resources: Use and over-exploitation, deforestation, case studies, Use and over-exploitation.	
	3 rd	Deforestation, case studies.	
	4 th	Timber extraction mining, dams and their effects on forests and tribal people.	
3 rd	1 st	Mineral Resources: Use and exploitation.	
	2 nd	Environmental effects of extracting and using mineral resources.	
	3 rd	Food Resources: World food problems.	
	4 th	Changes caused by agriculture and over grazing.	
4 th	1 st	Effects of modern agriculture, fertilizers pesticides problems, water logging, salinity.	
	2 nd	Energy Resources: Growing energy need, renewable and nonrenewable energy sources, use of alternate energy sources, case studies.	
	3 rd	Land Resources: Land as a resource ,land degradation ,man induces Landslides, soil erosion, and desertification.	
	4 th	Role of individual in conservation of natural resources.	
5 th	1 st	Equitable use of resources for sustainable lifestyles.	
	2 nd	Unit 3: Systems Concept of an ecosystem	
	3 rd	Structure and function of an ecosystem	
	4 th	Producers, consumers, decomposers	

6 th	1 st	Energy flow in the ecosystems.
	2 nd	Ecological succession.
	3 rd	Food chains, food web sand ecological pyramids
	4 th	Introduction, types, characteristic features, structure and function of the following ecosystem.
7 th	1 st	Forest ecosystem.
	2 nd	Aquatic ecosystems (ponds, streams, lakes, rivers, oceans, estuaries).
	3 rd	Unit 4: Biodiversity and it's Conservation Introduction-Definition: genetics, species and ecosystem diversity.
	4 th	Biogeographically classification of India.
8 th	1 st	Value of biodiversity: consumptive use
	2 nd	Value of biodiversity: productive use
	3 rd	social ethical, aesthetic and opt in values.
	4 th	Biodiversity at global.
9 th	1 st	national and local level.
	2 nd	Threats to biodiversity: Habitats loss
	3 rd	Threats to biodiversity: poaching of wild life
	4 th	Threats to biodiversity :man wildlife conflicts.
10 th	1 st	Unit 5: Environmental Pollution Definition Causes, effects and control measures of: Air pollution.
	2 nd	Water pollution.
	3 rd	Soil pollution
	4 th	Marine pollution
11 th	1 st	INTERNAL ASSESMENT
	2 nd	INTERNAL ASSESMENT
	3 rd	Noise pollution
	4 th	Thermal pollution

12 th	1 st	Nuclear hazards.
	2 nd	Solid waste Management: Causes, effects
	3 rd	Control measures of urban and industrial wastes.
	4 th	Role of an individual in prevention of pollution.
13 th	1 st	Disaster management: Floods ,earth quake, cyclone and landslides
	2 nd	Unit 6: Social issues and the Environment From unsustainable to sustainable development.
	3 rd	Urban problems related to energy.
	4 th	Water conservation, rain water harvesting,
14 th	1 st	water shed management.
	2 nd	Resettlement and rehabilitation of people ,its problems and concern.
	3 rd	Environmental ethics: issue and possible solutions.
	4 th	Climate change ,global warming
15 th	1 st	acid rain,ozone layer depletion
	2 nd	nuclear accidents and holocaust, case studies
	3 rd	Air (prevention and control of pollution) Act
	4 th	Water (prevention and control of pollution) Act.
16 th	1 st	Public awareness.
	2 nd	Unit 7: Human population and the environment Population growth and variation among nations.
	3 rd	Population explosion-family welfare program.
	4 th	Environment and human health.
17 th	1 st	Human rights.
	2 nd	Value education
	3 rd	Role of information technology in environment and human health
	4 th	Revision .