

# Lesson Plan

Discipline: Mechanical, Semester: 3RD, Name of Faculty : TRUPTI MOHANTY

Subject: Environmental studies

No. of days/  
week Class  
allotted: 4

Semester From Date: 1.10.2021

To date : 18.1.2022

Week

Class Day

Theory

1st

1st

The Multidisciplinary nature of environmental studies  
Introduction to subject

2nd

Definition, scope and importance

3rd

Need for public awareness.

4th

Some case studies and review of 1<sup>st</sup> chapter

2nd

1st

Natural Resources,

2nd

Renewable and non renewable resources

3rd

Natural resources and associated problems. Forest resources: Use and over-exploitation, deforestation, case studies, • Timber extraction mining, dams and their effects on forests and tribal people.

4th

Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.

3rd

1st

Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.

2nd

Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity, .

3rd

Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources,

4th

case studies.

4th

1st

Land Resources: Land as a resource, land degradation

2nd

, man induces landslides, soil erosion, and desertification.

3rd

Equitable use of resources for sustainable life styles.

4th

Role of individual in conservation of natural resources.

5th

1st

**Systems-** Concept of an eco system.

2nd

Structure and function of an eco system • Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).•

3rd

Producers, consumers, decomposers

4th

Energy flow in the eco systems

6th

1st

Ecological succession

2nd

Food chains, food webs

3rd

ecological pyramids- Introduction• , types, characteristic features,

4th

structure and function of the: Forest ecosystem:

7th

1st

structure and function of the: pond ecosystem

2nd

structure and function of the: lake ecosystem:

3rd

structure and function of the: river ecosystem:

	4th	structure and function of the: stream ecosystem:
8th	1st	structure and function of the ocean ecosystem:
	2nd	structure and function of the estuaries ecosystem:
	3rd	Unit test
	4th	discussion
9th	1st	<b>Biodiversity and It's Conservation-</b> introduction
	2nd	Introduction-Definition: genetics, species and ecosystem diversity.
	3rd	Biogeographically classification of India.
	4th	Value of biodiversity: consumptive use, productive use,
10th	1st	social ethical, aesthetic and optin values
	2nd	Biodiversity at global, national and local level.
	3rd	Threats to biodiversity: Habitats loss, poaching of wild life,
	4th	Man wildlife conflicts.
11th	1st	Environmental Pollution.
	2nd	Definition Causes, effects and control measures of Air pollution.
	3rd	Definition Causes, effects and control measures of water pollution.
	4th	Definition Causes, effects and control measures of soil pollution.
12th	1st	Definition Causes, effects and control measures of marine pollution.
	2nd	Definition Causes, effects and control measures of noise pollution.
	3rd	Definition Causes, effects and control measures of thermal pollution.
	4th	Definition Causes, effects and control measures of nuclear hazards
13th	1st	waste Management: Causes, effects and control measures of urban and industrial wastes
	2nd	waste Management: Causes, effects and control measures of urban and industrial wastes
	3rd	Role of an individual in prevention of pollution
	4th	Disaster management: Floods, earth quake, cyclone and landslides.
14th	1st	Form unsustainable to sustainable development. Urban problems related to energy.
	2nd	Water conservation, rain water harvesting, water shed management
	3rd	Resettlement and rehabilitation of people; its problems and concern.
	4th	Environmental ethics: issue and possible solutions.
15th	1st	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust
	2nd	Case studies.
	3rd	Air (prevention and control of pollution) Act. Water (prevention and control of pollution) Act. Public awareness.
	4th	Human population and the environment
16th	1st	Population growth and variation among nations.
	2nd	Population explosion- family welfare program.

	3rd	Environment and human health. Human rights. Value education
	4th	Role of information technology in environment and human health.

*Signature*  
1-10-21

HOD MECHANICAL

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