



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



## LESSON PLAN

**SUBJECT: Th5. 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	10	14
3	Systems	8	8
4	Biodiversity and it's Conservation	8	8
5	Environmental Pollution	12	17
6	Social issues and the Environment	10	17
7	Human population and the environment	8	9
	Total Period:	60	75

Discipline: ALL BRANCH	Semester: 3rd	Name of the Teaching Faculty: Mr. Rajat Kumar Sahoo
Week	Class Day	Theory / Practical Topics
1 <sup>st</sup>	1 <sup>st</sup>	The Multidisciplinary nature of environmental studies: Definition, scope and importance.
	2 <sup>nd</sup>	Need for public awareness.
	3 <sup>rd</sup>	Natural Resources: Renewable and non renewable resources
	4 <sup>th</sup>	Natural resources and associated problems.
	5 <sup>th</sup>	Forest resources: Use and over-exploitation, deforestation, case studies,
2 <sup>nd</sup>	1 <sup>st</sup>	Timber extraction mining, dams and their effects on forests and tribal people
	2 <sup>nd</sup>	Water resources: Use and over-utilization of surface and ground water, floods, drought,
	3 <sup>rd</sup>	conflicts over water, dam's benefits and problems
	4 <sup>th</sup>	conflicts over water, dam's benefits and problems
	5 <sup>th</sup>	environmental effects of extracting and using mineral resources
3 <sup>rd</sup>	1 <sup>st</sup>	Food Resources: World food problems, changes caused by agriculture and over grazing
	2 <sup>nd</sup>	effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,
	3 <sup>rd</sup>	Energy Resources: Growing energy need, renewable and non-renewable energy sources,
	4 <sup>th</sup>	use of alternate energy sources, case studies.
	5 <sup>th</sup>	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification

4 <sup>th</sup>	1 <sup>st</sup>	Role of individual in conservation of natural resources. Equitable use of resources for sustainable life styles.
	2 <sup>nd</sup>	Systems: Concept of an eco system. Structure and function of an eco system.
	3 <sup>rd</sup>	Producers, consumers, decomposers.
	4 <sup>th</sup>	Ecological succession.
	5 <sup>th</sup>	Food chains, food webs and ecological pyramids.
5 <sup>th</sup>	1 <sup>st</sup>	Introduction, types, characteristic features, structure and function of the following eco system
	2 <sup>nd</sup>	Forest ecosystem:
	3 <sup>rd</sup>	Aquatic eco systems (ponds, streams, lakes, rivers, oceans)
	4 <sup>th</sup>	Energy flow in the eco systems
	5 <sup>th</sup>	Biodiversity and it's Conservation: Introduction-Definition:
6 <sup>th</sup>	1 <sup>st</sup>	genetics, species and ecosystem diversity.
	2 <sup>nd</sup>	Biogeographically classification of India.
	3 <sup>rd</sup>	Value of biodiversity: consumptive use, productive use
	4 <sup>th</sup>	social ethical, aesthetic and optin values.
	5 <sup>th</sup>	Biodiversity at global, national and local level.

7 <sup>th</sup>	1 <sup>st</sup>	Threats to biodiversity: Habitats loss, poaching of wild life
	2 <sup>nd</sup>	man wildlife conflicts.
	3 <sup>rd</sup>	Environmental Pollution: Definition Causes, effects and control measures of different pollutions
	4 <sup>th</sup>	Air pollution.
	5 <sup>th</sup>	Water pollution
8 <sup>th</sup>	1 <sup>st</sup>	Soil pollution
	2 <sup>nd</sup>	Marine pollution
	3 <sup>rd</sup>	Noise pollution.
	4 <sup>th</sup>	Thermal pollution
	5 <sup>th</sup>	Nuclear hazards.
9 <sup>th</sup>	1 <sup>st</sup>	Solid waste Management: Causes
	2 <sup>nd</sup>	effects
	3 <sup>rd</sup>	control measures of urban and industrial wastes.
	4 <sup>th</sup>	Role of an individual in prevention of pollution
	5 <sup>th</sup>	Disaster management

10 <sup>th</sup>	1 <sup>st</sup>	Floods
	2 <sup>nd</sup>	earth quake
	3 <sup>rd</sup>	cyclone
	4 <sup>th</sup>	landslides.
	5 <sup>th</sup>	Social issues and the Environment
11 <sup>th</sup>	1 <sup>st</sup>	Form unsustainable to sustainable development.
	2 <sup>nd</sup>	Urban problems related to energy.
	3 <sup>rd</sup>	Water conservation
	4 <sup>th</sup>	rain water harvesting,
	5 <sup>th</sup>	water shed management.
12 <sup>th</sup>	1 <sup>st</sup>	Resettlement and rehabilitation of people
	2 <sup>nd</sup>	its problems and concern.
	3 <sup>rd</sup>	Environmental ethics: issue and possible solutions.
	4 <sup>th</sup>	Climate change,
	5 <sup>th</sup>	global warming,

<b>13<sup>th</sup></b>	<b>1<sup>st</sup></b>	acid rain,
	<b>2<sup>nd</sup></b>	ozone layer depletion
	<b>3<sup>rd</sup></b>	nuclear accidents and holocaust, case studies
	<b>4<sup>th</sup></b>	Air (prevention and control of pollution) Act
	<b>5<sup>th</sup></b>	Water (prevention and control of pollution) Act
<b>14<sup>th</sup></b>	<b>1<sup>st</sup></b>	Public awareness.
	<b>2<sup>nd</sup></b>	Human population and the environment:
	<b>3<sup>rd</sup></b>	Population growth and variation among nations.
	<b>4<sup>th</sup></b>	Population explosion- family welfare program
	<b>5<sup>th</sup></b>	Environment and humanhealth.
<b>15<sup>th</sup></b>	<b>1<sup>st</sup></b>	Value education
	<b>2<sup>nd</sup></b>	Human rights.
	<b>3<sup>rd</sup></b>	Human rights.
	<b>4<sup>th</sup></b>	Role of information technology in environment and human health
	<b>5<sup>th</sup></b>	Role of information technology in environment and human health