



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



## LESSON PLAN

**SUBJECT: Th5. ENVIRONMENTAL STUDIES**

### CHAPTERWISE 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 its 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: ALLBRANCH	Semester: 3rd	Name of the Teaching Faculty: Mr. SAROJ KUMAR PATRA
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,damsandtheireffectsonforestsandtribalpeople
	2 <sup>nd</sup>	Waterresources:Useandover-utilizationofsurface and ground water, floods, drought,
	3 <sup>rd</sup>	conflictsoverwater,dam'sbenefitsand problems
	4 <sup>th</sup>	conflictsoverwater,dam'sbenefitsand problems
	5 <sup>th</sup>	environmentaleffectsofextractingandusingmineral resources
3 <sup>rd</sup>	1 <sup>st</sup>	FoodResources:Worldfoodproblems,changes caused by agriculture and over grazing
	2 <sup>nd</sup>	effectsofmodernagriculture,fertilizers-pesticidesproblems, waterlogging,salinity,
	3 <sup>rd</sup>	Energy Resources: Growing energy need, renewableandnon-renewableenergysources,
	4 <sup>th</sup>	useofalternate energy sources,case studies.
	5 <sup>th</sup>	LandResources:Landasaresource,landdegradation, 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 ecosystem. Structure and function of an ecosystem.
	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 ecosystems (ponds, streams, lakes, rivers, oceans)
	4 <sup>th</sup>	Energy flow in the eco systems
	5 <sup>th</sup>	Biodiversity and its Conservation: Introduction-Definition:
6 <sup>th</sup>	1 <sup>st</sup>	genetics, species and ecosystem diversity.
	2 <sup>nd</sup>	Biogeographical classification of India.
	3 <sup>rd</sup>	Value of biodiversity: consumptive use, productive use
	4 <sup>th</sup>	social, ethical, aesthetic and option values.
	5 <sup>th</sup>	Biodiversity at global, national and local level.

7 <sup>th</sup>	1 <sup>st</sup>	Threatstobiodiversity:Habitatsloss,poachingofwildlife
	2 <sup>nd</sup>	manwildlifeconflicts.
	3 <sup>rd</sup>	EnvironmentalPollution: DefinitionCauses,effects andcontrolmeasures ofdifferent pollutions
	4 <sup>th</sup>	Air pollution.
	5 <sup>th</sup>	Waterpollution
8 <sup>th</sup>	1 <sup>st</sup>	Soilpollution
	2 <sup>nd</sup>	Marinepollution
	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>	SolidwasteManagement:Causes
	2 <sup>nd</sup>	effects
	3 <sup>rd</sup>	controlmeasuresofurbanandindustrial wastes.
	4 <sup>th</sup>	Roleofanindividualinpreventionofpollution
	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>	SocialissuesandtheEnvironment
11 <sup>th</sup>	1 <sup>st</sup>	Formunsustainabletosustainabledevelopment.
	2 <sup>nd</sup>	Urbanproblemsrelatedtoenergy.
	3 <sup>rd</sup>	Water conservation
	4 <sup>th</sup>	rainwaterharvesting,
	5 <sup>th</sup>	watershed management.
12 <sup>th</sup>	1 <sup>st</sup>	Resettlementandrehabilitationofpeople
	2 <sup>nd</sup>	itsproblemsand concern.
	3 <sup>rd</sup>	Environmentalethics:issueandpossible solutions.
	4 <sup>th</sup>	Climatechange,
	5 <sup>th</sup>	globalwarming,

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