

LESSON PLAN FOR ENVIRONMENTAL STUDIES

Discipline Civil	Semester: 6TH	Name of teaching faculty: Sourav Kumar Behera
Subject: ENVIRONMENTAL STUDIES	Nos of days per week class allotted: 4	Semester from date:9.12.19 to date:31.03.20
Week	Class day	Theory topics
DEC 2ND Week	1ST	The Multidisciplinary nature of environmental studies Definition
	2ND	scope
	3RD	importance
	4th	Need for public awareness
DEC 3rd Week	1ST	Natural Resources Natural resources and associated problems Forest resources: Use and over-exploitation, deforestation, case studies
	2ND	Timber extraction mining, dams and their effects on forests and tribal people
	3RD	Water resources: Use and over-utilization of surface and ground water
	4TH	floods, drought, conflicts over water, dam's benefits and problems.
DEC 4th week	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,
January 1st week	1ST	effects of modern agriculture, fertilizers-pesticides problems, water logging, salinity
	2ND	Energy Resources: Growing energy

		need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.
	3 RD	Land Resources: Land as a resource, land degradation
<u>January 2ND week</u>	1 ST	man induces land slides, soil erosion, and desertification
	2 ND	Role of individual in conservation of natural resources
	3 RD	Equitable use of resources for sustainable life styles
	4 TH	Systems Concept of an eco system
<u>January 3rd week</u>	1 ST	Structure of an eco system
	2 ND	function of an eco system
	3 RD	Producers, consumers, decomposers
	4 TH	Energy flow in the eco systems
<u>January 4th week</u>	1 ST	Ecological succession
	2 ND	Food chains, food webs
	3 RD	ecological pyramids
	4 TH	Introduction, types, characteristic features of the eco system
<u>January 5th week</u>	1 ST	structure and function of the following eco system
	2 ND	Forest ecosystem
	3 RD	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries)
	4 TH	Biodiversity and it's Conservation Introduction-Definition: genetics, species and ecosystem diversity
<u>February 2nd week</u>	1 ST	Biogeographically classification of India
	2 ND	Value of biodiversity: consumptive use, productive use
	3 RD	social ethical, aesthetic and optin values
	4 TH	Biodiversity at global
<u>February 3rd</u>	1 ST	national and local level

<u>week</u>		
	2 ND	Threats to biodiversity: Habitats loss, poaching of wild life
	3 RD	man wildlife conflicts
	4 TH	Environmental Pollution Definition Causes, effects and control measures
<u>February 4th week</u>	1 ST	Air pollution
	2 ND	Water pollution
	3 RD	Soil pollution
<u>February 5th week</u>	1 ST	Marine pollution
	2 ND	Noise pollution
	3 RD	Thermal pollution
	4 TH	Nuclear hazards
<u>March 1st week</u>	1 ST	Introduction to Solid waste Management
	2 ND	Causes, effects of urban and industrial wastes
	3 RD	Control measures of urban and industrial wastes
	4 TH	Role of an individual in prevention of pollution
	3 RD	Urban problems related to energy.
<u>March 3rd week</u>	1 ST	Water conservation, rain water harvesting
	2 ND	water shed management
	3 RD	Resettlement and rehabilitation of people; its problems nd concern
	4 TH	Environmental ethics: issue and possible solutions. Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
<u>March 4th week</u>	1 ST	Air (prevention and control of pollution) Act. Water (prevention and control of pollution) Act. Public awareness.

	2ND	Human population and the environment Population growth and variation among nations. Population explosion- family welfare program.
	3RD	Environment and human health. Human rights.
	4TH	Human rights. Value education
<u>Mach 5th week</u>	1ST	Role of information technology in environment and human health