

Discipline: Civil	Semester: 3rd	Semester from: 15/07/21-19/01/22 No. of weeks:28
Subject: EVS(Environmental Studies) Th.5	No. of days/per week Class Allotted: 4	Name of the teaching faculty: Sushree Sasmita Sahoo
Week	Class/Day	Theory Topics
1 <sup>st</sup>	1 <sup>st</sup>	<b>The Multidisciplinary nature of environmental studies</b>
	2 <sup>nd</sup>	Definition, scope and importance
	3 <sup>rd</sup>	Definition, scope and importance
	4 <sup>th</sup>	Need for public awareness
2 <sup>nd</sup>	1 <sup>st</sup>	<b>Natural Resources</b> <b>Renewable and non renewable resources</b>
	2 <sup>nd</sup>	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
	3 <sup>rd</sup>	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
	4 <sup>th</sup>	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems
3 <sup>rd</sup>	1 <sup>st</sup>	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources
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	3 <sup>rd</sup>	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources
	4 <sup>th</sup>	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,
4 <sup>th</sup>	1 <sup>st</sup>	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies
	2 <sup>nd</sup>	Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies
	3 <sup>rd</sup>	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification
	4 <sup>th</sup>	Role of individual in conservation of natural resources  Equitable use of resources for sustainable life styles
5 <sup>th</sup>	1 <sup>st</sup>	<b>Systems</b>  Concept of an eco system.
	2 <sup>nd</sup>	Structure and function of an eco system
	3 <sup>rd</sup>	Structure and function of an eco system
	4 <sup>th</sup>	Producers, consumers, decomposers
6 <sup>th</sup>	1 <sup>st</sup>	Energy flow in the eco systems
	2 <sup>nd</sup>	Energy flow in the eco systems
	3 <sup>rd</sup>	Ecological succession
	4 <sup>th</sup>	Food chains, food webs and ecological pyramids
7 <sup>th</sup>	1 <sup>st</sup>	Food chains, food webs and ecological pyramids
	2 <sup>nd</sup>	Introduction, types, characteristic features, structure and function of the following eco system

	3 <sup>rd</sup>	Forest ecosystem
	4 <sup>th</sup>	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries)
8 <sup>th</sup>	1 <sup>st</sup>	<b>Biodiversity and it's Conservation</b>  Introduction-Definition: genetics, species and ecosystem diversity
	2 <sup>nd</sup>	Biogeographically classification of India
	3 <sup>rd</sup>	Biogeographically classification of India
	4 <sup>th</sup>	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optional values
9 <sup>th</sup>	1 <sup>st</sup>	Biodiversity at global, national and local level
	2 <sup>nd</sup>	Biodiversity at global, national and local level
	3 <sup>rd</sup>	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts
	4 <sup>th</sup>	<b>Environmental Pollution</b>
10 <sup>th</sup>	1 <sup>st</sup>	Definition Causes, effects and control measures of:  a) Air pollution
	2 <sup>nd</sup>	b) Water pollution
	3 <sup>rd</sup>	b) Water pollution
	4 <sup>th</sup>	c) Soil pollution
11 <sup>th</sup>	1 <sup>st</sup>	d) Marine pollution
	2 <sup>nd</sup>	d) Marine pollution
	3 <sup>rd</sup>	e) Noise pollution
	4 <sup>th</sup>	f) Thermal pollution
12 <sup>th</sup>	1 <sup>st</sup>	f) Thermal pollution
	2 <sup>nd</sup>	g) Nuclear hazards
	3 <sup>rd</sup>	g) Nuclear hazards

	4 <sup>th</sup>	Solid waste Management: Causes, effects and control measures of urban and industrial wastes
13 <sup>th</sup>	1 <sup>st</sup>	Role of an individual in prevention of pollution
	2 <sup>nd</sup>	Disaster management: Floods, earth quake, cyclone and land slides
	3 <sup>rd</sup>	Disaster management: Floods, earth quake, cyclone and land slides
	4 <sup>th</sup>	From unsustainable to sustainable development
14 <sup>th</sup>	1 <sup>st</sup>	Urban problems related to energy
	2 <sup>nd</sup>	Urban problems related to energy
	3 <sup>rd</sup>	Water conservation, rain water harvesting, water shed management
	4 <sup>th</sup>	Water conservation, rain water harvesting, water shed management
15 <sup>th</sup>	1 <sup>st</sup>	Resettlement and rehabilitation of people; its problems and concern
	2 <sup>nd</sup>	Environmental ethics: issue and possible solutions
	3 <sup>rd</sup>	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
	4 <sup>th</sup>	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
16 <sup>th</sup>	1 <sup>st</sup>	Air (prevention and control of pollution) Act Water (prevention and control of pollution) Act
	2 <sup>nd</sup>	Public awareness
	3 <sup>rd</sup>	Population growth and variation among nations
	4 <sup>th</sup>	Population explosion- family welfare program
17 <sup>th</sup>	1 <sup>st</sup>	Environment and human health
	2 <sup>nd</sup>	Human rights

	3 <sup>rd</sup>	Value education
	4 <sup>th</sup>	Role of information technology in environment and human health