PROGRAMME : CIVIL ENGINEERING **COURSE NAME : EVS** **COURSE CODE : TH-5** **SEMESTER : 3RD** **PERIODS/WEEK: 4** **TOTAL PERIODS: 60**	**NAME OF THE FACULTY: DURLAVI SWAIN**

WEEK	CLASS	TOPICS
1	1	The Multidisciplinary nature of environmental studies: Definition
	2	Scope and importance, Need for public awareness.
	3	Natural Resources: Concepts
	4	Renewable and non renewable resources: Definition, Examples
2	1	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	2	Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.
	3	Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.
	4	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity
3	1	Energy Resources: Growing energy need, renewable and non renewable energy sources, use of alternate energy sources, case studies.
	2	Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.
	3	Role of individual in conservation of natural resources.
	4	Equitable use of resources for sustainable life styles.
4	1	Concept of an eco system.
	2	Structure and function of an eco system
	3	Producers, consumers, decomposers.
	4	Energy flow in the eco systems.
5	1	Ecological succession, Food chains, food webs and ecological pyramids
	2	Introduction, types, characteristic features, structure and function of Forest ecosystem
	3	Aquatic eco systems (ponds, streams, lakes, rivers, oceans, estuaries).
	4	Introduction-Definition: genetics, species and ecosystem diversity
6	1	Biogeographically classification of India.
	2	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values.
	3	Biodiversity at global, national and local level
	4	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
7	1	Definition Causes, effects and control measures of Air pollution
	2	Definition Causes, effects and control measures of Water pollution
	3	Definition Causes, effects and control measures of Soil pollution
	4	Definition Causes, effects and control measures of Marine pollution
8	1	Definition Causes, effects and control measures of Noise pollution
	2	Definition Causes, effects and control measures of Thermal pollution
	3	Definition Causes, effects and control measures of Nuclear hazards.

	4	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
9	**1**	Disaster management: Floods, earth quake, cyclone and landslides.
	2	Form unsustainable to sustainable development.
	3	Urban problems related to energy
	4	Water conservation, rain water harvesting, water shed management.
10	**1**	Resettlement and rehabilitation of people; its problems and concern.
	2	Environmental ethics: issue and possible solutions
	3	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
	4	Air (prevention and control of pollution) Act. Water (prevention and control of pollution) Act.
11	**1**	Population growth and variation among nations.
	2	Population explosion- family welfare program.
	3	Environment and human health.
	4	Human rights.
12	**1**	Value education
	2	Role of information technology in environment and human health.
	3	Revision
	4	Revision
13	**1**	Revision
	2	Revision
	3	Revision
	4	Revision
14	**1**	Revision
	2	Revision
	3	Probable questions discussion
	4	Probable questions discussion
15	**1**	Probable questions discussion
	2	Probable questions discussion
	3	Probable questions discussion
	4	Probable questions discussion