Discipline EE/EEE	Semester : 3rd Semester	Name of the Teaching Faculty: Niranjan Nayak Lect. (S-II) IN AE&I Engineering
Subject: Environmental studies (EVS)	No. of Days/week Class Allotted: 60	No of weeks: 15
WEEK	CLASS DAY	Theory Topics
1st	1	The Multidisciplinary nature of environmental studies: Definition, scope and importance.
	2	Need for public awareness.
	3	Forest resources: Use and over-exploitation, deforestation,
	4	case studies, Timber extraction
2nd	5	Mining, dams and their effects on forests and tribal people.
	6	Water resources: Use and over-utilization of surface and ground water,
	7	floods, drought
	8	conflicts over water, dam's benefits and problem
3rd	9	Mineral Resources: Use and exploitation
	10	Environmental effects of extracting and using mineral resources.
	11	Food Resources: World food problems
	12	changes caused by agriculture and over grazing
4th	13	effects of modern agriculture, fertilizers- pesticides problems,
	14	water logging, salinity
	15	Energy Resources: Growing energy need,
	16	renewable and non-renewable energy sources,
5th	17	Use of alternate energy sources, case studies.
	18	Land Resources: Land as a resource, land degradation
	19	Man induces landslides, soil erosion, and desertification.
	20	Revision of Flood ,Drought and Effect of modern agriculture
6th	21	Role of individual in conservation of natural resources and equitable use of resources for sustainable life styles.
	22	Concept of an eco-system.
	23	Structure and function of an eco-system.
	24	Producers, consumers, decomposers.

7th	25	Energy flow in the eco systems.
	26	Ecological succession and Food chains.
	27	Revision class of ecosystem
	28	Food webs and ecological pyramids.
8th	29	Introduction, types, characteristic features, structure and function of the following eco system: Forest ecosystem:
	30	Aquatic eco systems (ponds, streams, lakes, rivers, oceans,
	31	Introduction-Definition: genetics, species and ecosystem diversity.
	32	Bio-geographical classification of India.
9th	33	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and option values.
	34	Biodiversity at global, national and local level and threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts
	35	Revision class of value of biodiversity and threats.
	36	Definition Causes, effects and control measures of: AIR POLLUTION
10th	37	Definition Causes, effects and control measures of: WATER POLLUTION
	38	Definition Causes, effects and control measures of: SOIL POLLUTION
	39	Definition Causes, effects and control measures of: MARINE POLLUTION
	40	Definition Causes, effects and control measures of: NOISE POLLUTION
11th	41	Definition Causes, effects and control measures of: THERMAL POLLUTION
	42	Definition Causes, effects and control measures of: NUCLEAR POLLUTION
	43	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
	44	Role of an individual in prevention of pollution. Disaster management: Floods, earth quake, cyclone and landslides
12th	45	Revision class of Air and Water pollution.
	46	Form unsustainable to sustainable development. Urban problems related to energy
	47	Water conservation, rain water harvesting, water shed management.
	48	Resettlement and rehabilitation of people; its problems and concern
13th	49	Environmental ethics: issue and possible solutions.
	50	Revision class of rain water harvesting.
	51	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
	52	Air (prevention and control of pollution) Act

14th	53	Water (prevention and control of pollution) Act.
	54	Public awareness.
	55	Population growth and variation among nations.
	56	Population explosion- family welfare program.
15th	57	Environment and human health
	58	Human rights Value education
	59	Revision class of population growth and its impact.
	60	Previous question and answer discussion.