Discipline: Mechanical engineering	Semester : 3rd Semester	Name of the Teaching faculty: Smt. C R Meher(Lect.)
Subject :ENVIRONMENTAL STUDY	No. of Days/Week Class Allotted: 60	No of weeks :18
Week	Class Day	Theory Topics
1st	1st	The Multidisciplinary nature of environmental studies
	2nd	Definition of environment
	3rd	scope and importance of environment
	4th	Need for public awareness about environment
2nd	1st	Natural Resources and types
	2nd	Forest resources: Use and over-exploitation, deforestation, case studies, 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.
3rd	1st	Mineral Resources: Use and exploitation,
	2nd	Environmental effects of extracting and using mineral resources.
	3rd	Food Resources: World food problems ,changes caused by agriculture and
	4th	overgrazing,effectsofmodernagriculture,fertilizerspesticidesproblems, water logging, salinity,.
4th	1st	Energy Resources: Growing energy need,
	2nd	renewable and nonrenewable energy sources,
	3rd	use of alternate energy sources, case studies
	4th	Land Resources: Land as a resource ,.
5th	1st	land degradation ,man induces landslides, soil erosion, and desertification
	2nd	Role of individual in conservation of natural resources
	3rd	Equitable use of resources for sustainable lifestyles.
	4th	Ecosystems, Concept of an ecosystem.
6th	1st	Energy flow in the ecosystems. Ecological succession. Food chains, food web sand ecological pyramids
	2nd	Energy flow in the ecosystems. Ecological succession. Food chains, food web sand ecological pyramids
	3rd	Introduction, types, characteristic features, structure and function of the following ecosystem:
	4th	Forest ecosystem: Aquatic ecosystems (ponds, streams, lakes, rivers,

		oceans, estuaries
7th	1st	Biodiversity and it's Conservation
	2nd	Introduction-Definition: genetics, species and ecosystem diversity. Biogeographically classification of India.
	3rd	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and opt in values.
	4th	Biodiversity at global, national and local level.
8th	1st	Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
	2nd	: Environmental Pollution.
	3rd	Definition Causes, effects and control measures of
	4th	Air pollution.
9th	1st	Water pollution
	2nd	Soil pollution
	3rd	Marine pollution
	4th	Noise pollution.
10th	1st	Thermal pollution
	2nd	Nuclear hazards
	3rd	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
	4th	Role of an individual in prevention of pollution
11th	1st	Disaster management: Floods, earth quake, cyclone and landslides.
	2nd	: Social issues and the Environment
	3rd	From unsustainable to sustainable development.
	4th	Urban problems related to energy.
12th	1st	Water conservation, rain water harvesting, water shed management
	2nd	Resettlement and rehabilitation of people; its problems and concern
	3rd	Environmental ethics: issue and possible solutions
	4th	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
13th	1st	Air (prevention and control of pollution) Act.
	2nd	Water (prevention and control of pollution) Act.
	3rd	Public awareness.
	4th	Human population and the environment
14th	1st	Population growth and variation among nations
	2nd	Population explosion-family welfare program.
	3rd	Environment and human health
	4th	Human rights.
15th	1st	Value education
	2nd	role of information technology in environment and human health
	3rd	Revision of chapter 1
	4th	Revision of chapter 2

16th	1st	Revision of chapter 3
	2nd	Revision of chapter 4
	3rd	Revision of chapter 5
	4th	Revision of chapter 6
17th	1st	Revision of chapter 7
	2nd	Discussion of Question and Answer of chapter 1
	3rd	Discussion of Question and Answer of chapter 2
	4th	Discussion of Question and Answer of chapter 3
18th	1st	Discussion of Question and Answer of chapter 4
	2nd	Discussion of Question and Answer of chapter 5
	3rd	Discussion of Question and Answer of chapter 6
	4th	Discussion of Question and Answer of chapter 7