

Discipline: Mechanical engineering	Semester : 3 rd Semester 2020-21	Name of the Teaching faculty: Smt. C R Meher(Lect.)
Subject :ENVIRONMENTAL STUDY	No. of Days/Week Class Allotted: 60	Semester from date: 01/09/2020 to date: 19/03/2020 No of weeks :18
Week	Class Day	Theory Topics
1 st	1 st	The Multidisciplinary nature of environmental studies
	2 nd	Definition of environment
	3 rd	scope and importance of environment
	4 th	Need for public awareness about environment
2 nd	1 st	Natural Resources and types
	2 nd	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people.
	3 rd	Water resources: Use and over-utilization of surface and ground water,
	4 th	floods, drought, conflicts over water, dam's benefits and problems.
3 rd	1 st	Mineral Resources: Use and exploitation,
	2 nd	Environmental effects of extracting and using mineral resources.
	3 rd	Food Resources: World food problems ,changes caused by agriculture and
	4 th	overgrazing, effectsofmodernagriculture, fertilizerspesticidesproblems, water logging, salinity,.
4 th	1 st	Energy Resources: Growing energy need,
	2 nd	renewable and nonrenewable energy sources,
	3 rd	use of alternate energy sources, case studies
	4 th	Land Resources: Land as a resource ,.
5 th	1 st	land degradation ,man induces landslides, soil erosion, and desertification
	2 nd	Role of individual in conservation of natural resources
	3 rd	Equitable use of resources for sustainable lifestyles.
	4 th	Ecosystems, Concept of an ecosystem.
6 th	1 st	Energy flow in the ecosystems. Ecological succession. Food chains, food web sand ecological pyramids
	2 nd	Energy flow in the ecosystems. Ecological succession. Food chains, food web sand ecological pyramids
	3 rd	Introduction, types, characteristic features, structure and function of the following ecosystem:
	4 th	Forest ecosystem: Aquatic ecosystems (ponds, streams, lakes, rivers,

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

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