

Discipline : CIVIL		Semester: 3rd		Name of the Teaching Faculty : SUBINOY BANERJEE	
Subject : ENVIRONMENTAL		No. of Days / per week class		From date : 01.10.2021	To Date : 31.12.2021
MONTH	Week	Day	Unit	Topics	
OCTOBER	1st	6th	UNIT-I	The Multidisciplinary nature of environmental studies	
				Definition, scope and importance	
	2nd	2nd		Need for public awareness.	
				Question Discussion	
		4th	UNIT-II	Natural Resources Renewable and non renewable resources:	
				a) 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.	
		5th		Water resources: Use and over-utilization of surface and ground water, floods, drought, conflicts over water, dam's benefits and problems.	
		6th		Mineral Resources: Use and exploitation, environmental effects of extracting and using mineral resources.	
	4th	4th		Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture, fertilizers- pesticides problems, water logging, salinity,.	
				Question Discussion	
		5th		Energy Resources: Growing energy need, renewable and non-renewable energy sources, use of alternate energy sources, case studies.	
		6th		Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.	
				b) Role of individual in conservation of natural resources.	
				c) Equitable use of resources for sustainable life styles.	
				Question Discussion	
	5th	2nd	UNIT-III	Systems	
				Concept of an eco system.	
				Structure and function of an eco system.	
				Producers, consumers, decomposers.	
		4th		Energy flow in the eco systems.	
				Ecological succession.	
				Food chains, food webs and ecological pyramids.	

NOVEMBER	5th			Introduction, types, characteristic features, structure and function of the following eco system:
		5th		Forest ecosystem:
				Aquatic eco systems (ponds, streams,lakes)
				Aquatic eco systems (rivers, oceans, estuaries).
				Question Discussion
	6th			CLASS TEST-1
	1st		UNIT-IV	Biodiversity and it's Conservation
		2nd		Introduction-Definition: genetics, species and ecosystem diversity.
				Biogeographically classification of India.
		5th		Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optinvalues.
				Biodiversity at global, national and local level.
		6th		Threats to biodiversity: Habitats loss, poaching of wild life, man wildlife conflicts.
				Question Discussion
	2nd	2nd	UNIT-V	Environmental Pollution.
				Definition Causes, effects and control measures of:a) Air pollution.
		4th		b) Water pollution.
		5th		INTERNAL ASSESSMENT
		6th		INTERNAL ASSESSMENT
	3rd	2nd		c) Soil pollution
		4th		d) Marine pollution
		5th		e) Noise pollution.
		6th		Question Discussion
	4th	2nd		f) Thermal pollution
		4th		g) Nuclear hazards.
		5th		Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
		6th		Role of an individual in prevention of pollution.
				Disaster management: Floods, earth quake, cyclone and landslides.
	5th	2nd		Disaster management: Floods, earth quake, cyclone and landslides.
				Question Discussion
		1st	UNIT-VI	Social issues and the Environment

DECEMBER	1st	4th		From unsustainable to sustainable development.
		5th		Urban problems related to energy.
		6th		Water conservation, rain water harvesting, water shed management.
	2nd	2nd		Resettlement and rehabilitation of people; its problems and concern.
		4th		Environmental ethics: issue and possible solutions.
		5th		Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies.
		6th		Air (prevention and control of pollution) Act.
	3rd	2nd		Water (prevention and control of pollution) Act.
		4th		Public awareness.
				Question Discussion
		5th		CLASS TEST-2
		6th	UNIT-VII	Human population and the environment
	4th			Population growth and variation among nations.
		2nd		Population explosion- family welfare program.
		4th		Environment and human health.
				Human rights.
		5th		Value education
				Role of information technology in environment and human health.
		6th		Question Discussion