

ACADEMIC LESSION PLAN FOR WINTER SEMESTER - 2024

Dept. Of Electronics & Telecommunication, Govt. Polytechnic, Balasore

Name of the Faculty: DEBASISH MOHAPATRA (GF)

Environmental studies/TH-5

Course Code : Th.5
 Theory : 4 P/W
 Total Period s: 60 P/ SEM
 Examination : 3 Hours
 SEM : 3rd, E&TC


Internal Assessment : 20 Marks
 End Semester Exam : 80marks
 TOTAL MARKS : 100 Marks
 Class Starts : 01/07/2024

DICIPLINE: ELECTRONICS &TELE.COMM.ENGG.	SEMESTER:3 RD	NAME OF THE FACULTY: DEBASISH MOHAPATRA
SUBJECT: Environmental studies/TH-5	NO OF DAYS/WEEK CLASS ALLOTED: 4	SEMESTER EROM DATE:1 ST JULY2024 NO OF WEEKS:15
1 st	1 st	1. The Multidisciplinary nature of environmental studies: Definition, scope and importance.
	2 nd	Definition, scope and importance.
	3 rd	Need for public awareness.
	4 th	Need for public awareness.
2 nd	1 st	2. Natural Resources: Renewable and non renewable resources: Natural resources and associated problems.
	2 nd	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining
	3 rd	Dams and their effects on forests and tribal people. 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, environmental effects of extracting and using mineral resources.
	2 nd	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture
	3 rd	Fertilizers- pesticides problems, water logging, salinity, . Energy Resources: Growing energy need, renewable
	4 th	Non-renewable energy sources, use of alternate energy sources, case studies. Land Resources: Land as a resource, land degradation, man induces landslides, soil erosion, and desertification.
4 th	1 st	Role of individual in conservation of natural resources
	2 nd	Equitable use of resources for sustainable life styles
	3 rd	3. Systems: Concept of an eco system.
	4 th	Structure and function of an eco system. Producers, consumers, decomposers.

5 th	1 st	Energy flow in the eco systems. Ecological succession
	2 nd	Food chains, food webs and ecological pyramids.
	3 rd	Introduction, types, characteristic features, structure and function of the following eco system: Forest ecosystem:
	4 th	Introduction, types, characteristic features, structure and function of the following eco system: Aquatic eco systems :ponds, streams
6 th	1 st	Introduction, types, characteristic features, structure and function of the following eco system: lakes, rivers
	2 nd	Introduction, types, characteristic features, structure and function of the following eco system: oceans, estuaries.
	3 rd	4. Biodiversity and it's Conservation: Introduction-Definition: genetics, species and ecosystem diversity
	4 th	Biogeographically classification of India
7 th	1 st	Value of biodiversity: consumptive use, productive use
	2 nd	Socialethical, aesthetic and optin values.
	3 rd	Biodiversity at global, national and local level
	4 th	Biodiversity at global, national and local level
8 th	1 st	Habitats loss, poaching of wild life, man wildlife conflicts.
	2 nd	Habitats loss, poaching of wild life, man wildlife conflicts.
	3 rd	5. Environmental Pollution: Definition Causes, effects and control measures of: Air pollution.
	4 th	Definition Causes, effects and control measures of: Water pollution
9 th	1 st	Definition Causes, effects and control measures of: Soil pollution
	2 nd	Definition Causes, effects and control measures of: Marine pollution
	3 rd	Definition Causes, effects and control measures of: Noise pollution.
	4 th	Definition Causes, effects and control measures of: Thermal pollution.
10 th	1 st	Definition Causes, effects and control measures of: Nuclear hazards..
	2 nd	Solid waste Management: Causes, effects and control measures of urban and industrial wastes.
	3 rd	Role of an individual in prevention of pollution.
	4 th	Role of an individual in prevention of pollution.
11 th	1 st	Disaster management: Floods, earth quake, cyclone and landslides
	2 nd	Disaster management: Floods, earth quake, cyclone and landslides
	3 rd	6.Social issues and the Environment: Form unsustainable to sustainable development

	4 th	Urban problems related to energy. Water conservation, rain water harvesting
12 th	1 st	Water shed management. Resettlement and rehabilitation of people; its problems and concern
	2 nd	Concern. Environmental ethics: issue and possible solutions.
	3 rd	Climate change, global warming, acid rain, ozone layer depletion.
	4 th	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	Public awareness
14 th	1 st	7. Human population and the environment: 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	Role of information technology in environment and human health.
	4 th	Role of information technology in environment and human health.

Debasish Mohapatra.
Dt- 23/8/24
Signature
Faculty


Signature
HOD


Signature
Academic
Coordinator


Signature
Principal