



ACADEMIC LESSION PLAN FOR SESSION - 2021-22.
DEPT. OF ELECTRICAL ENGG, GOVT. POLYTECHNIC , BALASORE.
NAME OF THE FACULTY:-ANITA SHIAL (Lect. in EE)

ENVIRONMENTAL STUDIES

Course Code: Th-5

Theory : 4 P/W

Total Period s: 60P/ Sem

Examination: 3 Hours

Sem : 3RD EE

Class Test : 20 Marks

End Semester Exam : 80marks

TOTAL MARKS : 100 Marks

Start :-1ST October 2021

Week	Class day	Theory topic
1	1 st	The Multidisciplinary nature of environmental studies
	2 nd	Definition, scope and importance
	3 rd	Need for public awareness
	4 th	Different case Study related of Environment
2	1 st	Renewable and non renewable resources
	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	Forest resources: Use and over-exploitation, deforestation, case studies, Timber extraction mining, dams and their effects on forests and tribal people
	4 th	Water resources: Use and over-utilization of surface and ground water, floods
3	1 st	Water resources : drought, conflicts over water, dam's benefits and problems
	2 nd	Mineral Resources: Use and exploitation
	3 rd	Mineral Resources: environmental effects of extracting and using mineral resources.
	4 th	Food Resources: World food problems, changes caused by agriculture and over grazing, effects of modern agriculture.
4	1 st	Food Resources: fertilizers- pesticides problems, water logging, salinity
	2 nd	Energy Resources: Growing energy need, renewable
	3 rd	non-renewable energy sources, use of alternate energy sources, case studies
	4 th	Land Resources: Land resource, land degradation, man induces landslides, soil erosion, and desertification
5	1 st	Role of individual in conservation of natural resources and Equitable use of resources for sustainable life styles
	2 nd	Double Clearing
	3 rd	Class Test
	4 th	Concept of an eco system

6	1 st	Structure and function of an eco system
	2 nd	Producers, consumers, decomposers
	3 rd	Energy flow in the eco systems
	4 th	Ecological succession
7	1 st	Food chains, food webs and ecological pyramids
	2 nd	Introduction, types, characteristic features, structure and function of the following eco system
	3 rd	Forest ecosystem and functions of forest
	4 th	Aquatic eco systems (ponds, streams, lakes, rivers, oceans)
8	1 st	Biodiversity and it's Conservation , Introduction- Definition: genetics, species and ecosystem diversity
	2 nd	Biogeographically classification of India
	3 rd	Value of biodiversity: consumptive use, productive use, social ethical, aesthetic and optin values
	4 th	Biodiversity at global, national and local level
9	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
	4 th	Air pollution and agents of air pollution
10	1 st	Water pollution
	2 nd	Soil pollution
	3 rd	Marine pollution
	4 th	Noise pollution and it effects on human health
11	1 st	Thermal pollution
	2 nd	Nuclear hazards
	3 rd	Doubt Clearance
	4 th	Different Case studied related to pollution
12	1 st	Solid waste Management: Causes, effects and control measures of urban and industrial waste
	2 nd	Role of an individual in prevention of pollution.
	3 rd	Disaster management: Floods, earth quake, cyclone and landslides

	4 th	Solid waste management and local level
13	1 st	Social issues and the Environment: Form unsustainable to sustainable development
	2 nd	Urban problems related to energy
	3 rd	Water conservation, rain water harvesting, water shed management
	4 th	Resettlement and rehabilitation of people; its problems and concern
14	1 st	Resettlement and rehabilitation of people; its problems and concern
	2 nd	Climate change, global warming, acid rain, ozone layer depletion, nuclear accidents and holocaust, case studies
	3 rd	Air (prevention and control of pollution) Act, Water (prevention and control of pollution) Act.
	4 th	Public awareness
15	1 st	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, Value education