## **ACADEMIC SESSION : WINTER 2022**

Discipline : Civil Engineering	Semester : 3 <sup>rd</sup>	Name Of The teaching faculty: Iti Epsitarani Sethi
Subject : Environmental Studies	No. of days / week class allotted	Semester From date : 15.09.2022 to 22.12.2022 Nos. of Weeks :15
Week	Class Day	Theory / Practical topics
1st	1 <sup>st</sup>	Unit 1 – Multidisciplinary nature of environmental studies Definition of Environment
TSC	2 <sup>nd</sup>	Scope and importance of Environment
	3 <sup>rd</sup>	Scope and importance of Environment
	4 <sup>th</sup>	Need for public awareness
2nd	1 <sup>st</sup>	Unit -2 -Natural resource
ZIIU	2 <sup>nd</sup>	Renewable and non renewable resource
	3 <sup>rd</sup>	Forest resource ( use and over exploitation deforestation, case studies etc.)
	4 <sup>th</sup>	Water Resource ( use and over utilization of surface and ground water, flood and draught etc.)
3rd	1 <sup>st</sup>	Mineral resource ( use and exploitation environmental effect of extracting and using mineral resource )
Siu	2 <sup>nd</sup>	Food resource – world food problems, change cause by agriculture and over grazing, effect of modern agriculture etc
	3 <sup>rd</sup>	Energy resource – growing energy need, renewable and non renewable source, use of alternate energy source
	4 <sup>th</sup>	Land resource – land as resource, land degradation, soil erosion
<b>1</b> + l -	1 <sup>st</sup>	Role of individual in conservation of natural resource
4th	2 <sup>nd</sup>	Equitable use of resource for sustainable life style
	3 <sup>rd</sup>	Unit -3 – System (Concept of an eco-system)
	4 <sup>th</sup>	Structure and function of an eco-system
	1 <sup>st</sup>	Producers, consumers, decomposers
5th	2 <sup>nd</sup>	Energy flow in the eco-system
	3 <sup>rd</sup>	Ecological succession
	4 <sup>th</sup>	Food chain, food web and ecological pyramids

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6th	1 <sup>st</sup>	Food ecosystem ( Types, characteristic features, structure and function)
	2 <sup>nd</sup>	Aquatic ecosystem (Ponds, streams, lakes, rivers, ocean)
	3 <sup>rd</sup>	Unit 4 – Biodiversity and its Conservation Introduction, definition of biodiversity
	4 <sup>th</sup>	Definition of genetics, species, and ecosystem diversity
7 <sup>th</sup>	1 <sup>st</sup>	Biographical classification of India
	2 <sup>nd</sup>	Value of Biodiversity- consumptive use, productive use, social, ethical, aesthetic and option values
	3 <sup>rd</sup>	Biodiversity at global level
	4 <sup>th</sup>	Biodiversity at national and local level
Oth	1 <sup>st</sup>	Threads of biodiversity- habitats loss
8"	2 <sup>nd</sup>	poaching of wild life, men wild life conflicts
	3 <sup>rd</sup>	Unit 5 – Environmental pollution Air pollution – Definition, causes , effects and control measure
	4 <sup>th</sup>	Water pollution - Definition, causes , effects and control measure
9th	1 <sup>st</sup>	Soil pollution - Definition, causes , effects and control measure
	2 <sup>nd</sup>	Marine pollution - Definition, causes , effects and control measure
	3 <sup>rd</sup>	Noise pollution - Definition, causes , effects and control measure
	4 <sup>th</sup>	Thermal pollution - Definition, causes , effects and control measure
10th	1 <sup>st</sup>	Nuclear Hazards - Definition, causes , effects and control measure
	2 <sup>nd</sup>	Solid waste management – definition, cause
	3 <sup>rd</sup>	Effect and control measure of urban and industrial waste
	4 <sup>th</sup>	Role of individual in prevention of pollution

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1114	1 <sup>st</sup>	Disaster management- floods and earth quake
11th	2 <sup>nd</sup>	Cyclone and landslides
	3 <sup>rd</sup>	Unit 6 – Social issues and the environment Form unsustainable to sustainable development
	4 <sup>th</sup>	Urban problem related to energy
12th	1 <sup>st</sup>	Water conservation, rain water harvesting, watershed management
1201	2 <sup>nd</sup>	Resettlement and rehabilitation of people; its problems and concern
	3 <sup>rd</sup>	Environmental ethics: issues and possible solution
	4 <sup>th</sup>	Climate change, global warming, acid rain, ozone layer depletion
4 2 + 1-	1 <sup>st</sup>	Nuclear accident and holocaust and case studies
13th	2 <sup>nd</sup>	Air (prevention and control)
	3 <sup>rd</sup>	Water (prevention and control)
	4 <sup>th</sup>	Public awareness
14th	1 <sup>st</sup>	Unit 7 – Human population and environment Population growth
<b>1</b> -1011	2 <sup>nd</sup>	variation among nation
	3 <sup>rd</sup>	Population explosion – family welfare program
	4 <sup>th</sup>	Environment and human health
1 T + L	1 <sup>st</sup>	Human rights
15th	2 <sup>nd</sup>	Value education
	3 <sup>rd</sup>	Role of Information technology in the environment
	4 <sup>th</sup>	Human health