## Govt. Polytechnic Education Society, Manesar (Gurugram)

Faculty name : POOJA

Discipline : Computer Engineering

Semester : 2

Subject : Environmental Studies and Disaster Management

Duration of Lesson Plan : 15 weeks (20 January-15 May 2025)

Work Load per week : Lectures -02 Hours

	Theory		
Week	Lecture day	Topic (including assignment/test)	
1 <sup>st</sup>	1 <sup>st</sup>	Unit-1 Introduction and basic discussion about our Environment. Basics of Ecology	
	2 <sup>nd</sup>	Ecosystem- concept and sustainable development	
2 <sup>nd</sup>	1 <sup>st</sup>	Renewable and Non-renewable resources	
2"	2 <sup>nd</sup>	Advantages, disadvantages of renewable and nonrenewable energy	
ard	1 <sup>st</sup>	Rain water harvesting	
3 <sup>rd</sup>	2 <sup>nd</sup>	Advantages, disadvantages of Rain water harvesting	
4th	1 <sup>st</sup>	Deforestation – its effects.	
4 <sup>th</sup>	2 <sup>nd</sup>	Deforestation – its control measures	
5 <sup>th</sup>	1 <sup>st</sup>	<b>UNIT-II:</b> Air and Noise Pollution Air Pollution: Source of air pollution, Effect of air pollution on human health.	
	2 <sup>nd</sup>	Assignment-1 Sessional Test-1	
	1 <sup>st</sup>	Effect of air pollution on economy. Air pollution control methods.	
6 <sup>th</sup>	2 <sup>nd</sup>	Noise Pollution: Source of noise pollution. Unit of noise. Effect of noise pollution, Acceptable noise level, Different method of minimizing noise pollution.	
7 <sup>th</sup>	1 <sup>st</sup>	UNIT III Water and Soil Pollution Water Pollution: Impurities in water, Cause of water pollution, Source of water pollution	
	2 <sup>nd</sup>	Effect of water pollution on human health, Concept of DO, BOD, COD.	
8 <sup>th</sup>	1 <sup>st</sup>	Prevention of water pollution- Water treatment processes, Sewage treatment. Water quality standard.	
	2 <sup>nd</sup>	Soil Pollution :Sources of soil pollution, Effects and Control of soil pollution	
9 <sup>th</sup>	1 <sup>st</sup>	Types of Solid waste- House hold, Industrial, Agricultural, Biomedical, Disposal of solid waste	

	2 <sup>nd</sup>	Solid waste management E-waste, E – waste management.
10 <sup>th</sup>	1 <sup>st</sup>	Assignment-2 Sessional Test-2
	2 <sup>nd</sup>	UNIT IV
		Impact of Energy Usage on Environment
		Global Warming, Green House Effect, Depletion of Ozone Layer.
11 <sup>th</sup>	1 <sup>st</sup>	Global Warming, Green House Effect, Acid Rain. Eco-friendly Material
	2 <sup>nd</sup>	Recycling of Material
12 <sup>th</sup>	1 <sup>st</sup>	Concept of Green Buildings, Concept of Carbon Credit
	2 <sup>nd</sup>	Concept of Green Buildings, Concept of Carbon footprint.
	1 <sup>st</sup>	UNIT V
1 Oth		Disaster Management
13 <sup>th</sup>		Different Types of Disaster
	$2^{nd}$	Natural Disaster: such as Flood, Cyclone, Earthquakes and Landslides etc
14 <sup>th</sup>	1 <sup>st</sup>	Man-made Disaster: such as Fire, Industrial Pollution, Nuclear Disaster
	2 <sup>nd</sup>	Biological Disasters, Accidents (Air, Sea Rail & Road)
15 <sup>th</sup>	1 <sup>st</sup>	Structural failures(Building and Bridge), War & Terrorism etc
	2 <sup>nd</sup>	Disaster Preparedness Plan, Prediction, Early Warnings and Safety Measures of Disaster.
16th		Assignment-3
		Sessional Test-3