

INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad - 500 043

Course Title	DISASTER MANAGEMENT				
Course Code	ACEC31				
Program	B.Tech				
Semester	VIII	VIII CSIT			
Course Type	Open Electiv	Open Elective			
Regulation	IARE - UG20	0			
		Theory		Pract	tical
Course Structure	Lecture	Tutorials	Credits	Laboratory	Credits
	3	-	3	-	-
Course Coordinator	Mr. A Rajesh, Assistant Professor				

COURSE OBJECTIVES:

The students will try to learn:

I	The concept of environmental hazards, disasters and various approaches dealing with the mitigation of disasters.
II	The knowledge on various types of environmental disasters and their impacts on human beings and nature.
III	The Different types of endogenous and exogenous hazards and their influence on human life and nature.
IV	The immediate response and damage assessment with information reporting and monitoring tools.

COURSE OUTCOMES:

After successful completion of the course, students should be able to:

CO 1	Classify Environmental hazards for developing modern disaster	Understand
	management system.	
CO 2	Illustrate various approaches for reducing the level of risk	Understand
	associated with Disasters	
CO 3	Compare natural and manmade disasters for finding out intensity	Understand
	of damage loss occurred by them.	

CO 4	List various hazards and their effects for evaluating their impact on	Remember
	society and Environment.	
CO 5	Outline human adjustments and perception towards hazards for	Understand
	mitigation of disasters	
CO 6	Summarize disaster phenomenon and its different contextual	Understand
	aspects for implementing the Disaster Risk Reduction Strategy.	

QUESTION BANK:

Q.No	QUESTION	Taxonomy	How does this subsume	CO's		
			the level			
		MODULE :				
	EMERGING APPROACHES IN DISASTER MANAGEMENT					
PA	RT A-PROBLEM SOLVIN	G AND CRIT	CICAL THINKING QUEST	TIONS		
1	Explain how Sustainable	Understand	Learner to recall the	CO 2		
	management of natural		concepts of resource			
	resources is essential to		management and explain			
	provide Livelihood and		its importance of			
	environmental security.		environment.			
2	Summarize, how the	Understand	Learner to recall the	CO 2		
	occurrence of EL NINO		concepts of El Nino and			
	events affects global		explain its effects on			
	climate?		environment.			
3	Explain the concept of first	Understand	Learner to recall the	CO 2		
	responder with special		concepts of first responder			
	reference to the role of the		and understand the			
	government in first		government role in first			
	response.		response.			
4	Explain the principles of	understand	Learner to recall the	CO 2		
	disaster mitigation and		mitigation principles and			
	elaborate the Problem areas		explain various problems			
	in disaster mitigation.		that occurred during			
			mitigation of disaster.			
5	Discuss the relationship	Understand	Learner to recall the	CO 2		
	between disaster and		concepts of disaster,			
	development with the help		development and			
	of examples from developed		understand the working			
	and developing countries.		mechanism of disaster			
			management in developed			
			countries.			

6	Explain national guidelines	Understand	Learner to recall the effects	CO 1,
O	1 -	Understand		CO 1, CO 2
	for temporary shelter provision during disasters.		of disasters, and explain	CO 2
	provision during disasters.		the guidelines for shelter	
			provision by the	
		TT 1	government.	GO 2
7	Determine various methods	Understand	Learner to recall various	CO 2
	for rescuing affected persons		rescue methods and	
	in a disaster situation		explain how they were	
			helped during emergency	
			situations.	
8	Discuss the role and	Understand	Learner to recall working	CO 2
	functions of a Disaster		mechanism of disaster	
	Manager		management and explain	
			the importance of disaster	
			management.	
9	Write the significance of	Remember	Learner to recall significance	CO 1,
	planning for ensuring		of planning for ensuring	CO 2
	disaster prevention		disaster prevention	
10	Explain different key	Understand	Learner to recall and	CO 1,
	environmental concerns		understand the Various	CO 2
	pertaining to disasters,		concerns regarding disasters	
11	Explain Risk Assessment	Understand	Learner to recall and	CO 1,
	and underline the		understand the concepts of	CO 2
	methodologies for		risk assessment for disaster	
	conducting risk assessment.		management	
	PART B-LC	NG ANSWE	R QUESTIONS	
1	Define environmental stress	Remember	Learner to recall	CO 1
	and write a note on what		environmental stress.	
	bases the stresses are			
	categorised.			
2	Explain natural disaster and	Understand	Learner to define types of	CO 2
	manmade disaster and its		disasters and explain the	
	effects on environment and		effects on environment and	
	society.		society.	
3	Compare different	Understand	Learner to recall the	CO 2
	approaches to disaster		concepts of various	
	management with various		approaches and explain	
	case studies.		them with different case	
			studies.	
4	T	D l	Learner to recall the various	CO 1
	List out various types of	Remember	Learner to recan the various	COI
	List out various types of environmental disasters and	Remember	types of environmental	CO 1

5	Compare physical Psychosocial and mechanical hazards	Understand	Learner to define the concepts of hazards and explains them by comparing with other hazards.	CO 1
6	List out various types of Approaches which are used in disaster management	Remember	Learners to recall various types of approaches in disaster management.	CO 1, CO 2
7	Define various types of stressors and explain its effects on humans	Understand	Learner to recall the concepts stressors and explain its effects on humans	CO 1, CO 2
8	Explain chemical and biological hazards.	Understand	Learner to recall the concepts of hazards and explain various types of hazards.	CO 2
9	Define human ecology and describe how it is related to Disasters	Remember	Learner to recall the human ecology.	CO 1
10	Summarize Ecosystem Approach and perception approach	Understand	Learner to recall the concepts of approaches and explain eco and perception approaches.	CO 2
11	Explain key environmental concerns pertaining to disasters	Understand	Learner to recall various environmental issues and explain how they are becoming disasters.	CO 1
12	Define ecology, human ecology and human perception towards disaster mitigation	Understand	Learner to recall the concepts of ecology, human ecology and explain human perception for disaster mitigation	CO 2
13	Explain Risk Assessment and underline the methodologies for conducting risk assessment.	Understand	Learner to recall and understandthe concepts of risk assessment for disaster management.	CO1,CO
14	Define environmental stress. Write a note on the stressors of environment.	Understand	Learner will understand environmental stress	CO1,CO 2
15	Discuss about Ecosystem Approach and perception approach	Understand	Learner will understand ecosystem and perception approach	CO1,CO 2

16	Write an account on different approaches to disaster management and relation with human ecology.	Understand	Learner to recall the concepts of ecology, human ecology and explain human perception for disaster mitigation	CO1,CO 2
17	Write a note on chemical and biological hazards.	Understand	Learner to reacl on chemical and biological hazards.	CO1,CO 2
18	Write an account on geomorphic (geological) hazards.	Understand	Learner to recall geomorphic (geological) hazards.	CO1,CO
19	What is meant by human ecology? How it is related to Disasters.	Understand	Learner to understand human ecology? How it is related to Disasters.	CO1,CO
20	Define human Ecology? What is the field of applications in geographical Researchers.	Understand	Learner to understand field of applications in geographical Researchers.	CO1,CO
	PART-C SH	ORT ANSWE	R QUESTIONS	
1	Define various types of environmental hazards and disasters	Remember	Learner to recall the various types of environmental hazards and disasters.	CO 1
2	Distinguish between natural disaster and man-made disasters?	Understand	Learner to recall the concepts of types of disasters and explain the difference between them.	CO 2
3	State any two impacts of disaster that has on community.	Remember	Learner to recall the impact of disaster.	CO 1
4	When will hazards can become a disaster?	Remember	Learner will recall and understand the hazards and disaster.	CO 1
5	Describe a disaster?	Understand	Learner to recall the concepts of disaster phenomenon and explain their impact on society and humans.	CO 2
6	Classify environmental stresses in atmosphere.	Understand	Learner to Definethe concept of stresses and explain various types of stresses in environment.	CO 2

7	List out various types of Environmental Hazards and their effects on society.	Remember	Learners will recall the various types of Environmental Hazards and their effect on society.	CO 1
8	Explain biological hazards and their effects on humans.	Understand	Learner to recall the concepts of biological hazards and explain its effect on humans.	CO 2
9	Define flash flood and explain its impact on environment.	Understand	Learner to define the concept of flash flood and explain its impact on humans.	CO 1, CO 2
10	Define chemical and physical hazards.	Remember	Learner will understand the chemical and physical hazards.	CO 1
11	Define and give some examples of stressors	Remember	Learner will understand about stressors.	CO 1
12	Define physical hazards with an example	Remember	Learner to understand physical hazards.	CO 1
13	Define various approaches for disaster mitigation	Remember	Learner to recall different approaches for disaster mitigation.	CO 1
14	What are steps involved in risk communication?	Remember	Learner to understand steps involved in risk communication.	CO 1
15	Explain, how the occurrence of EL NINO events affects global climate?	Understand	Learner to recall the occurrence of EL NINO events affects global climate?	CO 1
16	Describe natural disaster and list out the natural disaster.	Remember	Learner to understand natural disaster and list out the natural disaster.	CO 1
17	Explain the concept of first responder with special reference to the role of the government in first response.	Remember	Learner to understand the concept of first responder.	CO 1
18	Discuss the guiding principles of disaster mitigation and elaborate the problem areas in disaster mitigation.	Understand	Learner to recall guiding principles of disaster mitigation.	CO 1

19	Discuss the relationship between disaster and development with the help of examples from developed and developing countries.	Remember	Learner to understand relationship between disaster and development with the help of examples from developed and developing countries.	CO 1
20	Discuss various methods for rescuing affected persons in a disaster situation.	Remember	Learner understand various methods for rescuing affected persons in a disaster situation. mitigation.	CO 1
		MODULE I	I	
			ZARDS AND DISASTERS	
PA	RT A-PROBLEM SOLVIN	G AND CRIT	ICAL THINKING QUEST	IONS
1	Explain cyber terrorism and Summarize forms and impacts	Understand	Learner to recall and understand the concepts of cyber terrorism and its effects.	CO 2
2	Explicit a brief note on psychological and social dimensions of disaster	Understand	Learner to recall and understand the concepts slopes and deflections and solve the slopes and deflections for a given beam.	CO 2
4	Illustrate manmade (anthropogenic) disaster and list out various manmade disasters	Understand	Learner to recall and understand the concepts of disasters and its types.	CO 2, CO 3,
5	Explore the positive human impact on environment	Understand	Learner to recall and explain how positive human will helps in mitigating disasters.	CO 2, CO 3,
6	Explain the negative effects of oil drilling	Understand	Learner to recall and understand the effects of oil drilling on environment.	CO 2, CO 3
7	Illustrate top ten terrifying disasters in history and Specify organization chart for emergency environmental health activities	Understand	Learner to recall and explain various disasters occurred in history and show mitigation plans for them.	CO 2, CO 3
8	Summarize various categories of natural hazards and their effects	Understand	Learner to recall and understand various categories of hazards and their effects	CO 2, CO 3

8	Explain biological hazards and their effects on humans.	Understand	Learner to recall the concepts of biological hazards and explain its effect on humans.	CO 2
9	Explain the causes of sea level rise and its effect on humans and environment	Understand	Learner to recall and understand the concepts of global warming and its effects	CO 2, CO 3
10	Define vulnerability and discuss the vulnerability profile of India.	Remember	Understand vulnerability and discuss the vulnerability profile of India.	CO 1
			R QUESTIONS	
1	Explain a) cold waves b) Heatwaves and c) soilErosion	Understand	Learner to recall the concepts of cold, hot waves and soil erosion explain their effects on society.	CO 2, CO 3
2	Relate floods as a serious environmental hazard.	Understand	Learner to recalland understand the effects of floods on society and environment	CO 2, CO 3
3	What are the consequences of the of drought and Summarize its effects on society.	Understand	Learner to recall and understand the effects of droughts on society	CO 2, CO 3
4	What is sea level rise and explain its causes and effects?	Understand	Learner to recall and Understand the concepts of global warming.	CO 2, CO 3
5	Summarize global atmospheric changes.	Understand	Learner to recall and explain the causes of atmospheric changes.	CO 2, CO 3
6	Compare natural disaster and man-made disaster	Understand	Learner to recall and understand the concepts of different types of disasters.	CO 2, CO 3
7	Explain planetary and extra planetary hazard with a flow chart.	Understand	Learner to recall and understand different types of hazards.	CO 2, CO 3
8	Illustrate planetary hazards with example	Understand	Learner to recall and understand the concepts of planetary hazards.	CO 2, CO 3
9	Summarize causes of floods and explore various harmful effects of floods.	Understand	Learner to recall and understand the concepts of floods and its causes.	CO 2, CO 3

10	Illustrate the methods of controlling floods.	Understand	Learner to recall and understand the concepts of flood control methods.	CO 2, CO 3
11	Examine the role of corporate social responsibility as an emerging avenue in managing disasters.	Understand	Learner to recall and understand role of corporate social responsibility as an emerging avenue in managing disasters	CO 2, CO 3
12	Illustrate floods as a serious environmental hazard with an example	Understand	Learner to recall and understand the concepts of floods and its effects.	CO 2, CO 3
13	Write short notes on: a) cold waves b) Heat waves c) Soil Erosion	Understand	Learner to Understand cold, heat waves and soil erosion.	CO 2, CO 3
14	Learner to Understand cold, heat waves and soil erosion.	Remember	Learner to understand floods as a serious environmental hazard.	CO 2, CO 3
15	What are the consequences of the phenomenon of drought? Explain briefly.	Remember	Learner to understand the consequences of the phenomenon of drought? Explain briefly.	CO 2, CO 3
16	Explain sea level rise. What are its causes and effects?	Remember	Learner to understand sea level rise. What are its causes and effects?	CO 2, CO 3
17	Write a note on global atmospheric changes.	Remember	Learner to understand global atmospheric changes.	CO 2, CO 3
18	What is the difference between natural disaster and man-made disaster?	Understand	Learner to understand difference between natural disaster and man-made disaster?	CO 2, CO 3
19	Draw a flow chart of planetary and extra planetary hazard and explain.	Remember	Learner to understand planetary and extra planetary hazard and explain.	CO 2, CO 3
20	Write a brief note on the extra planetary hazards.	Remember	Learner to recall note on the extra planetary hazards.	CO 2, CO 3

PART-C SHORT ANSWER QUESTIONS				
1	Define disaster and classify various types of disasters.	Remember	Learner to recall disaster and classify various types of disasters.	CO 2
2	Define social hazard.	Remember	Learner to recall social hazard.	CO 2
3	What are the effects of cyclones	Remember	Learner to understand the effects of cyclones	CO 2
4	Define different types of man-Induced hazards.	Remember	Learner to understand different types of man-Induced hazards.	CO 3
5	List various types of natural hazards.	Remember	Learner to understand various types of natural hazards.	CO 2
6	Define meteorological hazards.	Remember	Learner to recall meteorological hazards.	CO 3
7	Define earthquake hazard? What causes earthquake.	Remember	Learner to recall earthquake hazard.	CO 3
8	recall the harmful effects of earthquakes?	Remember	Learner to recall the harmful effects of earthquakes.	CO 3
9	Define extra planetary hazard	Remember	Define extra planetary hazard.	CO 3
10	What are the causes for earthquakes	Remember	What are the causes for earthquakes.	CO 3
11	Define planetary hazard	Remember	Define planetary hazard.	CO 3
12	Discuss about the planetary and extra-planetary hazard.	Remember	Learner to understand planetary and extra- planetary hazard.	CO 3
13	What is earthquake hazard? What causes earthquake.	Remember	Learner to understand earthquake and causes of earthquake hazards.	CO 3
14	What are technological disasters	Remember	Learner to understand technological effects of disasters.	CO 3
15	Describe civil disorder.	Understand	Learner to describe civil Disorders.	CO 3
16	What are the types of man-Induced hazards discuss?	Remember	Learner to recall the man- induced hazards.	CO 3
17	Write down the various types of natural hazards.	Remember	Learner to recall various types of natural hazards.	CO 3

18	Discuss about the planetary and extra-planetary hazard.	Remember	Learner to understand planetary and extraplanetary hazard.	CO 3
19	Write a note on meteorological hazards.	Remember	Learner to understand metrological hazards.	CO 3
20	What is earthquake hazard? What causes earthquake.	Remember	Learner to understand earthquake and causes of earthquake hazards.	CO 3
		MODULE I	II	
		OGENOUS HA		
	RT A-PROBLEM SOLVIN			
1	Illustrate various types of earthquakes and explain earthquake zonation in India.	Understand	Learner to recall and understand the concepts of types of earthquakes.	CO 3
2	Summarize briefly about the effects of earthquakes on the environment.	Understand	Learner to recall and understand the concepts of earthquakes and its effects	CO 3
3	List out the causes and hazardous effects of Volcanic eruptions?	Understand	Learner to recall and understand the concepts of Volcanic eruptions	CO 4, CO 3,
4	State different types disasters and illustrate an example from a real incident.	Understand	Learner to recall and understand the concepts of disasters and explain with an example.	CO 3
5	Explain a brief note on volcanoes. What are the hazards involved?	Understand	Learner to recall and understand the concepts of volcanoes and their effects.	CO 4
6	List different types of disasters and write a short note on each of them.	Understand	Learner to recall and understand different types of disasters.	CO 4, CO 3,
7	Explain various types of earthquakes and its impact on environment and humans	Understand	Learner to recall and understand the concepts of earthquakes	CO 4, CO 3,
8	Write a short note on earthquakes. What are its causes?	Understand	Learner to write short note on earthquakes.	CO 4, CO 3,
9	What are the mitigation measures to be taken at the time of earthquakes?	Understand	Learner to understand mitigation measures to be taken at the time of earthquakes.	CO 4, CO 3,

10	Write a note on man-made	Understand	Learner to recall man-made	CO 4,
10	landslides. State what are		landslides. State what are	CO 3,
	the mitigation measures at		the mitigation measures at	000,
	the time of land-slides.		the time of land-slides.	
		NG ANSWEF	R QUESTIONS	
1	Explain earthquakes and	Understand	Learner to recall and	CO 4,
	What are its causes?		understand the concepts of	CO_3
			earthquakes and its causes.	
2	Illustrate various mitigation	Understand	Learner to recall and	CO 4,
	measures to be taken at the		understand the concepts	CO 3
	time of earthquakes?		of earthquake mitigation	
3	Define man-made landslides.	Understand	Learner to recall and	CO 4,
	What are the mitigation		understand the concepts	CO 3
	measures we need to take at		of landslides and its	
	the time of land-slides.		mitigation measures.	
4	Explain various	Understand	Learner to recall and	CO 4,
	environmental Impacts of		understand the concepts	CO 3
	Volcanic Eruptions?		of volcanoes and its effects	
			on environment.	
5	Explain the causes and	Understand	Learner to recall and	CO 4,
	types of volcanoes		Understand the concepts	CO 3
			of volcanoua and its types.	
			,	
6	Explain Human Adjustment	Understand	Learner to recall and	CO 3
	and perception towards		Understand the concepts	
	earthquake.		of Human Adjustment and	
			perception towards	
			earthquake	
7	State epicenter and focus	Understand	Learner to recall and	CO 3
	with a neat diagram. Based		Understand the concepts	
	on depth how many types of		of epicenter and focus and	
	earthquake are classified.		explain various types of	
			earthquakes.	~~~
8	Illustrate endogenous	Understand	Learner to recall and	CO 3,
	hazards. Give some		understand the concepts	CO 4,
	examples.		of endogenous hazards.	
9	Explain various mitigation	Understand	Learner to recall and	CO 4,
	steps taken towards		understand the concepts	CO 3
	earthquake hazards		of earthquake hazards and	
		T T 1	its mitigation.	
10	Summarize seismic zonation	Understand	Learner to recall and	CO 4,
	of India		understand the concepts	CO 3
			of seismic zonation	

11	Write a brief note on the distribution of volcanoes in the world.	Understand	Learner to recall note on distribution of volcanoes in the world.	CO 4, CO 3
12	Comment on the distribution of earthquakes across the globe.	Understand	Learner to understand distribution of earthquakes across the globe.	CO 4, CO 3
13	Explain how the magnitude of earthquake is determined.	Understand	Learner to understand the magnitude of earthquake is determined.	CO 4, CO 3
14	Identify the earthquake hazards in India and explain.	Understand	Learner to recall earthquake hazards in India and explain.	CO 4, CO 3
15	Define vulnerability and discuss the process of vulnerability analysis.	Remember	Learner to understand the vulnerability and discuss the process of vulnerability analysis.	CO 4, CO 3
16	Briefly examine. Define Disaster Mitigation: and discuss the major mitigation measures.	understand	Learner to understand Disaster Mitigation and discuss the major mitigation measures.	CO 4, CO 3
17	Define disaster and refer to major environmental concerns.	Remember	Learner to understand and refer major environmental concerns	CO 4, CO 3
18	Write a note on capacity building for Earthquake Vulnerability Reduction.	understand	Learner to recall note on capacity building for Earthquake Vulnerability Reduction.	CO 4, CO 3
19	Discuss recent trends in disaster management with special reference to India.	Remember	Learner to recall recent trends in disaster management with special reference to India.	CO 4, CO 3
20	What are the causes and hazardous effects of Volcanic eruptions?	Understand	Learner to understand the causes and hazardous effects of Volcanic eruptions?	CO 4, CO 3
	PART-C SHO	ORT ANSWE	R QUESTIONS	
1	State seismic activity	Remember	Learner to recall State seismic activity.	CO 4
2	What are various geological hazards	Remember	Learner to recall What are various geological hazards.	CO 4
3	What is volcanic Ash	Remember	Learner to recall What is volcanic Ash.	CO 4
4	Define Endogenous Hazards?	Remember	Learner to recall Define Endogenous Hazards.	CO 4

5	Define landslides	Remember	Learner to recall landslides.	CO 4
6	List different types of atmospheric hazards.	Remember	List different types of atmospheric hazards.	CO 4
7	Define atmospheric hazard	Remember	Learner to recall the atmospheric hazard	CO 4
8	How earthquake occurs	Remember	Learner to recall earthquake occurs	CO 4
9	recall plate tectonic movements	Remember	Learner to recall plate tectonic movements	CO 4
10	List out various materials comes out from volcanic eruptions?	Remember	Learner to reacall various materials comes out from volcanic eruptions.	CO 3
11	Describe magma	Remember	Learner to recall and Describe magma.	CO 3
12	Explore the duties of National Disaster Management Authority of India	Remember	Learner to recall and Explore the duties of National Disaster Management Authority of India	CO 3
13	Describe about earthquake risk reduction	Remember	Learner to recall about earthquake risk reduction	CO 3
14	Describe Lava	Remember	Learner to Lava description.	CO 3
15	Explicit the effects of earthquake on buildings.	Remember	Learner to understand the effects of earthquake on buildings.	CO 3
16	Highlight various mitigation measures to be taken at the time of earthquakes?	Remember	Learner to understand the measures to be taken at the time of earthquakes?	CO 3
17	Explicit a note on man-made landslides. State what are the mitigation measures at the time of land-slides.	Remember	Learner to recall on man-made landslides.	CO 3
18	Define landslides.	Understand	Learner to understand landslides.	CO 3
19	How earthquake occurs.	Remember	Learner to Understand earthquakes.	CO 3
20	How to prevent natural disasters.	Remember	Learner to understand to prevent natural disasters.	CO 3

		MODULE I	V	
	EXO	GENOUS HA	ZARDS	
PA	RT- A PROBLEM SOLVIN	G AND CRIT	TICAL THINKING QUEST	TIONS
1	Summarize briefly the pattern of global population growth in recent years which is causing alarm to environmental experts.	Understand	Learner to recall and understand the importance of concerns over population growth	CO 5,
2	Explain Bhopal on gas tragedy.	Understand	Learner to recall and explain Bhopal gas tragedy.	CO 5
3	Illustrate pesticide pollution with an example.	Understand	Learner to recall and explain theeffects of pesticide on environment and humans.	CO 5,
4	Explain main causes of nuclear hazards?	Understand	Learner to recall and understand the effects of nuclear hazards.	CO 5,
5	Explain nuclear accidents and the Chernobyl disaster.	Understand	Learner to recall and understand the causes of nuclear accidents and its effects.	CO 5
6	Explicit briefly about the steps that need to be taken as part of an overall plan for achieving global population stabilization.	Understand	Learner to recall and explain various strategies for population stabilization.	CO 5,
7	List out various effects of pesticides on the environment?	Understand	Learner to recall and understand the concepts of slopes and deflections and solve for the fixed end moments and deflections.	CO 4
8	Summarize disaster mitigation and discuss the contribution of United Nations agencies in it.	Understand	Learner to recall and understand the concepts of disaster mitigation and explain how United Nations agencies were helping.	CO 6
9	List and explain the major facets of disaster management in coastal regions	Understand	Learner to recall and understand the concepts of coastal disaster management	CO 5

10	Illustrate the important steps in relief distribution and summarize the different types of damages that occur due to disasters.	Understand	Learner to recall and understand the important steps in relief distribution and explain effects of disasters.	CO 5, CO 6
	PART B-LO	NG ANSWEF	QUESTIONS	
1	Explain floods as a serious environmental hazard.	Understand	Learner to recall and explain the effects of floods on environment	CO 3
2	Explain various flood control measures taken in India	Understand	Learner to recall and understand the various flood measures taken to mitigate the disaster.	CO 4
3	Summarize the consequences of drought.	Understand	Learner to recall and explain the effects of drought on humans and environment.	CO 3
4	Explain effects of droughts and write a note on the drought control measures adopted across the globe.	Understand	Learner to recall,understand the effects of droughts and explain various drought control measures adopted across the globe.	CO 4
5	Explain the genetic disorders caused by radiation pollution.	Understand	Learner to recall and understand the genetic disorders caused by radiation pollution.	CO 4, CO 3
6	Illustrate population explosion and its control with an example.	Understand	Learner to recall and explain effects of population explosion and its measures.	CO 4
7	Explicit briefly about the steps that need to be taken as part of an overall plan for achieving global population stabilization.	Understand	Learner to recall and explain the steps for achieving population stabilization.	CO 4, CO 3
8	Illustrate the pattern of global population growth in recent years which is causing alarm to environmental experts.	Understand	Learner to recall and understand the concerns over population growth.	CO 4, CO 3

9	List out some ways and methods to destroy cyclones and explain them.	Understand	Learner to recall and understand the concepts cyclone and explain various methods to destroy them.	CO 3, CO 4,
10	Compare various types of floods and discuss its effects and causes.	Understand	Learner to recall,understand the concepts of floods, its effects and causes.	CO 4, CO 3
11	Explain the flood-prone regions in India.	Understand	Learner to recall and exaplin the causes of floods and its regions in India	CO 4, CO 3
12	What are the causes of cold waves and explain its effects?	Understand	Learner to recall and understand the concept of cold waves and its effects on environment.	CO 3,
13	Illustrate the floods hazards of India in the past years.	Understand	Learner to recall and explain the flood hazards with an example.	CO 3
14	State vulnerability and discuss the vulnerability profile of India.	Understand	Learner to recall and understand the concepts of vulnerability and explain vulnerability of India	CO 3
15	Discuss in brief the various floods control measures.	understand	Learner to recall various flood control measures.	CO 3
16	Discuss some of the measures to mitigate floods.	Understand	Learner to understand measures to mitigate floods.	CO 3
17	What are the consequences of drought? Explain briefly.	Remember	Learner to recall the consequences of drought.	CO 3
18	Write a note on the drought control measures adopted across the globe.	Understand	Learner to recall the drought control measures.	CO 3
19	Write a brief note on soil erosion and its conservation.	Understand	Learners to recall soil erosion and conservation.	CO 3
20	What is sedimentation? What are the different aspects in this process?	Remember	Learner to understand sedimentation.	CO 3
	PART- C SH	ORT ANSWE	R QUESTIONS	
1	Find different categories of cyclones and explore them.	Remember	Learner to find different categories of Cyclones	CO 3
2	Tell how cyclones are formed	Remember	Learner will understand the formation of Cyclones	CO 3
3	Tell the structure of cyclone.	Remember	Learner will understand the structure of cyclone	CO 3

4	List flood-prone regions in India.	Remember	Learner will understand flood prone regions in India	CO 3
5	Define soil erosion	Remember	Learner will understand the soil erosion.	CO 3
6	List various flood control measures	Remember	Learner will recall various flood control measures.	CO 3
7	Define sedimentation	Remember	Learner to recall sedimentation.	CO 4
8	Define biological hazards	Remember	Learner to understand biological hazards.	CO 4
9	Define population explosion as a hazard	Remember	Learner to understand population explosion.	CO 4
10	What are the causes of heat waves	Remember	Learner to understand heat waves.	CO 4
11	Define Nuclear Explosion	Remember	Learner to understand nuclear explosion.	CO 4
12	What are cyclones? Describe	Remember	Learner to understand cyclones.	CO 4
13	Write a note on the formation of cyclones.	Remember	Learner to understand formation of cyclones.	CO 4
14	Write in short about the structure of cyclone.	Remember	Learner will understand structure of cyclone.	CO 4
15	Write a short note on effect of cyclones.	Remember	Learner will understand effect of cyclones.	CO 4
16	Write a short note on the global distribution of cyclones.	Remember	Learner will understand the global distribution of cyclones.	CO 4
17	Discuss the flood-prone regions in India.	Remember	Learner will understand flood-prone regions in India.	CO 4
18	Discuss some of the measures to mitigate cyclones.	Remember	Learner to reacll measures to mitigate cyclones.	CO 4
19	What causes lightning and hailstorms? Explain.	Remember	What causes lightning and hailstorms? Explain.	CO 4
20	Define soil erosion.	Remember	Define soil erosion.	CO 4

		MODULE V	V	
			SASTER MANAGEMENT	
PA	ART- APROBLEM SOLVIN		CICAL THINKING QUEST	TIONS
1	Explain briefly the use of village disaster management committee.	Understand	Learner to recall and understand the uses of village disaster management committee.	CO 4, CO 5
2	List some guidelines for achieving sustainable development.	Remember	Learner to recall the guidelines for sustainable development	CO4,CO5
3	Illustrate various provisions taken for immediate relief measure to disaster affected people?	Understand	Learner to recall and explain the various provisions taken for immediate relief to disaster effected people.	CO 3, CO 5
4	Explain how do engineered structures help us to withstand like floods, earthquakes, and cyclones?	Understand	Learner to recall and understand the importance of structures in reducing loss of life during disaster period.	CO 3, CO 5
5	Compare structural mitigations and non-structural mitigations that should be restored to in case of floods.	Understand	Learner to recall and understand the concepts of structural and non-structural mitigations.	CO 4, CO 5
6	Classify various organizations which are involved in the research and mitigation of disasters.	Understand	Learner to recall and classify various organizations involved in the research and mitigation of disasters.	CO 4, CO 5
7	Explain how the community of a village play the most important role in time of disaster as 'first responder'	Understand	Learner to recall and understand the importance of first responder in disaster mitigation plan.	CO 4, CO 5
8	Illustrate how a search rescue team assist a village in times of a hazards?	Understand	Learner to recall and understand the working mechanism of rescue team and how they are helping village people.	CO 5
9	List various institutions and national centers involved in natural disaster reduction.	Understand	Learner to recall and explain various institutions and national centers involved in natural disaster reduction.	CO 5

10	Show different skills and techniques adopted by a disaster management.	Understand	Learner to recall and explain various skills and techniques adopted by disaster management.	CO 5
	PART B-LO	NG ANSWER	R QUESTIONS	
1	Explain a brief note on the emergency stage of a disaster.	Understand	Learner to recall and understand the concepts of emergency stage of a disaster.	CO 5
2	How natural disasters affect the life of humans and environment.	Remember	Learner to understand disaster affect and life of humans	CO 5
3	Illustrate the role of technology in disaster management.	Understand	Learner to recall and explain the importance of technology in disaster management with example.	CO 6
4	Show various methods to predict natural disasters.	Understand	Learner to recall and understand various methods which were used to predict natural disasters.	CO 5
5	Compare various types of cyclones and explain how can people be warned of it beforehand?	Understand	Learner to recall, compare different types of cyclones and understand how people be warned of it beforehand.	CO 5
6	Illustrate the various measures that should be taken for disaster management and prevention	Understand	Learner to recall and understand the various measures that were taken for disaster management and prevention	CO 5
7	Summarize post-disaster stage.	understand	Learner to recall and Understand the concept of post disaster stage.	CO 5
8	Explain disaster management.	Understand	Learner to recall and explain the concepts of disaster management.	CO 1,
9	Summarize the phases of disaster management	Understand	Learner to recall and explain various phases involved in disaster management.	CO 5

10	Compare different stages of disaster management. Explain in detail about pre-disaster stage.	Understand	Learner to recall and compare various stages involved in disaster management and explain pre-disaster stage.	CO 5
11	Illustrate an example from a real incident when warning against a cyclone helped the people.	Understand	Learner to recall and Illustrate an example of early warning system of cyclone.	CO 5
12	Summarize natural disasters and its mitigation strategies.	Understand	Learner to recall and understand natural disasters and its mitigation strategies	CO 5
13	State the guidelines for mitigation of disasters.	Remember	Learner should state the guidelines for mitigation of disasters.	CO 5
14	Explain the importance of first responders in disaster management.	understand	Learner to recall and explain the importance of first responders in disaster management.	CO 4
15	Explain the phases of disaster management	Understand	Learner to recall the phases of disaster management	CO 4
16	Enlist the different stages of disaster management. Write in detail about pre-disaster stage.	Understand	Learner to recall different stages of disaster management.	CO 4
17	Give an example from a real incident when warning against a cyclone helped the people.	Understand	Leaner to understand real incident when warning against a cyclone helped the people.	CO 4
18	Explain natural disasters and its mitigation strategies.	Understand	Learner to understand natural disasters and its mitigation strategies.	CO 4
19	State the guidelines for mitigation of disasters.	Understand	Learner to give the guidelines for mitigation of disasters.	CO 4
20	Explain in detail the mitigation planning.	Understand	Learner to understand in detail the mitigation planning.	CO 4
	PART- C SH	ORT ANSWE	R QUESTIONS	
1	Define warning systems	Remember	Learner to understand warning systems.	CO 6
2	recall a short notes on mitigation planning.	Remember	Learner to recall mitigation planning	CO 6

3	Show total management cycle	Remember	Learner to show total management cycle.	CO 6
4	What is nonstructural mitigation	Remember	Learner to recall non- structural mitigation.	CO 6
5	Define disaster cycle	Remember	Learner to understand disaster cycle	CO 6
6	What is risk mapping	Remember	Learner to understand risk mapping	CO 6
7	Define pre disaster	Remember	Learner to recall pre disaster.	CO 6
8	What is structural mitigation	Remember	Learner to recall structural mitigation	CO 6
9	State mitigation?	Remember	Learner to understand mitigation.	CO 6
10	Define first responder in terms of disasters.	Remember	Learner to understand first responder in disasters	CO 6
11	Define post disaster	Remember	Learner to understand post disaster.	CO 6
12	What is disaster cycle.	Remember	Lerner to understand disaster management cycle.	CO 6
13	How mitigation helps in prevention of disasters	Remember	Learner to understand mitigation and prevention.	CO 6
14	Define total management cycle.	Remember	Learner to understand disaster management cycle.	CO 6
15	What is mitigation?	Remember	Learner to understand mitigation.	CO 6
16	Write a note on disaster cycle.	Remember	Lerner to understand disaster management cycle.	CO 6
17	What is risk mapping.	Remember	Learner to recall risk mapping.	CO 6
18	What is pre disaster.	Remember	Learner to recall pre disaster.	CO 6
19	What is post disaster.	Remember	Lerner to Recall about post disaster.	CO 6
20	What is structural mitigation.	Remember	Learner to Recall Structural Mitigation.	CO 6

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