



INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous)

Dundigal, Hyderabad -500 043

CIVIL ENGINEERING TUTORIAL QUESTION BANK

Course Name	:	DISASTER MANAGEMENT
Course Code	:	A50117
Class	:	III B. Tech I Semester
Branch	:	Civil Engineering
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Course Faculty	:	Dr. Kavita Singh, Asso. Professor and Mr. K.Tarun Kumar

OBJECTIVES

- I. Identify the major disaster types. and their environmental impacts. Develop an understanding of why and how the modern disaster management is involved with Pre-disaster and post-disaster activities.
- II. Know the key personnel or specialists related to disaster management and associate them with the types of disasters and phases in which they are useful.
- III. Recognize and develop awareness of the chronological phases of natural disaster response and refugee relief operations.
- IV. Understand how the phases of each are parallel and how they differ. Understand the key concepts of a) disaster management related to development, and b) the relationship of different disaster management activities to the appropriate disaster phase. Understand the relationship of disaster phases to each other and the linkage of activities from one phase to the next.
- V. Understand the "relief system" and the "disaster victim." Identify the organizations that are involved in natural disaster assistance.

S No	QUESTION	Blooms taxonomy level	Course Outcomes
UNIT - I ENVIRONMENTAL HAZARDS AND DISASTERS			
Part - A (Short Answer Questions)			
1	Write a note on environmental hazards.	Remember	1,2
2	What is the difference between natural disaster and man-made disasters?	Understand	1,2
3	Write two impact of disaster has on community.	Remember	1,2
4	Write briefly about how hazards can become a disaster.	Remember	1,2
5	What is a disaster?	Understand	1,2

6	Discuss the environmental stress in the atmosphere.	Understand	1,2
7	Write the concept of Environmental Hazards.	Remember	1,2
8	Define biological hazards.	Understand	1,2
9	What is mean by flash flood?	Remember	1,2
10	Discuss about chemical and physical hazards.	Remember	1,2
11	Give some examples of stressors	Remember	1,2
12	Define hazard	Remember	1,2
13	Define disaster	Remember	1,2
14	Explain the concept of disaster.	Understand	1,2
15	Define physical hazards with an example	Remember	1,2
Part - B (Long Answer Questions)			
1	Define environmental stress. Write a note on the stressors of environment.	Remember	1,2
2	Define environmental stress. Write a note on the stressors of environment.	Remember	1,2
3	Write an account on different approaches to disaster management and relation with human ecology.	Understand	1,2
4	Write a note on chemical and biological hazards.	Remember	1,2
5	Write an account on geomorphic (geological) hazards.	Remember	
6	What is meant by human ecology? How it is related to Disasters.	Understand	1,2
7	Write down the types of environmental hazards and Disasters?	Understand	1,2
8	Define human Ecology? What are the field of applications in geographical Researchers.	Understand	1,2
9	Discuss about Ecosystem Approach and perception approach	Understand	1,2
10	Highlight key environmental concerns pertaining to disasters,	Remember	1,2
11	Sustainable management of natural resources is essential to provide livelihood and environmental security'. Discuss.	Understand	1,2
12	Write a note on key community based disaster management strategies.	Remember	1,2
13	Discuss; the relationship between disaster and development depends on the development choices made by the individual, community and the nation'. Discuss.	Understand	1,2
14	Define disaster and refer to major environmental concerns. Discuss recent trends in disaster management with special reference to India.	Remember	1,2
15	Examine the types and characteristics of corporate social responsibility with respect to disaster management.	Understand	1,2
Part - C (Problem Solving and Critical Thinking Questions)			
1	What are steps involved in risk communication?	Understand	1,5
2	Explain, how the occurrence of EL NINO events affects global climate?	Understand	1,5
3	Describe natural disaster and list out the natural disaster	Understand	1,5
4	Explain the concept of first responder with special reference to the role of the government in first response..	Understand	1,5
5	Discuss the guiding principles of disaster mitigation and elaborate the problem areas in disaster mitigation.	Remember	1,5
6	Discuss the relationship between disaster and development with the help of examples from developed and developing countries.	Understand	1,5
7	Describe the various management guidelines for temporary shelter provision during disasters.	Remember	1,5
8	Discuss various methods for rescuing affected persons in a disaster situation	Understand	1,5
9	Discuss the role and functions of a Disaster Manager.	Remember	1,5

10	Discuss Community-Based Disaster Risk Reduction Process.	Remember	1,5
11	Define Risk Assessment and underline the methodologies for conducting risk assessment.	Understand	1,5
12	Discuss the role of disaster management authorities in disaster management.	Remember	1,5
13	Discuss the role and functions of a Disaster Manager	Understand	1,5
14	Examine the changing complexion of disaster management in the contemporary context.	Understand	1,5
15	Highlight the significance of planning for ensuring disaster prevention	Remember	1,5
UNIT - II			
TYPES OF ENVIRONMENTAL HAZARDS AND DISASTERS			
Part – A (Short Answer Questions)			
1	What is a disaster? Classify.	Understand	2,3
2	Write a note on social hazard.	Remember	2,3
3	Write a short note on effects of cyclones	Remember	2,3
4	Describe civil disorder	Understand	2,3
5	What are the types of man-Induced hazards discuss?	Understand	2,3
6	Write down the various types of natural hazards	Understand	2,3
7	Discuss about the planetary and extra-planetary hazard.	Understand	2,3
8	Write a note on meteorological hazards.	Remember	2,3
9	What is earthquake hazard? What causes earthquake.	Understand	2,3
10	What are the harmful effects of earthquakes	Remember	2,3
11	Define extra planetary hazard	Remember	2,3
12	What causes earthquakes	Remember	2,3
14	Write a note on planetary hazard	Remember	2,3
15	Write short notes on technological disasters	Remember	2,3
Part - B (Long Answer Questions)			
1	Write short notes on: a) cold waves b) Heat waves c) Soil Erosion	Remember	2,3
2	Write a brief note on floods as a serious environmental hazard.	Understand	2,3
3	What are the consequences of the phenomenon of drought? Explain briefly.	Remember	2,3
4	Explain sea level rise. What are its causes and effects?	Understand	2,3
5	Write a note on global atmospheric changes.	Remember	2,3
6	What is the difference between natural disaster and man-made disaster?	Understand	2,3
7	Draw a flow chart of planetary and extra planetary hazard and explain.	Understand	1,2
8	Write a brief note on the extra planetary hazards.	Remember	3
9	What are floods? What are the harmful effects of floods.	Understand	2,3
10	Write down the methods of controlling floods.	Understand	2,3
11	Examine the role of corporate social responsibility as an emerging avenue in managing disasters.	Understand	2,3
12	Define vulnerability and discuss the vulnerability profile of India,	Remember	2,3
13	Analyse the important facets of disaster management in mountainous regions.	Remember	2,3
14	Throw light on the development perspective to Disaster management.	Understand	2,3

15	Discuss the role of disaster management authorities in disaster management.	Understand	2,3
Part – C (Problem Solving and Critical Thinking)			
1	Write a brief note on floods as a serious environmental hazard.	Remember	2,4
2	What are the consequences of the phenomenon of drought? Explain briefly.	Understand	2
3	What will be the consequences of drought when it affects an area very effectively?	Understand	2
4	Define cyber terrorism and explain forms and impacts	Understand	2,3
5	Write a brief note on psychological and social dimensions of disaster	Remember	1,2
6	What is the difference between natural disaster and man-made disaster?	Remember	2,3
7	Describe manmade (anthropogenic disaster) disaster and list out the natural disaster	Understand	2,3
8	Describe terrorism and write down the typology of terrorism	Remember	2,3
9	What is the positive human impact on environment	Remember	2,3
11	What are the negative effects of oil drilling	Understand	2,3
12	What are the top ten terrifying disasters in history	Remember	2,3
13	What are the advantages and disadvantages of travelling in a Car?	Understand	2,3
14	What does the Global Warming mean?	Understand	2,3
15	Illustrate the 5 worst man-Made disasters in History	Remember	2,3
UNIT-III ENDOGENOUS HAZARDS			
Part - A (Short Answer Questions)			
1	What are the effects of the volcanoes on the environment?	Remember	3,4
2.	What is seismic activity	Understand	3,4
3.	What are Geological hazards	Understand	3,4
4.	Define volcanic Ash	Remember	3,4
5.	What is Endogenous Hazards?	Remember	3,4
6.	Define landslides	Understand	3,4
7	Write down the different types of atmospheric hazards.	Remember	3,4
8	Define atmospheric hazards	Understand	3,4
9	How earthquake occurs	Understand	3,4
10	What are plate tectonic movements?	Remember	3,4
11	What are material comes out from volcanic eruptions?	Remember	3,4
12	Define magma	Understand	3,4
13	How to prevent natural disasters	Remember	3,4
14	How human being are adjusted to the disasters.	Understand	3,4
15	Define Lava	Understand	3,4
Part – B (Long Answer Questions)			
1	Write a short note on earthquakes. What are its causes?	Understand	4
2	What are the mitigation measures to be taken at the time of earthquakes?	Understand	4
3	Write a note on man-made landslides. State what are the mitigation measures at the time of land-slides.	Understand	4
4	What are the environmental Impacts of Volcanic Eruptions?	Remember	4
5	What is epicenter and focus ? draw with a neat diagram? Based on depth how many types of earthquake are classified.	Remember	4

6	What is endogenous hazards ? Explain with examples in detail.	Understand	3,4
7	Illustrate the causes and distribution of volcanoes.	Remember	3,4
8	Demonstrate the hazardous effects of volcanic eruptions	Understand	3,4
9	What causes earthquakes? What are the harmful effects of earthquakes.	Understand	3,4
10	Explain briefly about the effects of earthquakes on the environment.	Remember	3,4
11	What are the causes and hazardous effects of Volcanic eruptions?	Understand	3,4
12	What is a disaster? Give an example from a real incident.	Understand	3,4
13	Write a brief note on volcanoes. What are the hazards involved?	Remember	3,4
14	What are the different types of disaster ? write short note.	Understand	3,4
15	List out some deadliest disasters occurred in past	Remember	3,4
Part – C (Problem Solving and Critical Thinking)			
1	Write a brief note on the distribution of volcanoes in the world.	Understand	4
2	Comment on the distribution of earthquakes across the globe.	Understand	4
3	Explain how the magnitude of earthquake is determined.	Remember	4
4	Identify the earthquake hazards in India and explain	Remember	4
5	Define vulnerability and discuss the process of vulnerability analysis.	Understand	4
6	Briefly examine. Define Disaster Mitigation: and discuss the major mitigation measures	Remember	4
7	Define disaster and refer to major environmental concerns.	Understand	4
8	Write a note on capacity building for Earthquake Vulnerability Reduction.	Understand	4
9	Discuss recent trends in disaster management with special reference to India	Remember	4
10	What are the causes and hazardous effects of Volcanic eruptions?	Understand	4
UNIT-IV			
EXOGENOUS HAZARDS AND DISASTERS			
Part – A (Short Answer Questions)			
1.	What are cyclones? Describe	Understand	4
2.	Write a note on the formation of cyclones.	Remember	4
3.	Write in short about the structure of cyclone.	Understand	4
4.	Write a short note on effect of cyclones.	Remember	4
5.	Write a short note on the global distribution of cyclones.	Remember	4,5
6.	Discuss the flood-prone regions in India.	Remember	3,4
7.	Discuss some of the measures to mitigate cyclones.	Remember	5
8.	What causes lightning and hailstorms? Explain.	Remember	3,4
9.	Define soil erosion	Understand	3,4
10.	What are the flood control measures	Remember	3,4
11	What is sedimentation	Understand	3,4
12	Define biological hazards	Remember	3,4
13	Define population explosion as a hazard	Understand	3,4
14	Write the causes of heat waves	Remember	3,4
15	Define Nuclear Explosion	Understand	3,4
Part – B (Long Answer Questions)			
1	Write a brief note on floods as a serious environmental hazard.	Understand	5

2	Discuss in brief the various floods control measures.	Remember	5,6
3	Discuss some of the measures to mitigate floods.	Understand	5
4	What are the consequences of drought? Explain briefly	Remember	5
5	Write a note on the drought control measures adopted across the globe.	Remember	5,6
6	Enumerate the properties of soil	Understand	5,6
7	Write a brief note on soil erosion and its conservation.	Understand	6
8	What is sedimentation? What are the different aspects in this process?	Remember	6
9	What are the various sedimentation problems created in the environment.	Understand	6
10	Suggest the best management practices of soil erosion and sedimentation.	Remember	5
11	Can you suggest some ways and methods to destroy cyclones.	Remember	4,5
12	Write a note on floods and discuss its types and causes.	Remember	4
13	Discuss the flood-prone regions in India.	Understand	3,4
14	What causes cold waves what are its effects?	Remember	3,4
15	Illustrate the floods hazards of India in the past years	Understand	3,4

Part – C (Problem Solving and Critical Thinking)

1	What are the effects of pesticides on the environment?	Understand	5,6
2	Write a note on Bhopal on gas tragedy.	Remember	5,6
3	Write a short note on pesticide pollution.	Understand	5,6
4	What are the main causes of nuclear hazards?	Remember	5,6
5	Write a brief note on nuclear accidents and the Chernobyl disaster.	Remember	5,6
6	Write an account on the genetic disorders caused by radiation pollution.	Understand	5,6
7	Write a short note on population explosion and its control.	Remember	5,6
8	Write briefly about the steps that need to be taken as part of an overall plan for achieving global population stabilization.	Remember	5,6
9	Explain briefly the pattern of global population growth in recent years which is causing alarm to environmental experts.	Understand	5,6
10	Define urbanization. Give the reasons for large scale migration to urban areas and the consequences of rapid urbanization.	Remember	5,6
11	Define disaster mitigation and discuss the contribution of United Nations agencies in it.	Remember	5,6
12	Discuss the major facets of disaster management in coastal regions	Understand	5,6
13	Discuss the important steps in relief distribution, Explain the different types of damages that occur due to disasters.	Remember	5,6
14	Define vulnerability and discuss the vulnerability profile of India,	Understand	5,6
15	Discuss the guiding principles of disaster mitigation and elaborate the problem areas in disaster mitigation.	Understand	5,6

UNIT-V

Emergency Approaches in Disaster Management

Part - A (Short Answer Questions)

1	What are warning systems	Remember	6,7
2	Write short notes on mitigation planning.	Remember	6,7
3	Define total management cycle	Understand	6,7
4	What is mitigation?	Understand	6,7
5	Write a note on disaster cycle	Remember	6,7
6	What is risk mapping	Remember	6,7

7	What is pre disaster	Understand	6,7
8	What is post disaster	Remember	6,7
9	What is structural mitigation	Understand	6,7
10	What is non structural mitigation	Remember`	6,7
11	Define first responder in terms of disasters.	Understand	6,7
12	Who is the committee for disaster management	Remember	6,7
13	What is warning system	Understand	6,7
14	Draw disaster cycle	Remember	6,7
15	How mitigation helps in prevention of disasters	Understand	6,7
Part - B (Long Answer Questions)			
1	Write a brief note on the emergency stage of a disaster.	Remember	6,7
2	Write an account on the impact of disasters to life and environment.	Understand	6,7
3	Discuss the role of technology in disaster management.	Remember	5,6
4	Write the methods to predict natural disasters.	Understand	6,7
5	What is cyclone? How can people be warned of it beforehand?	Remember	6,7
6	Discuss the various measures that should be taken for disaster management and prevention	Understand	6,7
7	Write in brief on the post-disaster stage.	Remember	6,7
8	Write a note on disaster management.	Understand	6,7
9	Explain the phases of disaster management	Remember	6,7
10	Enlist the different stages of disaster management. Write in detail about pre-disaster stage.	Remember	6,7
11	Give an example from a real incident when warning against a cyclone helped the people.	Understand	
12	Explain natural disasters and its mitigation strategies.	Understand	6,7
13	State the guidelines for mitigation of disasters.	Remember	6,7
14	Explain in detail the mitigation planning.	Remember	6,7
15	Bring out the importance of people as the first responders in disaster management.	Remember	6,7
Part – C (Problem Solving and Critical Thinking)			
1	Why should every village have a disaster management committee? Write short notes.	Understand	6,7
3	Can you suggest some guidelines for achieving sustainable development.	Remember	7
4	Write are the provisions of immediate relief measure to disaster affected people?	Remember	7
5	How do engineered structures help us to withstand like floods, earthquakes, and cyclones?	Remember	6,7
6	Describe the structural mitigations and non- structural mitigations that should be restored to in case of floods.	Remember	7
7	Elaborate on the various organizations which are involved in the research and mitigation of disasters.	Understand	7
8	How does the community of a village play the most important role in times of disaster as ‘first responder’	Remember	6,7

9	How can search rescue team assist a village in times of a hazards?	Understand	7
10	Enlist the various institutions and national centers involved in natural disaster reduction.	Understand	6,7
11	Elucidate different skills and techniques adopted by a disaster manage	Remember	6,7
12	Bring to light major initiatives on Disaster Preparedness in India.	Understand	6,7
13	Analyse..Discuss the important steps in relief distribution. Examine the problem areas during recovery phase of disaster management,	Remember	6,7
14	Discuss the relationship between disaster and development with the help of examples from developed and developing countries.	Understand	6,7
15	Explain the different types of damage reports. Identify the different types of rehabilitation.	Remember	6,7

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