



ST. ANNE'S COLLEGE OF ENGINEERING AND TECHNOLOGY
(Accredited by NAAC, Approved by AICTE, New Delhi. Affiliated to Anna University, Chennai)
ANGUCHETTYPALAYAM, PANRUTI – 607 106.
DEPARTMENT OF MECHANICAL ENGINEERING

DISASTER RISK REDUCTION AND MANAGEMENT

QUESTION BANK
III YEAR /V SEM
ACADEMIC YEAR 23-24 ODD SEM

UNIT-I
PART – A

1. What is a Disaster? **(Apr/May 2019)**
2. What is a Pandemic? **(Apr/May 2019)**
3. List out the mangrove products.
4. Define famine.
5. Name the categories of disasters.
6. What is disaster preparedness?
7. Explain the agencies involved in the disaster management?
8. List the types of natural disaster
9. Summarize the different types of disaster.
10. Demonstrate about blizzards?
11. Differentiate between hazard and risk.
12. What is a limnic eruption?
13. Who is a perpetrator of terrorism?
14. Define avalanche. List out three parts of avalanche.
15. How to determine snow pack is safe.
16. What is mean by flash flood.
17. Compare hazards and vulnerability
18. Describe conservation benefits of mangroves.
19. Discuss about mudslide.
20. Compile about drought.
21. Distinguish hazards and vulnerability **(Apr/May 2018)**
22. Classify the different types of disasters **(Apr/May 2018)**
23. Define Hazard **(Nov/Dec 2021)**
24. Describe the pandemic briefly **(Nov/Dec 2021)**

PART – B

1. Describe various disaster preparedness strategies.
2. Define mining and explain methods of extraction.
3. What are the different types of natural disasters? Explain in detail. **(Apr/May 2019)**
4. What is to be done during and after the earth quake.
5. Draw the disaster management cycle and explain every stage in it.
6. Disaster impacts differential groups at various levels. Justify. **(Apr/May 2019)**
7. Explain the risk sharing process in disaster mitigation.
8. Describe terrorism and write down the typology of terrorism.
9. Describe flood and explain the causes of flood.
10. Explain the techniques of reducing oil fire.
11. Explain the causes, classification and types of forest fire.

12. Explain the types of drought and drought preparedness with Mitigation.
13. List the Do's and Don'ts during various types of Disasters.
14. Define earthquake and explain in detail about the types, causes and preventive measures of earthquake.
15. Describe the goal and objective of ISRD programme
16. What are flash floods? Explain about one recent flash flood that affected large population of a region in India.
17. What is smog? What are the various reasons for the presence of smog in the northern region of India during the month of November?
18. What are the causes for the Tsunami 2004 which inflicted heavy loss to life and property along the coast of Tamil Nadu? Specify its epicentre and magnitude.
19. Explain in detail about the global trends in disasters.\
20. Draw disaster management cycle and explain every stage. **(Apr/May 2018)**
21. What is to be done during and after the earthquake **(Apr/May 2018)**
22. Illustrate the classification of hazards in details **(Nov/Dec 2021)**
23. Dramatize the social, political and economic impact of disasters **(Nov/Dec 2021)**

UNIT-II PART – A

1. What is a disaster management cycle?
2. Define disaster risk reduction. **(Nov/Dec 2021)**
3. List the phases of disaster life cycle.
4. What is mitigation?
5. Why are the mitigation activities necessary?
6. Outline few points on the preparedness for disaster risk reduction.
7. Illustrate the goals of preparedness activities.
8. Explain the response activities for DRR.
9. Summarise the constituents of response activities
10. Explain recovery with its types.
11. Develop the term culture of safety
12. Build the structure of Pachayati Raj system.
13. Write down the types of Urban local bodies.
14. Construct the responsibilities of NDMA. **(Apr/May 2018)**
15. List the functions of NIDM.
16. Conclude on International Strategy for disaster management.
17. Describe early warning system with suitable examples. **(Nov/Dec 2021)**
18. Compile the types of early warning systems. **(Apr/May 2018)**
19. Discuss the stages in disaster risk reduction.
20. Discuss the roles and responsibilities of NDMA. **(Apr/May 2018)**
21. Explain the goals of disaster management **(Apr/May 2019)**
22. What are the phases of the disaster lifecycle **(Apr/May 2019)**

PART – B

1. What are the key components of disaster management? Explain in detail. **(Apr/May 2019)**
2. Write a brief note on cultural safety in disaster risk reduction.
3. How the structural and non-structural components are used in risk reduction strategies? Explain. **(Apr/May 2018) (Apr/May 2019)**
4. Explain the roles and responsibilities of various agencies in disaster mitigation and management. **(Apr/May 2018)**
5. Explain the roles and responsibilities of Panchayati Raj Institution. **(Nov/Dec 2021)**
6. Give an outline on Urban Local Bodies in India
7. Write a short note on the concept of Panchayati Raj and also explain its structure.
8. Develop the stages of disaster risk reduction and explain in detail.
9. Write a brief note on early warning system.
10. Analyse and write a brief note on SDMA.
11. List any three advisories from appropriate agencies, Explain in detail.
12. Assess in detail on the four basic elements and types of early warning systems.
13. Develop the conceptual framework for disaster risk reduction.
14. Write a case study on disaster risk reduction in India.
15. Consider Bhopal gas disaster as a case study. Explain the applicable principles of disaster management to mitigate the effect of such disaster in future.
16. Evaluate the risk reduction strategies followed by the Government of India during the times of disaster.
17. What are the fundamental underpinnings of disaster risk management?
18. Explain on the public awareness and public education for disaster risk reduction.
19. Critically evaluate the disaster framework at the state and central levels. **(Nov/Dec 2021)**

UNIT- III PART – A

1. What is disaster relief?
2. According to Planning Commission report, list the key vulnerabilities of India?
3. Tell in short about any one of technical disasters occurred in India.
4. Indicate the nodal agencies designated by GoI for the early warning of different natural hazards.
5. Write a note on vulnerability profile on India.
6. Discuss the major earthquake hazard zones in India.
7. What do you mean by the terms DANA and DALA?
8. What do you mean by “capacity building”?
9. Interpret the disaster management cycle as proposed by NDMA.

PART B

1. Recall natural hazard vulnerability in India. (8)
2. Discuss about the man-made vulnerable zones of India. (5)
3. Identify the Landslide-prone regions of India and suggest some measures to mitigate the disasters caused by these.

4. Illustrate how the following facilities - Water, Food, Sanitation, Shelter, Health, Waste Management could be arranged aftermath of a disaster.
5. Why there is a need for capacity building? Categorize its vital components.
6. State the constitution and role of National Disaster Response Force (NDRF) as per DM Act, 2005.
7. Brief about the roles and functions of
 - a. National Authority of NDMA. (7)
 - b. State Authority of SDMA. (6)
8. What is GIS? How this application helps in disaster management process?
9. Summarize the risk assessment types and steps involved in it.
10. Explain in detail about disaster management act, 2005
11. What are the key components of disaster management and how do they contribute to effective response and recovery efforts?
12. How does preparedness for rescue and relief play a crucial role in disaster management? Can you provide examples of preparedness measures?
13. What is the significance of mitigation in disaster management? How does it help in reducing the impact of disasters?
14. Could you explain the concepts of rehabilitation and reconstruction in the context of disaster management? What are some strategies and approaches used in these processes?
15. What is the role of disaster risk management in mitigating the impact of disasters? How does it differ from traditional disaster management approaches?
16. How do compensation and insurance play a part in post-disaster management? What are some mechanisms and policies in place to ensure fair compensation and insurance coverage for affected individuals and communities?
17. Can you provide an overview of the Disaster Management Act (2005) and its significance in the Indian context? How does it influence disaster management efforts?
18. Apart from the Disaster Management Act (2005), what are some other related policies, plans, programs, and legislation that contribute to disaster management in India?
19. What are the key institutional processes and frameworks at the state and central level in disaster management? How do organizations like NDMA, SDMA, DDMA, NRDF, and Civic Volunteers contribute to these processes?
20. How do state and central-level institutions coordinate their efforts in disaster management? Can you explain the roles and responsibilities of each of these organizations?

UNIT- IV
PART – A

1. Indicate the guidelines needed for Preparedness in case of any disaster.
2. Tell the purpose of Initial Damage Assessment.
3. Considering the pandemic due to CoViD-19, what would be the recovery measures?
4. Mention about Disaster Management Act.
5. What are the steps involved in GIS for disaster management?
6. Define the term Risk Assessment.

7. Tell the objectives of disaster risk assessment. **(Apr/May 2019)**
8. Give the facts on the functions of National Authority of NDMA.
9. Figure out the benefits of GIS in disaster management.
10. Compile the four types of Damage Assessment
11. List the uses of the information collected in the Detailed Sector Assessment.
12. Describe GIS and spatial data **(Nov/Dec 2021)**
13. Explain vulnerability profile **(Nov/Dec 2021)**
14. What is disaster profile? **(Apr/May 2019)**
15. Explain the objective of IPCC **(Apr/May 2018)**

PART – B

1. List the broad features of the National Policy on Disaster Management. (8)
2. In what ways the financial arrangements are facilitated for disaster mitigation? (5)
3. How would you illustrate the role Management Authority in India?
4. Develop how the risk information is used for Disaster Risk Management and explain about risk communication.
5. State the risk assessment methodology.
6. Justify why the recovery phase is essential after a disaster.
7. Write about the evolution of Disaster Management in India and outline its structure and institutional framework.
8. Illustrate in detail about the components of disaster relief.
9. Justify the role of GIS Application and Information technology on analysing the Chennai Floods in 2015.
10. Elaborate the importance and categories of disaster damage assessment.
11. What is the significance of early warning systems in disaster management? How do they contribute to timely and effective response efforts?
12. Can you provide examples of early warning systems used in different types of disasters?
13. What are the key components of disaster relief?
14. How do water, food, sanitation, shelter, health, and waste management play a crucial role in addressing the immediate needs of affected communities during and after a disaster?
15. Can you explain the institutional arrangements involved in disaster management, specifically in the areas of mitigation, response, and preparedness?
16. How do these arrangements contribute to effective disaster management?
17. How does GIS (Geographic Information System) and information technology support preparedness efforts in disaster management?
18. What are some examples of how these components are utilized for risk assessment, response planning, and recovery phases of disasters?
19. What is the process of disaster damage assessment?
20. How is it conducted, and what are the key elements involved in assessing the extent of damage caused by a disaster?
21. What are the essential elements of climate-resilient development?
22. How does integrating climate resilience into development planning contribute to effective disaster management?

23. Can you provide an overview of the standard operating procedures (SOPs) for disaster response?
24. What are the key components of these procedures, and how do they ensure a coordinated and efficient response to disasters?
25. How is financial planning done for disaster management?
26. What are the key considerations and strategies involved in budgeting and allocating funds for disaster preparedness, response, and recovery?
27. How do risk assessments contribute to disaster management?
28. What are the methodologies and tools used for assessing and analyzing risks associated with various types of disasters?
29. How do the phases of response and recovery in disaster management differ?
30. What are the key activities and priorities during each phase, and how do they contribute to overall disaster management efforts?
31. Describe the disaster management act and policy in detail **(Nov/Dec 2021)**
32. Summarize how disaster damage assessment is conducted **(Nov/Dec 2021)**
33. Write a note on disaster management act 2005 **(Apr/May 2019)**
34. What is the purpose of damage assessment? What are the factors that affect the assessment methods and tools used to assess damage? **(Apr/May 2019)**

UNIT-V
PART – A

1. What is a fluvial flood? **(Apr/May 2019)**
2. List out the examples of man-made disaster? **(Apr/May 2019)**
3. What are the steps to be taken by the residents during an earthquake in a residential building?
4. List out the different types of floods? **(Nov/Dec 2021)**
5. Define pluvial flood?
6. List out any two recent natural disasters? **(Apr/May 2018)**
7. Explain landslide hazard zonation? **(Apr/May 2018)**
8. Summarize factors causing landslide?
9. Summarize total risk with equations?
10. List out the method of LHZ?
11. Illustrate the data description of forest fire?
12. Illustrate percentile Index in drought assessment?
13. Explain SPI ?
14. Explain mitigation measures in drought assessment?
15. Illustrate impact of earthquake?
16. Summarize the three levels of coastal flooding?
17. Compare moderate and major of coastal flooding ?
18. Write the case study of man-made disaster?
19. Discuss the process of barometric setup in storm surge?

PART – B

1. What are the Mitigation Measures for your home to prevent it from disaster?
2. Describe any flooding disaster that occurred in India and write the various lessons that you have learned from it? **(Apr/May 2019) (Apr/May 2018)**
3. What was the type of flood that affected Kerala recently?
4. Critically evaluate the risk reduction strategies followed during the disaster? **(Nov/Dec 2021)**
5. Explain in detail about methodology used in coastal flooding?
6. Explain the working of various instrumentation used to measure earthquake? **(Apr/May 2018)**
7. Describe the various intensity and magnitude of earthquake?
8. Write in detail about earthquake vulnerability assessment and building and infrastructure? **(Apr/May 2019)**
9. Expand and explain data description about forest fire?
10. Illustrate the case study about forest fire in India?
11. Brief about analysis for landslide hazard zonation?
12. Explain the role of GIS in LHZ?
13. What are the methodology used in drought assessment?
14. Access in detail about causes of man-made disaster?
15. Write about storm and storm surge assessment?
16. Illustrate about earthquake vulnerability assessment of buildings and infrastructure with case study?
17. Discuss in detail about drought assessment with case study?
18. Elaborate in detail about case study of storm surge?
19. Write about LHZ with case study?