

GUJARAT TECHNOLOGICAL UNIVERSITY

BE-6 SEMESTER – OLD PAPER – S22 TO W25 – QUESTION BANK

Subject Name & Code:

DISASTER MANAGEMENT (3160622)

Unit 1: Understanding Disasters

Repeated Questions:

1. **Define the terms: Hazard, Vulnerability, Risk, Capacity.** (S24 - Q1b, 04 marks)
(WIN 24 - Q1b, 04 marks)
(SUM 25 - Q2b, 04 marks)
2. **What is Disaster Management? / Describe the phases of Disaster Management Cycle.** (W25 - Q1c, 07 marks)
(WIN 23 - Q1a, 03 marks)
(WIN 24 - Q1c, 07 marks)
(SUM 23 - Q1a, 03 marks)
(SUM 24 - Q1b, 04 marks)
(SUM 25 - Q1b, 04 marks)
3. **Differentiate: Natural Disaster & Man-made Disaster. / Describe natural disasters and man-made disasters.** (WIN 24 - Q1a, 03 marks)
(SUM 23 - Q1c, 07 marks)
(SUM 24 - Q1c, 07 marks)

Other Important Questions:

4. Define the terms: Disaster and Hazard. (W25 - Q1a, 03 marks)
 5. What is Vulnerability? Explain briefly, types of Vulnerability. (W25 - Q1b, 04 marks)
 6. Write a short note on Man-made disasters. (W25 - Q2a, 03 marks)
 7. Write a detailed note about vulnerability, categorizing it. (WIN 23 - Q1b, 04 marks)
 8. Classify different types of disaster. (SUM 24 - Q1a, 03 marks)
 9. Write a short note on paradigm shift in disaster management in India. (SUM 25 - Q1a, 03 marks)
 10. Define the term Disaster and describe various phases of disaster. (SUM 25 - Q1b, 04 marks)
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Unit 2: Types, Trends, Causes, Consequences and Control of Disasters

Repeated Questions:

1. **Which are the causes of floods?** (W25 - Q3a OR, 03 marks)
(WIN 24 - Q3a OR, 03 marks)
(SUM 23 - Q3a OR, 03 marks)
(SUM 24 - Q3a, 03 marks)
2. **Explain various types of Landslides.** (WIN 23 - Q3a, 03 marks)
(SUM 23 - Q3a, 03 marks)
3. **What is cyclone? / Explain the cyclone with its formation process.** (WIN 24 - Q4c, 07 marks)
(SUM 23 - Q3c OR, 07 marks)
4. **What is tsunami? What are its causes?** (SUM 23 - Q3c, 07 marks)
(SUM 24 - Q3c, 07 marks)
5. **What is climate change? Explain causes of climate change.** (W25 - Q2b, 04 marks)
(SUM 23 - Q4c OR, 07 marks)
(SUM 24 - Q4c OR, 07 marks)
6. **Discuss the safety measures to avoid the train accidents.** (WIN 23 - Q4a OR, 03 marks)
(SUM 23 - Q5b OR, 04 marks)
7. **Enlist the technological disasters. Discuss any one such disaster.** (WIN 24 - Q2c OR, 07 marks)
(SUM 23 - Q5c OR, 07 marks)
(SUM 24 - Q3c OR, 07 marks)
(SUM 25 - Q3c OR, 07 marks)

Other Important Questions:

8. Give a comprehensive list of various types of disasters. (SUM 23 - Q2b, 04 marks)
(SUM 24 - Q2a, 03 marks)
 9. Give classification of disasters with examples. (WIN 24 - Q2b, 04 marks)
 10. How development may cause disasters? (SUM 23 - Q2a, 03 marks)
(SUM 24 - Q2b, 04 marks)
 11. Write short note on Geological disasters. (SUM 23 - Q2c, 07 marks)
 12. Which are the effects of earthquake? (SUM 23 - Q2c OR, 07 marks)
(SUM 24 - Q2c, 07 marks)
 13. Discuss environmental impact of mining. (SUM 23 - Q3b, 04 marks)
 14. Give the classification of various floods. (WIN 24 - Q3b, 04 marks)
 15. Explain the Earthquake and also give various steps for prevention and protection from Earthquake. (WIN 24 - Q3c, 07 marks)
 16. Enlist various types of Landslides. (WIN 24 - Q4a, 03 marks)
 17. Explain effect of climate change on disaster. (WIN 24 - Q4b, 04 marks)
 18. What are the important causes of accidents in Mining? (WIN 24 - Q4a OR, 03 marks)
 19. Discuss about Biological Disasters. (SUM 25 - Q4a OR, 03 marks)
 20. Write a brief note on Tsunami Disaster. (SUM 25 - Q3a, 03 marks)
 21. Describe the mitigation measures for any two Hydro-Meteorological Disaster. (SUM 25 - Q5a OR, 03 marks)
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Unit 3: Disaster Management Cycle and Framework

Repeated Questions:

1. **Explain various phases of Disaster Management Cycle with neat sketch.** (W25 - Q2c, 07 marks)
(WIN 23 - Q1a, 03 marks)
(WIN 24 - Q1c, 07 marks)
(SUM 25 - Q3b OR, 04 marks)
2. **Explain Early Warning System (EWS).** (W25 - Q4b OR, 04 marks)
(SUM 23 - Q4b OR, 04 marks)
(SUM 24 - Q4b OR, 04 marks)
(SUM 25 - Q4b, 04 marks)
3. **Describe Incident Response System (IRS). / Explain features of Incident Response System.** (W25 - Q4b, 04 marks)
(WIN 23 - Q3b OR, 04 marks)
(WIN 24 - Q5c, 07 marks)
4. **Explain Disaster Risk Analysis process** (W25 - Q2c OR, 07 marks)
Discuss about "Risk Assessment" and "Capacity Development" (SUM 25 - Q5c OR, 07 marks)

Other Important Questions:

5. Write a note on disaster management cycle framework. (SUM 25 - Q3b OR, 04 marks)
 6. Give features of disaster management cycle. (SUM 23 - Q4a, 03 marks)
 7. Explain prevention and mitigation of disaster. (SUM 24 - Q4a OR, 03 marks)
 8. Discuss major issues involved in disaster preparation. (SUM 23 - Q4b OR, 04 marks)
 9. Give checklist for Disaster preparedness by state/district. (W25 - Q4a, 03 marks)
 10. Explain about search and rescue activity and its objectives. (SUM 25 - Q5b, 04 marks)
 11. Write the major features of Emergency Operation Centre (EOC). (SUM 25 - Q4a, 03 marks)
 12. Discuss the essential features of damage assessment. (SUM 25 - Q5a, 03 marks)
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Unit 4: IDNDR, Yokohama Strategy, Hyogo Framework & Disaster Management in India

Repeated Questions:

1. **Explain Yokohama strategy. / What are the main objectives of YOKOHAMA strategy?** (WIN 23 - Q3c OR, 07 marks)
(WIN 24 - Q4b OR, 04 marks)
(SUM 24 - Q2c OR, 07 marks)
(SUM 25 - Q1c, 07 marks)
2. **Write short on: IDNDR (International Decade for Natural Disaster Reduction).** (WIN 23 - Q3a, 03 marks)
(SUM 23 - Q4a OR, 03 marks)
(SUM 24 - Q4a, 03 marks)
3. **Write short note about National Disaster Management Authority (NDMA).** (WIN 23 - Q3a OR, 03 marks)
Discuss briefly the contributions of National Disaster Management Authority for Safety and Training programmes. (W25 - Q5c OR, 07 marks)
Describe the role of NDMA, NDRF and SDRF for Disaster Management. (SUM 24 - Q3a OR, 03 marks)
State the role of NDMA and SDRF in disaster management. (SUM 25 - Q5b OR, 04 marks)
4. **Discuss about the Disaster Management Act 2005.** (SUM 24 - Q4c, 07 marks)
(SUM 25 - Q4c OR, 07 marks)
5. **Explain lessons learnt from previous/mega disasters in India** (WIN 24 - Q5a, 03 marks)
(SUM 25 - Q5c, 07 marks)
Discuss briefly about mega disasters of India and lessons learnt from them. (SUM 24 - Q5c OR, 07 marks)
(SUM 25 - Q5c, 07 marks)

Other Important Questions:

6. Discuss briefly, the initiatives taken by National Disaster Management Authority for capacity development in India. (W25 - Q3c, 07 marks)
 7. Explain any three mega disasters of India. (WIN 23 - Q3c, 07 marks)
 8. Elaborate lesson from the Uttarakhand land slide Tragedy. (WIN 23 - Q4a, 03 marks)
 9. Enlist the state level institutions for disaster management and explain any one in detail. (W25 - Q3b, 04 marks)
 10. Write a note on Disaster profile of India. (SUM 24 - Q4b, 04 marks)
 11. Write short note on national disaster management policy. (SUM 25 - Q3b, 04 marks)
 12. What is the role of National Executive Committee (NEC) at state level and at district level? (WIN 24 - Q5b, 04 marks)
 13. Discuss the role of Civil Society / non-government agencies in Disaster Management. (W25 - Q3c OR, 07 marks)
(SUM 25 - Q4c, 07 marks)
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Unit 5: Applications of Science and Technology for Disaster Management & Mitigation

Repeated Questions:

1. **Describe the role of GPS in management of disaster.** (W25 - Q5a, 03 marks)
(WIN 23 - Q2a, 03 marks)
(SUM 23 - Q5a OR, 03 marks)
(SUM 24 - Q5a, 03 marks)
(SUM 25 - Q4b OR, 04 marks)
2. **What is role of GIS in disaster management?** (W25 - Q5a OR, 03 marks)
(SUM 23 - Q5b, 04 marks)
(SUM 24 - Q5b, 04 marks)
3. **Describe structural mitigation for disaster management.** (WIN 23 - Q1c, 07 marks)
(WIN 24 - Q2c, 07 marks)
(SUM 23 - Q5c, 07 marks)
4. **Explain disaster safe designs and constructions / earthquake resistant design.** (WIN 24 - Q3c OR, 07 marks)
(SUM 23 - Q4c OR, 07 marks)
(SUM 24 - Q5c OR, 07 marks)
(SUM 25 - Q3c, 07 marks)
5. **Discuss the safety measures to avoid road accidents.** (W25 - Q4a OR, 03 marks)
(SUM 24 - Q3b OR, 04 marks)
(SUM 25 - Q3a OR, 03 marks)

Other Important Questions:

6. Describe role of Technology in Disaster Management. (W25 - Q4c, 07 marks)
7. Describe briefly the existing Hazard forecasting and Warning Networks established in the country. (W25 - Q4c OR, 07 marks)
8. Enlist various Communication modes available for Disaster forecasting and warning. Explain any two in detail. (W25 - Q5c, 07 marks)
9. Write a short note on Non-structural mitigation measures for disaster management. (W25 - Q5b OR, 04 marks)
10. Explain early warning system for landslides. (WIN 23 - Q2b, 04 marks)
11. Describe how you will use remote sensing and GIS technology for volcanic eruption and cyclone disaster. (WIN 23 - Q5c, 07 marks)
12. Describe the application of remote sensing for the disaster management. (WIN 24 - Q3a, 03 marks)
13. Describe the application GIS for the disaster management. (WIN 24 - Q3a OR, 03 marks)
14. Discuss the role of Information Technology in case of disaster. (WIN 24 - Q5a OR, 03 marks)
15. Explain the governing elements of emergency communication. (WIN 23 - Q5a, 03 marks)
16. Describe use of geospatial techniques in case of earthquake and landslide disaster. (WIN 23 - Q5c, 07 marks)
17. Explain the role and functions of a disaster communication system. (WIN 24 - Q5c OR, 07 marks)
18. Explain different features of land use planning. (WIN 23 - Q5b, 04 marks)
19. What is the significance of Land Use Planning and Development Regulations in Disaster Management? (SUM 24 - Q5b OR, 04 marks)
20. Describe the role of development regulations in disaster management. (SUM 25 - Q2a, 03 marks)
21. Enlist various formats for the training programmes by National Institute of Disaster Management (NIDM). Discuss any one in detail. (W25 - Q5b, 04 marks)
22. Enlist the Safety and training Institutions in India for disaster management. (SUM 23 - Q5a, 03 marks)
