

GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER-VI EXAMINATION – WINTER 2025

Subject Code: 3160622

Date: 19-11-2025

Subject Name: Disaster Management

Time: 02:30 PM TO 05:00 PM

Total Marks: 70

Instructions:

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Simple and non-programmable scientific calculators are allowed.

	MARKS
Q.1 (a) Define the terms : Disaster and Hazard	03
(b) What is Vulnerability? Explain briefly, types of Vulnerability.	04
(c) What is Disaster Management? Explain key stages of Disaster Management.	07
Q.2 (a) Write a short note on Man-made disasters.	03
(b) What is climate change? Explain briefly, causes of Climate change.	04
(c) Explain various phases of Disaster Management Cycle with neat sketch.	07
OR	
(c) Explain Disaster Risk Analysis process	07
Q.3 (a) Enlist safety measures adopted by Indian railways to avoid collision of trains.	03
(b) Enlist the state level institutions for disaster management and explain any one in detail.	04
(c) Discuss briefly, the initiatives taken by National Disaster Management Authority for capacity development in India.	07
OR	
Q.3 (a) Which are the causes of floods?	03
(b) Enlist various possible disasters related to water, climate, and geological issues.	04
(c) Discuss the role of Civil Society in Disaster Management.	07
Q.4 (a) Give checklist for Disaster preparedness by state/district.	03
(b) Describe Incident Response System (IRS).	04
(c) Describe role of Technology in Disaster Management.	07
OR	
Q.4 (a) Enlist preventive measures for Road accidents in India.	03
(b) Write short note on : Early warning system (EWS).	04
(c) Describe briefly the existing Hazard forecasting and Warning Networks established in the country.	07

- Q.5** (a) Describe the role of GPS in management of disaster. **03**
- (b) Enlist various formats for the training programmes by National Institute of Disaster Management (NIDM). Discuss any one in detail. **04**
- (c) Enlist various Communication modes available for Disaster forecasting and warning. Explain any two in detail. **07**

OR

- Q.5** (a) What is role of GIS in disaster management? **03**
- (b) Write a short note on Non-structural mitigation measures for disaster management. **04**
- (c) Discuss briefly the contributions of National Disaster Management Authority for Safety and Training programmes. **07**
