

# GUJARAT TECHNOLOGICAL UNIVERSITY

BE- SEMESTER- V EXAMINATION – SUMMER 2026

Subject Code:3150913

Date:21-05-2026

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) Differentiate: Natural Disaster & Man-made Disaster.                                                   | 03    |
|     | (b) Define following terms in context of disaster.<br>1) Disaster 2) Coping capacity 3) Mitigation 4) Risk | 04    |
|     | (c) Draw & explain disaster management cycle.                                                              | 07    |
| Q.2 | (a) Define the term Disaster and enlist various phases of disaster.                                        | 03    |
|     | (b) Explain role of technology in disaster management.                                                     | 04    |
|     | (c) Write a brief note on effects of cold waves and heat waves.                                            | 07    |
|     | OR                                                                                                         |       |
|     | (c) Explain Causes, Effect and what to do before and after the biological disaster.                        | 07    |
| Q.3 | (a) Discuss effects of Landslides.                                                                         | 03    |
|     | (b) Write a note on Capacity Development.                                                                  | 04    |
|     | (c) Describe the adverse impact and mitigation measures for any one Hydro-metrological disaster.           | 07    |
|     | OR                                                                                                         |       |
| Q.3 | (a) Explain Tsunami Disaster.                                                                              | 03    |
|     | (b) Give causes of fire and precautionary measures.                                                        | 04    |
|     | (c) What is Drought? Explain various types of Droughts in brief.                                           | 07    |
| Q.4 | (a) Explain disaster risk mapping.                                                                         | 03    |
|     | (b) Explain about search and rescue activity and its objectives.                                           | 04    |
|     | (c) What is Emergency operation Center? Also state its functions.                                          | 07    |
|     | OR                                                                                                         |       |
| Q.4 | (a) Give consequences and effects of Epidemics                                                             | 03    |
|     | (b) Write a short note on Disaster Management Act, 2005                                                    | 04    |
|     | (c) Explain the role and functions of a disaster communication system.                                     | 07    |
| Q.5 | (a) State the role of SDRF.                                                                                | 03    |
|     | (b) Write short note on National plan on disaster management.                                              | 04    |
|     | (c) Preventive and Protective Measures against Avalanche                                                   | 07    |
|     | OR                                                                                                         |       |
| Q.5 | (a) What is the role of National Executive Committee (NEC) at state level and at district level?           | 03    |
|     | (b) Enlist the Safety and training institution in India for disaster management.                           | 04    |
|     | (c) Describe the application of remote sensing and GIS for the disaster management.                        | 07    |

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