



End Term (Even) Semester Examination May-June 2025

Roll no.....

Name of the Program and semester: B Tech CSE (Semester – 8)

Name of the Course: Disaster Management

Course Code: TDM-881

Time: 3 hour

Maximum Marks: 100

Note:

- (i) All the questions are compulsory.
- (ii) Answer any two sub questions from a, b and c in each main question.
- (iii) Total marks for each question is 20 (twenty).
- (iv) Each sub-question carries 10 marks.

- Q1. CO-1 (2X10=20 Marks)
- a. Define disaster and explain its key characteristics. How does it differ from a hazard?
 - b. What are some man-made disasters, and how do they impact human health and the environment? Discuss a case study of a significant man-induced disaster
 - c. Examine the major natural disasters that have affected Uttarakhand in the past decade. What lessons have been learned from these disasters?
- Q2. CO-2 (2X10=20 Marks)
- a. How do disasters impact development, and how can poor development planning exacerbate disaster risks? Provide examples.
 - b. Analyze the effects of large-scale development projects such as dams, embankments, and land use changes on disaster vulnerability. How can sustainable infrastructure minimize risks?
 - c. What is the role of sustainable development in disaster mitigation? How can development policies balance economic growth and environmental protection?
- Q3. CO-3 (2X10=20 Marks)
- a. What is forecasting? Explain the role of forecasting and early warning systems in disaster mitigation.
 - b. What is rehabilitation? What are the major challenges in rehabilitation and reconstruction of disaster-affected areas? Provide examples of successful rehabilitation programs.
 - c. What is disaster mitigation? How can urban disaster mitigation strategies help reduce disaster risks in densely populated cities?
- Q4. CO-4 (2X10=20 Marks)
- a. What is vulnerability? Discuss the major reasons of vulnerabilities and their impact of the disaster restoration.
 - b. List the major natural disasters in India. Explain any two disasters special reference to Uttarakhand. Also discuss the causes of these disasters in Uttarakhand.
 - c. Design a sustainable development framework that prioritizes disaster resilience and incorporates the principles of equity and social justice.
- Q5. CO-5 (2X10=20 Marks)
- a. What is Disaster Management Act, 2005? Discuss the objectives and key provisions of the Disaster Management Act, 2005. How does this legislation enhance India's disaster preparedness and response mechanisms?
 - b. Explain the roles and responsibilities of central, state, and district authorities under the Disaster Management Act, 2005. How do they coordinate disaster relief efforts?
 - c. What is National Disaster Response Force (NDRF)? Examine the role of the National Disaster Response Force (NDRF) in disaster response. How does it contribute to search and rescue operations during emergencies?