



Bharatiya Vidya Bhavan's
SARDAR PATEL COLLEGE OF ENGINEERING

(Government Aided Autonomous Institute)
Munshi Nagar, Andheri (W) Mumbai - 400058



END SEMESTER November 2025 / ~~February 2026~~ January 2026

Program: M.Tech (Machine Design)

Course Code: VE-MTMD301

Course Name: Disaster Management

Note: All questions are compulsory.

Duration: 3 hrs

Maximum Points:100

Semester: III

Q.No.	Questions	Points	CO	BL	Module No.
Q1 (A)	Distinguish between a hazard and a disaster, providing at least two practical real-world illustrations of each to highlight the difference.	10	1	3	1
Q1 (B)	Define a disaster and discuss the key factors that lead to its occurrence, supporting your explanation with suitable examples	10	1	2	1
Q2 (A)	Explain the economic losses resulting from major disasters and illustrate your answer with examples from recent national or international events.	10	2	3	2
Q2 (B)	Discuss how natural calamities such as earthquakes, cyclones, and tsunamis disrupt ecological balance, providing relevant examples.	10	1	3	2
Q3 (A)	Identify the major flood and drought-prone regions of India and discuss the geographical and climatic factors responsible for their susceptibility.	10	2	3	3
Q3 (B)	Describe the seismic zoning of India and explain how each zone differs in its level of earthquake vulnerability.	10	1	3	3
Q4 (A)	Describe the role of remote sensing technologies in disaster preparedness, focusing on the importance of timely and accurate data.	10	3	4	4
Q4 (B)	Explain why monitoring natural events that can potentially lead to disasters is essential, and support your answer with relevant examples.	10	1	3	4
Q5 (A)	Explain the present global disaster risk landscape and discuss how it disproportionately impacts developing nations.	10	2	3	5



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Q5 (B)	Describe any two commonly used disaster risk assessment techniques, explaining their practical uses and key limitations.	10	4	4	5
Q6 (A)	Explain any three practical and effective survival strategies that individuals or communities can adopt during and after a disaster.	10	3	4	6
Q6 (B)	Discuss the role of international bodies in promoting disaster preparedness and reducing risks across nations.	10	2	3	6
Q7 (A)	Distinguish between structural and non-structural mitigation measures, illustrating your explanation with suitable examples.	10	3	3	7
Q7 (B)	Define disaster mitigation and describe its core idea with the help of relevant examples.	10	1	2	7