

Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY

B.Tech Degree S7 (R,S) (S5 PT) Examination November 2025 (2019 Scheme)

Course Code: CET445**Course Name: NATURAL DISASTERS AND MITIGATION****Max. Marks: 100****Duration: 3 Hours****PART A***Answer all questions, each carries 3 marks.*

Marks

- | | | |
|----|--|-----|
| 1 | Define the following: a) Capacity b) Exposure c) Risk | (3) |
| 2 | How does urbanization increase vulnerability to natural disasters? | (3) |
| 3 | Differentiate between epicentre and hypocentre of an earthquake. | (3) |
| 4 | Name three types of volcanic hazards. | (3) |
| 5 | What are the major causes of forest fires? | (3) |
| 6 | Mention three causes of soil erosion. | (3) |
| 7 | What are the main components of risk in the context of disaster management? | (3) |
| 8 | Briefly mention the various stages in disaster management cycle. | (3) |
| 9 | Briefly mention examples of use of modern technology in disaster management. | (3) |
| 10 | What are the key factors to consider in relief camp layout? | (3) |

PART B*Answer any one full question from each module, each carries 14 marks.***Module I**

- | | | |
|----|---|-----|
| 11 | a) Differentiate between natural and human-made hazards with examples. | (8) |
| | b) Explain the concept of Carbon Footprint and discuss any three ways to reduce it. | (6) |

OR

- | | | |
|----|--|-----|
| 12 | a) How does resilience influence the recovery from a disaster? Illustrate with examples. | (8) |
| | b) With the help of examples bring out the inter-connected nature of the earth's subsystems. | (6) |

Module II

- | | | |
|----|--|-----|
| 13 | a) Using neat sketches, explain the mechanism of formation of Tsunami. | (7) |
| | b) Explain the mechanism of formation of storm surges. | (7) |

OR

- 14 a) What are the various causes of floods? Briefly explain any five flood mitigation strategies. (14)

Module III

- 15 a) How does desertification occur? Discuss the various effects and mitigation measures. (14)

OR

- 16 a) Reflect on how a landslide disaster might change a community's way of life. (8)
b) Suggest any three methods that can be adopted to conserve soil and prevent further degradation. (6)

Module IV

- 17 a) Explain the roles of disaster response and disaster recovery in disaster management. Illustrate your answer with suitable real-life examples. (14)

OR

- 18 a) Explain the basic concept of SWOT Analysis. How can SWOT Analysis be applied in disaster management planning? Discuss its advantages and limitations in managing disaster risks effectively. (14)

Module V

- 19 a) "Community participation is critical in all phases of disaster management." Justify this statement with examples. (7)
b) Explain the main components of a disaster management plan for floods. (7)

OR

- 20 a) What is Environmental Impact Assessment (EIA)? Explain its importance in disaster-prone regions. How does EIA contribute to sustainable development? (14)
