



Reg No.: _____

Name: _____

APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY
B.Tech Degree 7th semester (S,FE) Exam April 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**

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|----|---|-----|
| 1 | Explain the terms (i) exposure (ii) vulnerability (iii) capacity. | (3) |
| 2 | Illustrate the interactions between sub-systems of earth in the case of fossil fuel extraction and consumption. How can this lead to disasters? | (3) |
| 3 | Explain elastic rebound theory of earthquake | (3) |
| 4 | Explain any three causes of volcanic eruption | (3) |
| 5 | How soil degradation leads to soil desertification? | (3) |
| 6 | What are the types of forest fire? | (3) |
| 7 | What is SWOT analysis? Mention its uses. | (3) |
| 8 | Explain disaster response plan | (3) |
| 9 | Explain (i) emergency logistics and (ii) emergency relief | (3) |
| 10 | Explain (i) flood plain zoning and (ii) Flood proofing | (3) |

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

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| 11 | a) Differentiate natural hazard and manmade hazard citing suitable examples. | 6 |
| | b) Explain the term resilience. How does resilience of a community influence the recovery from a disaster? | 8 |

OR

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| 12 | a) Suggest any six control measures to reduce carbon footprint | 6 |
| | b) What is urbanization? Explain the effects of urbanisation | 8 |

Module II

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| 13 | a) Explain various seismic hazards of earthquake | 14 |
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OR

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| 14 | a) Discuss the causes of Tsunami | 6 |
| | b) Explain any six mitigation measures of Volcanic eruption | 8 |

Module III

- 15 a) Explain the causes of landslides 6
b) Discuss any eight remedial measures to reduce landslides 8

OR

- 16 a) Explain the causes of soil degradation and suggest three remedial measures to reduce its effects 14

Module IV

- 17 a) Illustrate with an example, which are the different phases in disaster risk management cycle. 14

OR

- 18 a) What is SOP? Explain its responsibilities in disaster management 14

Module V

- 19 a) What are the steps involved in EIA process in India? 14

OR

- 20 a) Explain the pre-disaster, disaster and post-disaster phase measures taken for earthquake 14
