

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: BE
BRANCH: CIVIL**

**SEMESTER : VII
SESSION : MO/18**

SUBJECT: CE7013 DISASTER MANAGEMENT

TIME: 3 HRS.

FULL MARKS: 60

INSTRUCTIONS:

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
 2. Candidates may attempt any 5 questions maximum of 60 marks.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) What are the different types of Disasters? Give examples of each type. [2]
Q.1(b) What are the characteristics of Disaster and which factors lead to Disasters? [4]
Q.1(c) Explain the principles of Disaster Management. [6]
- Q.2(a) Define (a) Exposure, (b) Vulnerability, and (c) Capacity, with respect to Disaster Risk Reduction. [2]
Q.2(b) How a community can effectively respond to Disaster situations? Mention the preparedness measures that can be taken to deal with Disaster situations. [4]
Q.2(c) What is the organizational structure of NDMA? [6]
- Q.3(a) What is Plate Tectonics? Why study of movement of earth's plates is necessary? [2]
Q.3(b) What are the structural forms? Explain the major types of structural form systems employed in modern buildings. [4]
Q.3(c) What are the various considerations that should be employed for designing earthquake resistant structures? [6]
- Q.4(a) What are Tsunamis? How they are formed? [2]
Q.4(b) What is Cyclone? Explain its various development stages. [4]
Q.4(c) What are the adverse effects of a Tsunami and what are the possible risk reduction measures for Tsunamis? [6]
- Q.5(a) What is a Flood? Which factors contribute to flooding? [2]
Q.5(b) Explain the various mitigation approach for flood risk reduction. [4]
Q.5(c) What is Drought? What are the different Drought mitigation strategies for Drought Management? [6]
- Q.6(a) What are the Landslide preventive measures? [2]
Q.6(b) What is Landslide? Explain the various causes of Landslides. [4]
Q.6(c) Explain the various mitigation measures of Landslide Mitigation. [6]
- Q.7(a) What is Fire? Explain the 'Fire Triangle and 'Fire Tetrahedron'. [2]
Q.7(b) What are the various classes of Fire? Which type of fire extinguisher can be used for extinction of those classes of Fire? [4]
Q.7(c) Explain in detail the fire prevention and mitigation strategies. [6]

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