Roll No.						Total No. of Pages : 0	: 02
11011 110.						10tal 110. 01 1 agoo 1 02	

**Total No. of Questions: 08** 

## M.Tech (Civil Engineering) (Sem.-3)

## DISASTER REDUCTION AND MANAGEMENT

Subject Code : CE-520 M.Code : 35215

Time: 3 Hrs. Max. Marks: 100

## **INSTRUCTIONS TO CANDIDATES:**

- 1. Attempt any FIVE questions out of EIGHT question.
- 2. Each question carry TWENTY marks.
- Q1 a) Discuss the different design criteria for earth quake resistant design.
  - b) State the different codal provisions for earthquake resistant design of structures in the seismic zone in which you are situated.
- Q2 a) Explain how the seismic data collected and processed?
  - b) What is meant by base isolation method? Discuss its importance in earthquake disaster management.
- Q3 a) Discuss the importance of training and capacity building in earthquake disaster management. Popose a course module for earthquake resistant design for practicing engineers.
  - b) "Planning and land use management has a major role in disaster management", elucidate.
- Q4 "In case earthquake disaster, the indirect damages are far reaching than direct damages". Discuss enumerating the various indirect effects.
- Q5 Discuss the mitigation measures in respect of the following disasters
  - a) Fire
  - b) Release of poisonous gas.

1 | M-35215 (S9)-2488

- Q6 Congratulations! You are appointed as the disaster management nodal officer in your district. Discuss the measures which you take to prepare for the earthquake disaster.
- Explain the following in respect of disaster management Q7
  - a) Social rehabilitation
  - b) Damage reconnaissance
- Q8 Write notes on the following with respect to disaster management
  - downtoold from Suid Ra. Con Studies of Contraction of the Contraction a) Regional data base and resources network
  - b) Remote sensing and GIS
  - c) Liquefaction of soil
  - d) Danger zone restrictions

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

**2** | M-35215 (S9)-2488