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Total No. of Pages : 01

Total No. of Questions : 08

M.Tech.(CTM) (E-IV) (Sem.-3)

**DISASTER REDUCTION AND MANAGEMENT**

Subject Code : CT-515

Paper ID : [E0819]

Time : 3 Hrs.

Max. Marks : 100

**INSTRUCTIONS TO CANDIDATES :**

1. Attempt any FIVE questions in all.
2. Each question carries TWENTY marks.

- Q1 a) Explain the Seismic design philosophy for design of structures. (8)  
b) Discuss codal provisions for earthquake resistant design of structures. (12)
- Q2 a) What is Retrofitting? Discuss its importance. (10)  
b) Discuss the importance and application of proper land use practices. (10)
- Q3 a) What kind of emergency medical and public health services, you will suggest for an earthquake affected area? (10)  
b) *'Care for old and orphans is very important during and after an Earthquake'*. Justify and discuss steps you will take for this task. (10)
- Q4 a) Discuss the various causes and effects of Tsunamis. (10)  
b) Landslides and Avalanches are likely to occur during disaster. What steps you will take to avoid these? What steps will you recommend after occurrence of landslides and avalanches? (10)
- Q5 a) As a consequence of earthquake, Fire is likely to occur. Discuss the remedial measures, you will adopt to control/combat Fire, (10)  
b) Discuss the bad effects of nuclear radiation on human beings. (10)
- Q6 a) Discuss vulnerability and capacity assessment. Explain its aims and perspectives. (10)  
b) *'There is a need for rescue operations in response phase of disaster management'* Give your views and Justify with reasons. (10)
- Q7 a) Define the role of Remote sensing in disaster management. (10)  
b) What are responsibilities of National Disaster Management Authority? (10)
- Q8 a) List various attributes of emergency management system. (10)  
b) Write a note on *'Information management and related technologies in engineering and disaster management'*. (10)