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INDIAN INSTITUTE OF TECHNOLOGY KHARAGPUR
End-Autumn Semester Examination - 2010-2011

Date : 22 November 2010 (AN) **Time** : 3 hrs
Course : 5th year B. Arch **Total Marks** : 100
Subject : Disaster Resistant Building and Management **No. of Students** : 24
Subject No. : AR52007
Department : Architecture & Regional Planning

Instruction : Answer any Four (4) questions
Answers should be supported with necessary illustrations

- Q.1 Suggest effective solutions associated with the appendages in domestic, commercial buildings, critically evaluating various components and their vulnerability, degree of hazards and damages, during earthquake. [25]
- Q.2 Enumerate on the causes of Tsunami, its formation, and the nature of hazards and damages to the buildings and people. Highlight the planning and architectural solutions to minimize damages when tsunami strikes. [25]
- Q3. Discuss any two (2) of the following natural hazards with due consideration to their occurrence, effects, hazard levels and design solutions. [2x12.5 = 25]
a) Cloud burst and Flood
b) Cyclone and Tornado
c) Avalanch and Volcano
- Q4. Discuss any two (2) of the following man-made hazards, with due consideration to pre-disaster and post-disaster actions. [2x12.5 = 25]
a) Mine collapse and Drought
b) Stampede and Terrorist attack
c) Fire and Gas tragedy
- Q5. What are the characteristics of Landslide and its occurrence ? Enumerate various classifications of landslides with due references to the nature and degree of hazards, and design solutions. [25]

