

Code No: 115DX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech III Year I Semester Examinations, February/March - 2016

DISASTER MANAGEMENT

(Common to CE, CSE, CEE)

Time: 3 hours

Max. Marks: 75

**Note:** This question paper contains two parts A and B.

Part A is compulsory which carries 25 marks. Answer all questions in Part A.

Part B consists of 5 Units. Answer any one full question from each unit.

Each question carries 10 marks and may have a, b, c as sub questions.

### PART - A (25 Marks)

- 1.a) Distinguish between environmental hazard and disaster. [2]
- b) Describe the model of cultural ecology. [3]
- c) Classify the following hazards as either Endogenous or Exogenous Hazard. [2]
  - i) cyclone
  - ii) drought
  - iii) epidemic
- d) Make a list of secondary effects caused by i) cyclone and ii) drought. [3]
- e) What causes earthquakes? [2]
- f) What are the after effects of earthquakes? [3]
- g) What are the causes of flooding in Urban areas and how is it related to global warming? [2]
- h) Indicate the geographic distribution of tropical cyclones in the world and in India. [3]
- i) Indicate the importance of pre-disaster training with respect to fire. [2]
- j) In an earthquake situation list the post disaster rehabilitations measures undertaken. [3]

### PART - B (50 Marks)

- 2.a) What are different approaches to human ecology? Describe one of the approaches in detail. [5+5]
  - b) When does an environmental stress turn into a hazard? Give an example. [5+5]
- OR**
- 3.a) How is Global warming related to environmental hazard?
  - b) What are the precautions to be taken to reduce the environmental stress?
  - c) In what way NGOs and govt. interact to effect eco friendly policies? [3+3+4]
- 4.a) Define the following terms i) Hazard ii) Triggering event iii) Disaster iv) Threat
  - b) Indicate the likely triggering event for the following hazards:
    - i) land slide
    - ii) flooding
    - iii) Tsunami
  - c) Give a list of disasters that can trigger a fire as secondary effect. [3+3+4]
- OR**
- 5.a) How would you classify the following disasters:
    - i) Bopal gas tragedy
    - ii) Minamata disaster
    - iii) Chernobyl disaster
  - b) Does any relationship exist between manmade disaster and natural disaster? Discuss.
  - c) What is the relationship between threat, vulnerability and disaster? [3+3+4]

- 6.a) What are the reasons for landslides?  
b) In India, what locations are considered vulnerable to landslides?  
c) What are the effects of landslides? What measures are to be taken to avoid its occurrence? [3+3+4]

OR

- 7.a) What is Plate tectonics and how is related to occurrence of earthquakes?  
b) What are the secondary disasters that can follow a seismic disturbance?  
c) Distinguish between the magnitude and intensity of an earthquake. [4+3+3]

- 8.a) What are the drought prone areas in India?  
b) What are the control measures taken to mitigate the effects of drought?  
c) "Drought is considered as a creeping disaster" Discuss the applicability of this statement with respect to long term measures necessary for this type of disaster. [3+3+4]

OR

- 9.a) What is a super cyclone?  
b) What are the causes for distribution and frequency of cyclones on the east coast of India?  
c) List the types of damages caused by tropical cyclones. [3+4+3]

- 10.a) Describe the role of GIS in disaster management.  
b) Taking the example of flood disaster indicate how remote sensing and satellite data is used for disaster management work.  
c) Indicate also how live training can be imparted using networking principles involving various departments. [3+4+3]

OR

- 11.a) What activities comprise pre-disaster planning for flood disaster?  
b) What is meant by "Golden hour" during advancement of a cyclone heading to cross a coast?  
c) What activities are undertaken during this "Golden hour" which is just prior to a major disaster? [3+4+3]

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