

Code No: 115DX

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD

B.Tech III Year I Semester Examinations, November - 2015

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) Give a list of environmental Hazards in order of their importance. [2]
- b) Describe briefly eco system based model of human ecology. [3]
- c) Classify the following hazards as either Endogenous or Exogenous Hazard. [2]
 - i) Earthquake ii) thunderstorm iii) volcano.
- d) Distinguish between planetary and extra-planetary hazard giving examples. [3]
- e) What causes volcanoes? [2]
- f) What are the hazardous effects of the volcanoes? [3]
- g) What is an eye of a cyclone? What is the wind velocity in the eye? [2]
- h) Describe the mechanism of soil erosion. [3]
- i) What are the three stages of disaster management? [2]
- j) List the pre- disaster measures can be taken for landslides. [3]

PART - B (50 Marks)

- 2.a) Define environmental hazard.
- b) Describe the environmental stress with respect to clean fresh water in India.
- c) What ecological influences threaten availability of clean air in coastal India? [3+3+4]

OR

- 3.a) Describe how environmental health is related to human health.
- b) Describe the importance of marine ecosystem for Indian subcontinent.
- c) What is the regulatory management which takes care of marine ecosystem? [3+3+4]

- 4.a) Give a list of man induced hazards.
- b) What are the energy sources that induce such hazards?
- c) Taking the example of a landslide hazard indicate the role of man in either triggering or preventing the hazard turning into a disaster. [3+3+4]

OR

- 5.a) What are the effects of environmental hazard? Give at least three effects.
- b) What hazards can be considered as extra planetary-Discuss
- c) Has the world faced such hazards in the past? [4+3+3]

- 6.a) What is the instrument used to measure earthquake intensity and how does it work?
- b) What measures are taken to protect buildings against collapse during the earthquake?
- c) What is meant by epicenter of an earthquake and how is it determined? [4+3+3]

OR

- 7.a) What is a Tsunami?
- b) Under what various circumstances a Tsunami can occur?
- c) Which regions get affected during Tsunami? [3+3+4]

- 8.a) List the technological hazards.
b) Taking the example of a chemical industry indicate the measures taken to avoid the threat of toxic chemicals polluting the atmosphere.
c) In such cases indicate the role of training in mitigating the effects of pollution. [3+3+4]

OR

- 9.a) Compare the disasters fire flood and tsunami with respect to magnitude of disaster.
b) Are these to be considered as disasters in their own right or should they be treated as secondary effects? Discuss.
c) If they are considered as secondary effect, identify the likely primary cause or causes. [3+4+3]

- 10.a) List the activities considered for post disaster rehabilitation after an earthquake.
b) Bring out the importance of reconstruction of damaged buildings and the problems associated with it to ensure the dictum "Build back better"
c) What measures are taken to rehabilitate the population in a holistic way? Discuss. [3+4+3]

OR

- 11.a) Discuss the problems associated with sedimentation processes.
b) What pre disaster measures can reduce the impact of sedimentation problem?
c) Discuss how this aspect influences soil erosion and suggest corrective measures. [3+3+4]

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