

3 Hours

1. Question no. 1 compulsory.
2. Answer any three questions out of remaining five
3. Attempt sub questions in order
4. Figures to the right indicate full marks.

80 Marks

1. Write short notes on (any 4)
  - a) Capacity building
  - b) Functions of NIDM
  - c) Sea walls, embankments and bioshields
  - d) Triage
  - e) Environmental hazard
  - f) National Disaster Management Policy
  - g) Community based disaster preparedness
2. a) Discuss the framework for disaster management in India. [8]
2. b) Explain global warming and climate change. [6]
2. c) Comment on radiation hazards. Also discuss possibilities of chemical spills in Mumbai. [6]
3. a) Discuss the various types of technological disasters and highlight the specific efforts to mitigate such disasters in India. [8]
3. b) Explain the role of various international agencies for Disaster Management. [6]
3. c) Explain various means of raising finance for mitigating and managing disasters [6]
4. a) Differentiate between structural and non-structural measures of flood mitigation and discuss the importance of forecasting, warning and monitoring system in India [8]
4. b) Appraise the role of GIS and GPS in disaster management. [6]
4. c) Discuss various types of natural disasters in India and highlight their impacts on life. [6]
5. a) Explain in detail the design concepts involved in as well as the construction materials used for the safe construction of facilities in case of earthquakes and cyclones. Also discuss the fire resistant facilities that need to be essentially provided in a building/industry. [8]
5. b) Elaborate the guidelines laid down by NDMA for disaster management in India. [6]
5. c) Explain in detail, vulnerability, with reference to floods and cyclones. List down the preparatory measures for minimizing vulnerabilities related to Tsunami. [6]

BTE (civil). Sem

6. a) Discuss in brief the Disaster Management Act 2005.
6. b) Explain Community based disaster preparedness
6. c) Is rapid depletion of groundwater a type of disaster? To which category does this belongs? What are the reasons for this problem?
6. d) Identify and discuss the various hazards which are associated with volcanic eruptions