

**Note:**

1. **Question No. 1 is compulsory.**
2. Attempt any **THREE** out of the remaining **FIVE** questions.
3. Assume suitable data if necessary.

- 1** Answer the following (any 4) **(20)**
- a) Define the terms: Hazard, Vulnerability, Risk **5**
  - b) Discuss the Direct and indirect effects of disasters **5**
  - c) What is Disaster Scenario of India? **5**
  - d) Explain types of Manmade disasters. **5**
  - e) What is Climate Change? What are the effects of Global Warming? **5**
- 2**
- a) What are different types of flood? Enlist structural mitigation measures for flood. **10**
  - b) Explain the types of landslide and factors affecting them. Give a case study for the same. **10**
- 3**
- a) What are different government agencies responsible for various types of disasters? **10**
  - b) Explain roles and responsibilities of NDMA in detail. **10**
- 4**
- a) Discuss the role of GIS and Remote Sensing in disaster management. **10**
  - b) Describe the institutional mechanism setup in India. **10**
- 5**
- a) What is role of NGOs in disaster management? Enlist major NGOs working on disaster management. **10**
  - b) Explain Bio shield and Sea wall in detail with schematic diagram. **10**
- 6**
- a) What is Community Base Disaster Management (CBDM)? Discuss how it is useful in Indian scenario. **10**
  - b) What are Do's and don'ts in Earthquake, Tsunami and Cyclone? **10**

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