



**SL No of QP : 1221**

**Unique Paper Code: 32187601**

**Name of the Paper:** Natural Hazards & Disaster Management

**Name of the Programme:** B.Sc. (H) Environmental Sciences – DSE (LOCF)

**Semester:** VI

**Duration:** 3 Hours

**Maximum Marks:** 75

**Instructions for Candidates**

Answer any **five** questions. All Questions carry **equal** marks.

1. Discuss the concept of risk and vulnerability. Explain how urban expansion and inadequate government policies contribute to increased vulnerability. (15)
2. (a) Describe the causes and geographic distribution of earthquakes. (7½)  
(b) Explain the formation and effects of tsunamis. (7½)
3. Describe the impacts of sand mining and injudicious groundwater extraction on flood hazards. Provide case study examples. (15)
4. (a) Differentiate between direct and indirect losses in disaster events. (7½)  
(b) Explain the importance of qualitative likelihood measurement index in risk assessment. (7½)
5. Write explanatory notes (Attempt any **two**): (7½×2=15)
  - (i) Atmospheric hazards with examples
  - (ii) Deforestation and landslide hazards
  - (iii) Application of space technology in disaster management
  - (iv) Preparedness planning and training
6. Differentiate between structural and non-structural mitigation measures. Give examples. (15)
7. Discuss the National Disaster Management Framework in India. How does it streamline the disaster response mechanism? (15)
8. Evaluate the lessons learned from the Bhopal gas tragedy and its significance in present-day disaster management planning. (15)

