Time: (3 Hours)   Total Marks: 80

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

Q1   Attempt any four   20

A) Explain the role of international agencies for Disaster Management.

B) Describe the framework for disaster management in India.

C) What are the reasons for rapid depletion of ground water?

D) What are the provisions of National Policy on Disaster Management(NPDM) of 2009?

E) What are the fire resistant facilities that need to be essentially provided in a building/industry?

Q2   A)Discuss the framework for disaster management in India.   10

B)What do you understand by early warning system? In which disasters, are early warning systems are not possible?   10

Q3   A) Comment on radiation hazards. Also discuss possibilities of chemical spills in Mumbai.   10

B) Industrialization is an essential component for the economic development of a country. However industrial disasters can have a significant social and economic impact. Explain this statement with suitable examples.   10

Q4   A) Appraise the role of the role of Geo-informatics in disaster management.   10

B) Explain in detail, vulnerability, with reference to tsunami. List down the preparatory measures for minimizing vulnerabilities related to Tsunami.   10

Q5   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.   10

B) What is meant by technological disasters? Support your answer with case studies.   10

Q6   Attempt any four
A) What is Triage? Explain with example.   20
B) Explain various means of raising finance for mitigating and managing disasters.
C) Explain Rehabilitation with example.
D) What is Palmer drought index? Give example.
E) What are the guidelines laid down by NDMA for disaster management in India?

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