# M. SC. (GEOGRAPHY) (MSCGG) Term-End Examination June, 2025

# MGGE-003: NATURAL HAZARDS AND DISASTER MANAGEMENT

Time: 3 Hours Maximum Marks: 100

Note: All Sections are compulsory. Marks are indicated against each Section. Question Nos. 1 and 2 are compulsory. Answer any five questions out of seven questions 3 to 9 given in Section C.

# Section-A

- 1. Answer any *five* questions in about 150 words each:  $4\times5=20$ 
  - (i) Describe in brief any *four* key attributes of hazards.

- (ii) Define vulnerability. Describe any two components of vulnerability in brief.
- (iii) What is an earthquake? Briefly describe any *two* steps followed in locating the earthquake.
- (iv) What is loose snow avalanche? State any *two* external factors that triggered loose snow avalanche.
- (v) Describe in brief urban floods and fluvial floods.
- (vi) Write a short note on the relationship between climate change and pandemics.
- (vii) Explain in brief any *four* significances of need assessment in post-disaster situation.

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### Section—B

- 2. Answer any *five* questions in about 300 words each:  $6\times5=30$ 
  - (i) Explain the differences between hazards and disasters by giving any *six* points for each.
  - (ii) Discuss the relationship among hazard, vulnerability and risk.
  - (iii) Describe any *three* direct and indirect impacts each of earthquake.
  - (iv) Explain in brief any *three* natural and anthropogenic causes of landslides each.
  - (v) State any *six* structural and nonstructural measures each for flood mitigation.
  - (vi) Write a short note on "Fire-Adaptive Community Planning".
  - (vii) Discuss in brief any *three* mitigation measures and preparedness for addressing issues arising out of pandemics.

## Section—C

- **Note**: Answer any *five* questions in about 500 words each.  $10 \times 5 = 50$
- Discuss the salient features of Sendai Framework for Disaster Risk Reduction, 2015.
- Explain in detail the strategies for mitigation and preparedness required for Tsunami.
- 5. Discuss the role of Indian Meteorological
  Department (IMD) and National Disaster
  Management Authority (NDMA) in disaster
  mitigation related to cyclones in India.
- 6. Describe in detail the trends and distribution of road accidents in India.
- 7. Give a detailed discussion on any *five* operational steps involved in Community Based Disaster Management.

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- 8. What is indigenous knowledge system?

  Describe the role and importance of indigenous knowledge system for disaster risk reduction.
- 9. Explain various causative factors responsible for industrial hazards.

