Roll No.

Total No. of Pages : 02

Total No. of Questions : 09

B.Sc. (Environmental Sciences) (Sem.–5) HAZARDS AND RISK ASSESSMENT Subject Code : BSEN507-20 M.Code : 92595 Date of Examination : 02-01-2023

Time: 3 Hrs.

Max. Marks : 60

INSTRUCTIONS TO CANDIDATES :

- 1. SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.

SECTION-A

- 1. Write briefly :
 - a) List **any four** causes of earthquakes
 - b) Name **any four** measures of hazard reduction in avalanche
 - c) What is meant by reservoir induced seismicity?
 - d) List **any four** mitigation measures hazards associated with chemical processing industry.
 - e) Define 'hazardous substance'.
 - f) What are the four scientific characteristic attributes which define hazardous substances?
 - g) What are the three key elements involved in the cradle-to-grave approach in hazardous waste management?
 - h) Define 'mutagenesis'. Why is it important in hazardous waste management?
 - i) What is meant by 'threshold dose'?
 - j) Differentiate between criteria and standards.

SECTION-B

- 2. Write a note on floods and droughts as natural hazards.
- 3. Discuss the major occupational hazards nuclear power plants.
- 4. Explain the importance of environmental monitoring in hazard management.
- 5. Discuss the importance of community involvement and risk communication in hazard management.
- 6. What are '*early warning systems*'? Explain using examples.

SECTION-C

7. Write notes on :

- a) Toxicity Assessment
- b) Ecological Risk Assessment.
- 8. Sketch and explain the four-step process of risk assessment.
- 9. Discuss the salient features of the major legal and regulatory framework of hazard management in India.

NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.