Total No. of Questions: 16 ] [ Total No. of Printed Pages: 3

# SEM-3012

# M.Sc. (IIIrd Semester) Examination, 2022 ENVIRONMENTAL SCIENCE

Paper - ESEO-304 (B)

# (Disaster Management)

Time: 3 Hours [ Maximum Marks: 40

The question paper contains three Sections.

Section-A (Marks :  $1 \times 10 = 10$ )

**Note**: Answer all the *ten* questions carries 1 mark each. The answer should not exceed **50** words.

Section–B (Marks :  $3 \times 5 = 15$ )

Note: Answer five questions by selecting at least one question from each Unit. Each question carries 3 marks. Answer should not exceed 200 words.

Section–C (Marks:  $5 \times 3 = 15$ )

**Note**: Answer *three* questions by selecting *one* question from each Unit. Each question carries 5 marks. The answer should not exceed **500** words.

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### Section-A

- 1. Attempt all questions.
  - (i) Define Risk.
  - (ii) What is Famine?
  - (iii) Write about disaster management.
  - (iv) What do you mean by Vulnerability?
  - (v) Define 'Disaster cycle'.
  - (vi) What do you mean by a hazard and vulnerability profile?
  - (vii) Give the causes of floods.
  - (viii) Enlist major disasters in North India.
  - (ix) What are simple and complex disasters?
  - (x) Give the major effects of Bihar floods.

#### Section-B

#### Unit-I

- 2. What are slow onset and rapid onset disasters?
- 3. How human settlement induces disasters? Explain.
- 4. Write the major causes and impacts of cyclone.

#### Unit-II

- 5. Give aims and objectives of UNISDR.
- 6. Write a note on 'Phases of Disaster'.
- 7. Discuss about principles of disaster epidemiology.

### Unit-III

- 8. Write about the aims and objectives of Disaster Management Act, 2005.
- 9. Discuss about the Gujarat earthquake.
- 10. Write a note on Orissa Super-cyclone.

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# Section-C

#### Unit-I

11. What are natural disasters? Explain causes, effects and mitigation measures of earthquake.

Or

12. Write about the concept of hazard. Describe the major causes of disaster.

#### Unit-II

13. Discuss in detail about components of disaster relief.

Or

14. Explain the disaster risk reduction strategies giving importance of early warning systems.

# Unit-III

15. Describe the best practices in disaster management. Write a note on disaster management in India.

Or

- 16. Write short notes on the following:
  - (a) Bhopal Gas disaster
  - (b) South-Indian Tsunami

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