

[Total No. of Questions - 9] [Total No. of Printed Pages - 3]  
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**B. Tech 1st Semester Examination**  
**Disaster Management & Environmental Science (CBS)**  
**HS-103**

**Time : 3 Hours**

**Max. Marks : 60**

*The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.*

**Note :** The question paper consists of five Sections A, B, C, D and E. The candidates are required to attempt five questions in all selecting one question from each section A, B, C, D and all subparts of Section E. Use of non-programmable calculator is allowed.

**SECTION - A**

1. (a) Explain the impact of earthquake with the help of any case study.
- (b) What are different types of floods? Explain each one briefly.
- (c) How tornadoes can be classified? (4+4+4=12)
2. (a) Discuss national policy on disaster management.
- (b) Write short note on:
  - (i) Hazard (ii) Vulnerability (iii) Risk (4+8=12)

**SECTION - B**

3. (a) What are different phases of disaster management?

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- (b) Discuss mitigation measures for:
  - (i) Cyclones (ii) Floods (iii) Landslides (4+8=12)
4. (a) Name few of the voluntary agencies that are involved at various stages of disaster management.
- (b) How the rural development programmes can be integrated with disaster reduction and mitigation activities? Explain few of the rural development programmes. (4+8=12)

**SECTION - C**

5. (a) List major ways to conserve water on a personal level.
- (b) What are the major cause and consequences of deforestation? Discuss. (4+8=12)
6. (a) Why is air pollution such a large problem in urban areas?
- (b) Give any five major categories of water pollutants, their sources and their effects. (4+8=12)

**SECTION - D**

7. (a) List the adverse effects of depletion of the Ozone layer. Suggest measures to prevent it.
- (b) What are green house gases and how they cause enhanced global warming? Discuss the possible impact of global warming. (4+4+4=12)
8. (a) Justify the necessity of developing non-conventional sources of energy.
- (b) Discuss the role of engineers for better and clean environment. (4+8=12)

**SECTION - E**

9. (i) What percentage of our land areas is prone to floods? (2)
- (ii) What is nuclear terrorism? (2)
- (iii) What is cyclone shelter? (1)
- (iv) What is rain water harvesting? (1)
- (v) Define radioactivity. Mention the sources of radioactivity. (1)
- (vi) What are the causes of soil pollution? (1)
- (vii) What are the various alternatives to CFCs? (1)
- (viii) How does acid rain occur? (1)
- (ix) Write short note on carbon credits. (1)
- (x) List the various forms of commercial energy. (1)