INSTITUTE OF AERONAUTICAL ENGINEERING

(Autonomous) Dundigal-500043, Hyderabad

B.Tech VI SEMESTER END EXAMINATIONS (REGULAR) - JULY 2023

Regulation: UG-20

DISASTER MANAGEMENT

(Common to CSE | CSE (AI&ML) | CSE (DS)| CSE (CS) | CSIT | IT | EEE | ME)

Time: 3 Hours

Max Marks: 70

Answer ALL questions in Module I and II Answer ONE out of two questions in Modules III, IV and V All Questions Carry Equal Marks All parts of the question must be answered in one place only

$\mathbf{MODULE}-\mathbf{I}$

- 1. (a) How is environmental hazard linked to ecology? Discuss the spectrum of environmental hazard from geophysical events to human activities. [BL: Understand] CO: 1|Marks: 7]
 - (b) List the various environmental disasters caused by humans. Explain the integrated landscape approaches in sustainable development. [BL: Understand] CO: 1|Marks: 7]

$\mathbf{MODULE}-\mathbf{II}$

- 2. (a) Mention the different types of man-made disaster with special reference to Bhopal gas leak tragedy. [BL: Understand| CO: 3|Marks: 7]
 - (b) Discuss how exogenous and endogenous hazards impact legal, political and health systems. [BL: Understand] CO: 2|Marks: 7]

$\mathbf{MODULE}-\mathbf{III}$

- 3. (a) Outline the various types of hazards associated with earthquakes and discuss the various methods of mitigation of earthquake hazards. [BL: Understand| CO: 3|Marks: 7]
 - (b) Identify the various causes of volcanoes. Discuss the hazards which are associated with volcanic eruptions. [BL: Understand | CO: 3|Marks: 7].
- 4. (a) Give examples including the salient features of major disasters caused by earthquakes in different parts of India during the last three decades. [BL: Understand] CO: 4|Marks: 7]
 - (b) What are the pre-disaster measures to be taken to prevent loss of life due to the earthquakes? [BL: Understand] CO: 4|Marks: 7]

$\mathbf{MODULE}-\mathbf{IV}$

- 5. (a) Summarize various causes of floods and explain the different methods of flood control measures. [BL: Understand| CO: 5|Marks: 7]
 - (b) Elucidate disaster mitigation and discuss the contribution of United Nations agencies in it.

[BL: Understand] CO: 5|Marks: 7]

- 6. (a) Determine the causes of tropical cyclones and local storms and also list the steps to be adopted to mitigate the same. [BL: Understand| CO: 5|Marks: 7]
 - (b) Categorize different types of drought. Suggest relief and rehabilitation measures for any two types of drought. [BL: Understand| CO: 5|Marks: 7]

$\mathbf{MODULE}-\mathbf{V}$

- 7. (a) Discuss about the steps involved in emergency management. Outline the role of government agencies for disaster management. [BL: Understand| CO: 6|Marks: 7]
 - (b) List the different stages of disaster management. Write in detail about pre- disaster stage

[BL: Understand |CO: 6 |Marks: 7]

- 8. (a) Differentiate mitigation and preparedness. Outline the organizational structure for disaster management in India. [BL: Understand] CO: 6|Marks: 7]
 - (b) Justify why the recovery phase is essential after a disaster. Mention the salient features of national disaster management act 2016. [BL: Understand| CO: 6|Marks: 7]

