

- b. Infer the significance of the essential post-disaster activity "Search and Rescue (SAR)". 12 3 4 2

32. a. Examine the role of remote sensing in the response, recovery and mitigation phases of the landslide event. 12 2 5 1

(OR)

- b. Analyze the role and responsibilities of the scientific divisions of the national institute of hydrology, India. 12 3 5 1

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Reg. No.

B.Tech. DEGREE EXAMINATION, NOVEMBER 2023
Fifth & Seventh Semester

18CEO307T – DISASTER MITIGATION AND MANAGEMENT
(For the candidates admitted during the academic year 2018-2019 to 2019-2020)

Note:

- (i) **Part - A** should be answered in OMR sheet within first 40 minutes and OMR sheet should be handed over to hall invigilator at the end of 40th minute.
(ii) **Part - B & Part - C** should be answered in answer booklet.

Time: 3 hours

Max. Marks: 100

PART – A (20 × 1 = 20 Marks)

Answer ALL Questions

- | | Marks | BL | CO | PO |
|--|-------|----|----|----|
| 1. The extent to which a community, structure, service or geographic area is likely to be damaged or disrupted by the impact of particular hazard is termed as
(A) Capacity (B) Vulnerability
(C) Risk (D) Hazard assessment | 1 | 2 | 1 | 2 |
| 2. Effective hazard management largely rely
(A) Government agencies (B) Emergency responses
(C) Pre disaster planning (D) Volcanoes | 1 | 2 | 1 | 2 |
| 3. The NDMA is headed by
(A) Prime minister (B) President of India
(C) Governor of states (D) Chief Minister of states | 1 | 3 | 1 | 2 |
| 4. The National Institute of Disaster Management is located at
(A) Manipur (B) Punjab
(C) Hyderabad (D) New Delhi | 1 | 3 | 1 | 1 |
| 5. Which among the following is a social impact of drought?
(A) Diminishing of drinking water (B) Ground water
(C) Rise in inflation rate (D) Loss of soil moisture | 1 | 1 | 2 | 1 |
| 6. Name the instrument used for measuring the magnitude of earthquake
(A) Thermometer (B) Ergo graph
(C) Seismograph (D) Barometer | 1 | 1 | 2 | 1 |
| 7. The ill-health effect caused by one-time, sudden, high exposures is often called _____.
(A) Chorionic effect (B) Acute effect
(C) Systematic effect (D) Immediate effect | 1 | 1 | 2 | 1 |
| 8. In the eye of the cyclone the temperature and pressure are
(A) Highest (B) Lowest
(C) Normal (D) Average | 1 | 1 | 2 | 1 |

9. When the outbreak of any disease spread from one country to other, it is called _____.
 (A) Epidemic (B) Pandemic
 (C) Endemic (D) Hypodemic
10. Which of following is not an engineering disaster?
 (A) Dam failure (B) Collapse of bridges
 (C) Collapse of flyover (D) Landslides
11. Bhopal gas tragedy can be classified as _____.
 (A) Meteorological disaster (B) Chemical disaster
 (C) Natural disaster (D) Biological disaster
12. _____ are the outbreak of diseases of contagious of plant and animal life on epidemic or pandemic level.
 (A) Nuclear disaster (B) Chemical disaster
 (C) Forest fire (D) Biological disaster
13. As per WMO which regional meteorological centre responsible for cyclones in north Indian ocean?
 (A) NHC-Miami (B) IMD-Delhi
 (C) JMA-Tokya (D) CPHU-Honolulu
14. The mapping of earthquake deformation is done by
 (A) SAR polarimeter (B) Optical remote sensing
 (C) Thermal remote sensing (D) SAR interferometry
15. IMD headquarters is located in which of the following place?
 (A) Kolkata (B) Delhi
 (C) Mumbai (D) Chennai
16. Name of the high resolution radar remote sensing technique to assess the cyclones
 (A) Polorimetry (B) Interferometry
 (C) Photogrammetry (D) Scatterometry
17. The foundation of community based disaster
 (A) Insurance (B) Communication
 (C) Capacity building (D) Disaster risk reduction
18. Which is considered as a major tool of NCS for the preparedness and mitigation activities for an earthquake event?
 (A) Seismic hazard microzonation (B) Seismic hazard macrozonation
 (C) Mapping of active fault zone (D) Ioseismals
19. Identification and quantification of the resources needed for rehabilitation, recovery and reconstruction involves in
 (A) Emergency (B) Pre-disaster
 (C) Post disaster (D) Recovery

20. Indian meteorological department classify a storm as 'Super Cyclone' when the wind blows
 (A) More than 120 km/hr (B) More than 100 km/hr
 (C) More than 220 km/hr (D) More than 150 km/hr

PART – B (5 × 4 = 20 Marks)
 Answer ANY FIVE Questions

- | | Marks | BL | CO | PO |
|--|-------|----|----|----|
| 21. Draw the disaster management cycle. | 4 | 2 | 1 | 1 |
| 22. Define vulnerability and list out the classification of vulnerability. | 4 | 3 | 1 | 2 |
| 23. Explain forest fire and building fire. | 4 | 1 | 3 | 1 |
| 24. Explain long term environmental effect. | 4 | 1 | 3 | 2 |
| 25. What are the impact of floods? Explain. | 4 | 1 | 2 | 1 |
| 26. Examine the significance of rapid assessment survey. | 4 | 3 | 4 | 2 |
| 27. List out the 12 subsequent categories of MMI scale. | 4 | 2 | 5 | 2 |

PART – C (5 × 12 = 60 Marks)
 Answer ALL Questions

- | | Marks | BL | CO | PO |
|---|-------|----|----|----|
| 28. a. Explain national disaster management framework in detail with flowchart description. | 12 | 2 | 1 | 2 |
| (OR) | | | | |
| b. Explain disaster management cycle in detail with pre-disaster and post disaster stages elaborately. | 12 | 3 | 1 | 2 |
| 29. a. Explain in detail about earthquake, its characteristics and effects. | 12 | 1 | 2 | 1 |
| (OR) | | | | |
| b. Discuss in detail about flood, its classification, effects and possible mitigation measures. | 12 | 1 | 2 | 1 |
| 30. a. Explain water pollution and its sources along its effects and causes. | 12 | 1 | 3 | 1 |
| (OR) | | | | |
| b. Write in detail about disasters due to oil fire accident with their causes, effects and mitigation measures. | 12 | 1 | 3 | 1 |
| 31. a. Demonstrate and discuss the conceptual relationship between education and disaster vulnerability with a flowchart. | 12 | 2 | 4 | 2 |

(OR)