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B.Tech. DEGREE EXAMINATION, MAY 2024
Fourth to Seventh Semester

18CEO307T – DISASTER MITIGATION AND MANAGEMENT
(For the candidates admitted during the academic year 2018-2019 to 2021-2022)

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 Chairman of the National Disaster Management authority is (A) Home minister (B) Chief minister (C) Prime minister (D) Vice president	1	1	1	1
2. National Institute of disaster management is located at (A) Punjab (B) New Delhi (C) Manipur (D) Hyderabad	1	1	1	1
3. The disaster management Act was made in the year (A) 2003 (B) 2004 (C) 2005 (D) 2006	1	1	1	1
4. The mitigation phase in disaster management (A) Occurs after a disaster (B) Occurs before a disaster (C) Include property inspection (D) Include revised zoning	1	2	1	1
5. Which is the appropriate cause of global warming? (A) Chlorofluorocarbon (B) Mineral oil (C) Methane emission (D) Oxide of nitrogen	1	3	2	2
6. Which of the following is the origin of earthquake? (A) Volcanic eruption (B) Movement of crustal plates (C) Tsunami (D) Power failure	1	2	2	2
7. Which human action should be avoided for prevention of flood? (A) Dam construction (B) Deforestation (C) Nuclear test (D) Aviation exhaust	1	3	2	2
8. Choose the type of disaster under which Covid-19 can be placed (A) Chemical (B) Biological (C) Nuclear (D) Metrological	1	2	2	2
9. Earthquakes are recorded by an instrument called (A) Thermostat (B) Rather scale (C) Barometer (D) Seismograph	1	1	3	1

10. In disaster management EWS stands for 1 1 3 1
 (A) Emergency warning system (B) Early warning system
 (C) Emergency water supply (D) Earth water science
11. Prevention, mitigation and preparedness corners under _____ phase. 1 2 3 2
 (A) Pre disaster (B) Post disaster
 (C) Recovery (D) Response
12. Which was the first country to develop atomic bomb? 1 1 3 1
 (A) Russia (B) China
 (C) United States of America (D) Japan
13. Rehabilitation indicates 1 2 4 2
 (A) Immediate response after the disaster (B) Public health service after the disaster
 (C) Planning the mitigation of the event (D) Reconstruction work in an area after disaster
14. Vulnerability analysis corners is under _____ part of disaster management cycle. 1 3 4 2
 (A) Mitigation (B) Preparedness
 (C) Response (D) Recovery
15. What is the name of the map in which the areas are classified based on the natural surface features on the ground? 1 2 4 2
 (A) Land cover map (B) Land use map
 (C) Land cover and land use map (D) Cadastral map
16. What is the issue of Jharia coal mine underground fire? 1 2 4 2
 (A) Forest fire (B) Lightening
 (C) Human accident (D) Unscientific mining and extraction of coal in the past
17. Indian Metrological Department calls a storm as "Super Cyclone" when the wind blows 1 1 5 1
 (A) More than 120 km / hour (B) More than 100 km / hour
 (C) More than 220 km / hour (D) More than 320 km / hour
18. Which among the following does not come under preparing multiple hazard maps? 1 2 5 1
 (A) Translated information (B) Sources of compiling information
 (C) Timing (D) EWS
19. The permanent seismological observatory is located in 1 1 5 1
 (A) Palenpur, Gujarat (B) Chamoli, Uttarakhand
 (C) Latur, Maharashtra (D) Pune, Maharashtra
20. The agency that provide information about the weather 1 1 5 1
 (A) ISO (B) IMD
 (C) ISI (D) CGWB

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

Marks BL CO PO

21. Discuss in brief about the disaster management cycle.	4	2	1	1
22. Explain triage and tagging in disaster management.	4	2	2	2
23. Discuss about the types of faults.	4	2	2	2
24. List the sources of fire hazard.	4	2	3	1
25. List any two primary and secondary effects of flood.	4	3	2	2
26. Discuss briefly about the types of aerial photographs.	4	3	5	2
27. List the key functions of GIS.	4	3	5	2

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

Marks BL CO PO

28. a. Explain the national disaster management framework in detail with neat flow chart.	12	3	1	2
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(OR)

b. Write short notes on

(i) Disaster	4	2	1	1
(ii) Hazard	4	2	1	1
(iii) Vulnerability	4	2	1	1

29. a. Analyze the causes and effects of landslides, their classification, and mitigation measures.	12	4	2	4
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(OR)

b. Discuss in detail about the formation of cyclones, its types and impacts.	12	4	2	3
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30. a. Write in detail about

(i) Coal fire	4	3	3	1
(ii) Oil fire	4	3	3	1
(iii) Deforestation	4	3	3	1

(OR)

b. Explain the causes and effects of Chernobyl nuclear power plant accident in detail.	12	3,4	3	3
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31. a. What is the post disaster stage plan for landslide and Tsunami?	12	3,4	4	3,4
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(OR)

b. What is the pre-disaster stage preparedness plan for earthquake?	12	3,4	4	3,4
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32. a. Explain in detail about the roles and responsibilities of the scientific division of seismological observatory. 12 3,4 5 3

(OR)

b. Discuss in detail about the role of remote sensing and GIS in disaster management. 12 3,4 5 2,1

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