

M.Sc (Part I) (SEM I) Examination
ENVIRONMENTAL SCIENCE (Paper XIV)
Environmental Hazards and Disaster Management (CBCS)(New)
Sub. Code: 65020

Question Bank

June 2022

Choose correct answer : (1 mark each)

1. What is the range of the intensity scale used in measuring Earthquakes?
 - A) 1 to 12
 - B) 1 to 7
 - C) 1 to 15
 - D) 1 to 5
2. Disaster Management Act was enacted in -----.
 - A) 2006
 - B) 2003
 - C) 2005
 - D) 2008
3. How many divisions are there on Richter Scale?
 - A) From 1 to 7
 - B) From 1 to 8
 - C) From 1 to 9
 - D) From 1 to 10
4. Natural disasters are -----.
 - A) Relatively slow movements in comparison to hazard
 - B) Relatively sudden and cause large scale disaster in comparison to hazard
 - C) Relatively small scale disaster
 - D) Disaster with no damage
5. The cause for floods in India is due to -----.
 - A) Deforestation
 - B) Overpopulation

- C) High temperature
 - D) Increasing transportation
6. Tsunamis are caused when -----.
- A) An earthquake occurs
 - B) Wind is strong
 - C) Ocean currents become warm
 - D) Sea level rises
7. Which one of the following states receives floods in the winter?
- A) Assam
 - B) West Bengal
 - C) Kerala
 - D) Tamil Nadu
8. The most disastrous giant waves are -----.
- A) Body waves
 - B) Ocean currents
 - C) Tsunamis
 - D) Surface waves
9. The river valley project has been constructed to check floods in India is -----.
- A) Bhakra and Nangal Dam
 - B) Damodar Valley Corporation
 - C) Annasagar project
 - D) Narmada dam
10. What was the cause of the Koyna Earthquake?
- A) Current Pressure in Koyna reservoir
 - B) Hydraulic Pressure in Koyna reservoir
 - C) Cyclone in Koyna reservoir
 - D) Heavy rains in Koyna reservoir
11. Debris flow that originates on the slope of a volcano is known as -----.
- A) Creep
 - B) Fall
 - C) Lahar

- D) Lateral spreads
12. Which instrument measures the seismic waves?
- A) Earthometer
 - B) Seismograph
 - C) Quakegraph
 - D) None of the above
13. Far less dramatic disaster is -----.
- A) Volcano
 - B) Landslide
 - C) Earthquake
 - D) Tsunami
14. Debris flow that originates on the slope of a volcano is known as -----.
- A) Creep
 - B) Fall
 - C) Lahar
 - D) Lateral spread
15. An oil slick is detrimental to -----.
- A) Human life
 - B) Tigers
 - C) Marine life
 - D) Wild animals
16. Active, dead and dormant are types of -----.
- A) Volcanoes
 - B) Cyclones
 - C) Volcanoes and Cyclones
 - D) Floods
17. National Institute of Disaster Management was inaugurated on....--.
- A) September 23, 2002
 - B) August 14, 2001
 - C) October 16, 2003
 - D) August 14, 2004

18. Head office of the National Institute of Disaster Management is situated in India city/state?

- A) Kolkata
- B) New Delhi
- C) Hyderabad
- D) Manipur

19. Which one of the following is not a Natural Disaster?

- A) Volcano eruption
- B) Flood
- C) Tsunami
- D) Oil Spills

20. Rolling effect along the earth's surface affect produces a wave of an earthquake?

- A) L wave
- B) P wave
- C) S wave
- D) A wave

21. Where International Tsunami Information Centre is located?

- A) Honolulu
- B) Hyderabad
- C) Goa
- D) Pondicherry

22. National Disaster Management authority comes under which ministry?

- A) Ministry of Pollution
- B) Ministry of Environment
- C) Ministry of Home Affairs
- D) Ministry of Foreign Affairs

23. In which of the following countries, hurricanes are common?

- A) India
- B) Sri Lanka
- C) Australia

D) USA

24. Where is the Tsunami Warning Centre located in India?

A) Kolkata

B) New Delhi

C) Hyderabad

D) Manipur

25. Tsunami word is derived from which language ?

A) Greek word

B) Indian word

C) French word

D) Japanese word

26. In which direction the wind of the tropical cyclone blows in the northern hemisphere.

A) Straight forward

B) Anticlockwise direction

C) Clockwise direction

D) In any direction

27. According to the Indian Meteorological Department (IMD), the wind blows at which speed called a storm as Super Cyclone?

A) Above 200 km

B) Above 110 km

C) Above 220 km

D) Above 50 km

28. The active volcano in India is.....

A) Volcano Baratang

B) Barren Island Volcano

C) Volcano Etna

D) Volcano Japan

29. India's total flood-prone area is up to.....

A) 30%

B) 20%

C) 12%

D) 10%

30. International Day of Natural Disaster Reduction is celebrated on.....

A) June 15

B) March 5

C) October 13

D) September 13

31. What year Bhopal gas tragedy happens and due to which gas?

A) In 1986, Ethyl Isocyanate

B) In 1984, Methyl Isocyanate

C) In 1984, Potassium Isothiocyanate

D) In 1987, Sodium Isothiocyanate

32. Which option refers to as ring of fire?

A) Area encircling the Pacific Ocean named as Circum-Pacific Belt

B) Area encircling by a belt of volcanoes of Mid-Atlantic Ocean

C) Area encircling by the belt of volcanoes of the Mid-Continental region

D) Area encircling the Arabian sea

33. Is the form of rapid mass movement of earthy matters.

A) Solification

B) Creep

C) Debris flow

D) Lahars

34. An active volcano Mauna Loa is located in -----.

A) Hawaii, USA

B) Brazil

C) Japan

D) India

35. An important water contaminant is -----.

A) Heavy metals

B) Nitrogen oxides

C) Carbon monoxide

D) NO₂ and SO₂

36. Disaster at Chernobyl (USSR) is all related to -----.
- A) Disaster caused by earthquake
 - B) Disaster caused by Tsunami
 - C) Nuclear disaster
 - D) Epidemic disaster
37. The doldrums is an area of.....
- A) Low temperature
 - B) Low pressure
 - C) Low
 - D) Low humidity
38. The word disaster comes from.....
- A) Greek word
 - B) Latin word
 - C) French word
 - D) German
39. Which choice is a man-made trigger of landslides?
- A) Earthquakes
 - B) Volcano
 - C) Blasting
 - D) Erosion
40. Which of the following is related to acid rain?
- A) Carbon-dioxide
 - B) Nitrogen
 - C) Sulphur dioxide
 - D) Carbon monoxide
41. Which one of the following is not associated with earthquake -----.
- A) Focus
 - B) Epicentre
 - C) Swell
 - D) Seismograph
42. The mouth of volcano is known as -----.

- A) Pipe
- B) Vent
- C) Cone
- D) Crater

43. Seismic wave travel faster through...-----.

- A) Gas
- B) Liquid
- C) Solid
- D) Lava

44. The rapid downslope movement of ice or snow is called as -----.

- A) Mudflow
- B) Solifluction
- C) Lahars
- D) Avalanches

45. Minimum rainfall during a cloud burst is -----.

- A) 100 cm/hr
- B) 100 mm/hr
- C) 4.9 inches/hr
- D) 2 cm/hr

46. What is the speed of tsunami waves?

- A) 40 m/hr
- B) 100 km/hr
- C) 900 km/hr
- D) 800 km/hr

47. Which one of the following is not an agent of erosion?

- A) Weathering
- B) Water
- C) Ice
- D) Wind

48. The term drip-stone is associated with -----.

- A) Glacier

- B) Running water
 - C) Wind action
 - D) Underground water
49. Which is one of the following is the largest glacier of world -----.
- A) Hubbard glacier
 - B) Lambert fisher glacier
 - C) Siachin glacier
 - D) Petermanns glacier
50. Most disastrous cloud burst occur in which of the following state -----.
- A) Himachal Pradesh
 - B) Uttarakhand
 - C) Jammu & Kashmir
 - D) Delhi
51. The lines joining places of earthquake of equal intensity is ----.
- A) Epicentre
 - B) Radio waves
 - C) Focus
 - D) Isosesimal lines
52. Major tsunamis are generated by earthquakes along....
- A) Divergent margins
 - B) Convergent margins
 - C) Transform margin
 - D) None of the above
53. Socio-economical impact due construction of multipurpose dams in river vallies is mainly concern for:
- A) Forest loss
 - B) Water quality
 - C) Seismicity
 - D) Project affected people
54. The cause for red tide in the lakes and seas is due to -----.

- A) Eutrophication
- B) Congestion
- C) Oxidation
- D) Precipitation

55. The Deepwater Horizon oil spill occurred on.....

- A) 15 March 2012
- B) 10 April 2010
- C) 21 October 2014
- D) 2 December 1998

56. Structural and Non-structural measures are elements of high category of Risk Reduction Measures -----.

- A) Socio-economic measures
- B) Physical measures
- C) Environmental measures
- D) Post disaster measures

57. Mass killing diseases can be referred as -----.

- A) Biological disaster
- B) Industrial disaster
- C) War disaster
- D) Flood disaster

58. What are the important measures to be taken in community level of disaster preparedness?

- A) Increased awareness
- B) Provision of early and timely warning
- C) Land use planning
- D) All of the above

59. Which techniques are used for prediction of early warning of eruption?

- A) Electric Distance Measures
- B) Tilt Meters
- C) GPS and Satellite Interfering Radar
- D) Tachometer

60. Tropical cyclones originate within -----.

- A) Intermediate between Polar and temperate zones
- B) Mainly tropical area
- C) Intermediate between Tropics of Capricorn and cancer
- D) Mainly equatorial Zones

61. What are the major types oriented to mitigation measures of hazards and disasters?

- A) Public mitigation measures
- B) Community mitigation measures
- C) Both a and b
- D) None of the above

62. "Kalbaisakhi" is a kind of thunder storm witnessed in the states of -----.

- A) Assam, Tripura and West Bengal
- B) Nagaland, Tripura and Sikkim
- C) Mizoram, Assam and Manipur
- D) West Bengal, Manipur and Mizoram

63. Who shall be the first responders in disaster management situation?

- A) Central Government
- B) Community
- C) Local Government
- D) State Government

64. Tropical cyclone, drought, wildfire is -----.

- A) Industrial hazard
- B) Man induced hazard
- C) Meteorological hazard
- D) Hydrological hazard

65. Pandemic diseases include -----.

- A) Cholera
- B) Small pox
- C) Tuberculosis
- D) all of the above

66. The disease that swept a large part of Asia, Europe and Africa in the 14th century is -----.

- A) Plague

- B) Small pox
 - C) Tuberculosis
 - D) Influenza
67. The primary goal of a disaster preparedness plan is -----.
- A) To protect the population
 - B) To protect valuable resources
 - C) To keep communications lines open
 - D) To protect environmental health personnel
68. The Disaster Management Act was made in?
- A) 2006
 - B) 2003
 - C) 2005
 - D) 2009
69. Asian Disaster Preparedness Centre is at?
- A) Bangkok
 - B) Kerala
 - C) Surat
 - D) Mumbai
70. According to World Disasters Report of 2010, during 2000-09, 85% of affected people belonged to the?
- A) African region
 - B) Asia Pacific Region
 - C) Japan region
 - D) Australian region
71. National Disaster Reserve Fund is the result of?
- A) 12th Finance Commission
 - B) 11th Finance Commission
 - C) 13th Finance Commission
 - D) 10th Finance Commission
72. The Chairman of the National Disaster management Authority is?
- A) Home Minister

- B) Vice President
- C) Prime Minister
- D) Minister, Human Resource Development

73. National Institute of Disaster Management publishes a biannual journal titled?

- A) Disaster Development
- B) Disaster India
- C) Disaster Mitigation
- D) Indian Disaster

74. In which year the violent explosion of the famous Volcano, Krakatoa in Indonesia, produced Tsunamis measuring 40 feet?

- A) 1881
- B) 1882
- C) 1884
- D) 1883

75. The nodal department for wind detection IMD refers to -----

- A) Indian meteorological department
- B) Indian metrological department
- C) Indian metallurgical department
- D) Indian musical department

76. Mapping method used for tracking wind speed and direction is -----.

- A) Mind mapping
- B) Hazard mapping
- C) Speed mapping
- D) Brain mapping

77. A cyclone is called a ----- in Philippines and Japan.

- A) Hurricane
- B) Typhoon
- C) Tornado
- D) Thunderstorm

78. Full form of EVD -----.

- A) Evoc Virus Disease

- B) Evola voc Disease
- C) Evola Vig Disease
- D) Ebola Virus Disease

79. When Bhopal Gas Tragedy occurred -----.

- A) 3 rd Dec, 1984
- B) 5 th Dec, 1985
- C) 3 rd Nov, 1984
- D) 3 rd Dec, 1987

80. Full form of DDMA -----.

- A) District Disease Manage Authority
- B) District Dam Manage Authority
- C) District Disaster Management Authority
- D) District Duck Management Authority

Answer key :

- | | | |
|------|------|------|
| 1 A | 28 B | 55 B |
| 2 C | 29 C | 56 B |
| 3 C | 30 C | 57 A |
| 4 B | 31 B | 58 D |
| 5 A | 32 A | 59 D |
| 6 A | 33 C | 60 C |
| 7 D | 34 A | 61 C |
| 8 C | 35 B | 62 A |
| 9 B | 36 C | 63 B |
| 10 B | 37 B | 64 C |
| 11 C | 38 A | 65 D |
| 12 B | 39 C | 66 A |
| 13 B | 40 C | 67 A |
| 14 C | 41 C | 68 C |
| 15 C | 42 D | 69 A |

16 A	43 C	70 B
17 D	44 D	71 B
18 B	45 A	72 C
19 D	46 D	73 A
20 C	47 A	74 D
21 A	48 D	75 A
22 C	49 B	76 B
23 D	50 B	77 B
24 C	51 D 7	8 D
25 D	52 B	79 A
26 B	53 D	80 C
27 C	54 A	

Short answer questions : (8 marks each)

1. Give difference between disaster and hazard.
2. Explain natural disaster with a suitable example.
3. Describe causes of occurrences of earthquakes.
4. Describe causes of occurrences of volcanoes.
5. Explain protective measures from landslides.
6. Explain any one major epidemic in India.
7. Comment on urbanization and flooding.
8. Describe state level planning for hazards mitigation.
9. Describe use of remote sensing in disaster management.
10. Describe causes of occurrences of Tsunami.
11. Explain in brief global warming.
12. Comment on environmental degradation due to wars.
13. Describe how warning system is important in disaster management.
14. Describe reason of occurrences of draught.
15. Explain importance of education and training activities in disaster management.
16. Explain radiation hazards.
17. Explain industrial accidents as manmade hazard.

18. Explain acid rain and its control.
19. Describe consequences of earthquakes.
20. Explain concept of green house effect.

Long answer questions : (16 marks each)

1. What is a hazard? Explain differences between disaster and hazards and add a note on types of hazards and disasters.
2. Give causes of occurrences, consequences, measurement and distribution of earthquake in the world.
3. Describe causes of occurrences, consequences and distribution of Tsunami in the world.
4. Give reason of occurrences of draught. Add a note on consequences and draught prone areas in India.
5. What is disaster management plan? Describe use of remote sensing in disaster management.

Short notes : (8 marks each)

1. Man made hazards
2. Industrial fires and control
3. Earthquake measurement
4. Volcanic belts
5. Causes of land slides
6. Causes of occurrence of storm
7. Urbanization and flooding
8. Mitigation of draught
9. Hazard zonation and mapping
10. Economic impacts of disaster
11. Flood hazard assessment
12. Tropical cyclones
13. Origin of volcanoes
14. Oil spills
15. Natural disasters
16. Ozone depletion

17. Radiation hazards
18. Environmental degradation due to wars
19. Major epidemics in India
20. Emergency Preparedness for disasters

Short notes : (4 marks each)

1. Fire hazard
2. Green house gases
3. Hazardous waste
4. Volcanic belts
5. Landslides and soil types
6. Human induced landslides
7. Environmental effects of flooding
8. Draught mitigation
9. Planning for Rescue and Relief works
10. Hazard mapping
11. Social impacts of disasters
12. Rock types and landslides
13. Earthquake measurement
14. Floodplains
15. Toxic chemical waste disposal hazards
16. Consequences of draught
17. Role of NDRF
18. Frequency of flooding
19. War and environment
20. Seismograph
