

# ENTRANCE TEST-2024

## SCHOOL OF EARTH & ENVIRONMENTAL SCIENCES

### DISASTER MANAGEMENT

Question Booklet Series

A

Total Questions : 60

Time Allowed : 70 Minutes

Roll No. :

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#### Instructions for Candidates :

1. Write your Entrance Test Roll Number in the space provided at the top of this page of Question Booklet and fill up the necessary information in the spaces provided on the OMR Answer Sheet.
2. OMR Answer Sheet has an Original Copy and a Candidate's Copy glued beneath it at the top. While making entries in the Original Copy, candidate should ensure that the two copies are aligned properly so that the entries made in the Original Copy against each item are exactly copied in the Candidate's Copy.
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7. There will be '**Negative Marking**' for wrong answers. Each wrong answer will lead to the deduction of 0.25 marks from the total score of the candidate.
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14. At the end of the examination, hand over the OMR Answer Sheet to the invigilator who will first tear off the original OMR sheet in presence of the Candidate and hand over the Candidate's Copy to the candidate.

1. What type of Hazard is an earthquake ?
  - (A) Meteorological
  - (B) Hydrological
  - (C) Geological
  - (D) Biological
2. Most Cyclone hit region of India :
  - (A) East Coast
  - (B) West Coast
  - (C) Central India
  - (D) None of these
3. When did Bhopal Gas Tragedy happen ?
  - (A) 1984
  - (B) 1994
  - (C) 1974
  - (D) 1979
4. Which one is the Terrestrial Disaster ?
  - (A) Cyclone
  - (B) Hailstorm
  - (C) Landslide
  - (D) All of these
5. A set of prevailing or consequential conditions, which adversely affect the community's ability to prevent, mitigate, prepare for and respond to hazardous events :
  - (A) Vulnerability
  - (B) Disaster
  - (C) Disaster risk
  - (D) Hazard
6. The term disaster is derived from which language ?
  - (A) Greek
  - (B) Latin
  - (C) French
  - (D) English
7. Which of the following is **NOT** a structural mitigation measure for earthquakes ?
  - (A) Installing early warning system
  - (B) Construction of earthquake resistant buildings
  - (C) Retrofitting of existing buildings
  - (D) Strengthening of bridges
8. How many steps are there in the disaster recovery process ?
  - (A) 7
  - (B) 4
  - (C) 5
  - (D) 8
9. What is the primary purpose of conducting a community vulnerability and capacity assessment in CBDM ?
  - (A) Identifying potential hazards in the community
  - (B) Evaluating the effectiveness of Government Disaster Policies
  - (C) Understanding the community's strengths and weaknesses in dealing with disasters
  - (D) Conducting relief operations in the community
10. Which of the following is correct for adaption measures of disasters ?
  - (A) It is localised and region-specific
  - (B) These are long-term strategies
  - (C) It is the strategy to adjust to climatic change
  - (D) It is the strategy to reduce the impact of climate change

11. India's vulnerable landmass prone earthquakes of moderate to very high intensity is :  
 (A) 59%  
 (B) 12%  
 (C) 68%  
 (D) None of these
12. The NDMA was Constituted on :  
 (A) 27 September 2006  
 (B) 27 September 2005  
 (C) October 2005  
 (D) None of these
13. Which of the following is not the phase of Disaster Management Cycle ?  
 (A) Mitigation  
 (B) Readiness  
 (C) Preparedness  
 (D) Response
14. Risk means probability and consequences.  
 (A) True  
 (B) False
15. Which of the following belong to the 10 core principles of the Yokohama Strategy ?  
 (A) Risk assessment  
 (B) Capacity building  
 (C) Reducing vulnerability through planned development  
 (D) All of these
16. When was the Yokohama Strategy for a safer world adopted by UNO ?  
 (A) 1990  
 (B) 1994  
 (C) 1992  
 (D) 1996
17. Which one of the Hyogo Framework for Action (HFA) identified five priorities for action is incorrect ?  
 (A) Ensure that disaster risk reduction (DRR) is a national and a local priority with a strong institutional basis for implementation  
 (B) Identify, assess and monitor disaster risks and enhance early warning  
 (C) Use knowledge, innovation and education to build a culture of safety and resilience at all levels  
 (D) Reduce the underlying risk factors  
 (E) Strengthen disaster preparedness for effective response specific levels
18. The HFA was adopted at the *World Conference on Disaster Reduction*, held in Kobe, Hyogo, Japan in :  
 (A) 2005  
 (B) 2018  
 (C) 2015  
 (D) None of these
19. How many targets Sendai Framework has set for 2015-30 ?  
 (A) 4  
 (B) 7  
 (C) 10  
 (D) 6
20. When was the Sendai Framework for disaster risk reduction adopted by UN General Assembly ?  
 (A) 2015  
 (B) 2018  
 (C) 2016  
 (D) None of these

21. Who is the Chairperson of Disaster Management Authority of India (NDMA) ?
- President of India
  - Prime Minister of India
  - Home Minister of India
  - Minister of Environment and Forests
22. Which year is the paradigm shift for the Disaster Management in India ?
- 2005
  - 2006
  - 2007
  - 2008
23. The Disaster Management Force was established by Section 26 of :
- Parliament of India
  - Ordinance by the President of India
  - NDMA
  - Disaster Management Act, 2005
24. The Centre Government provides SDRF funds to the General Category States and Union Territories to the tune of :
- 90%
  - 75%
  - 50%
  - None of these
25. Which one of the following statement is correct
- Satellite technology can also be used to detect :
- Ground movement
  - Predict landslides
  - Seismic activity
  - All of these
26. Which satellite is used specifically for managing the natural resources of the nation and disaster management ?
- EDUSAT
  - INSAT
  - IRS
  - GSA
27. Which of the following are biological disasters ?
- Cholera
  - Influenza H1N1(Swine-flu)
  - COVID-19
  - All of these
28. Which of the following Legislations enacted in India provides for the Institutional and Operational Framework for disaster prevention response preparedness and recovery at all level ?
- The Water (Prevention and Control of Pollution) Act, 1974
  - The Air (Prevention and Control of Pollution) Act, 1981
  - The Environmental (Protection) Act, 1986 and the Rules (1986)
  - Disaster Management Act, 2005
29. What best describes the Earth's crust ?
- Outer most layer of the Earth
  - Outer most thinnest layer of the Earth
  - The semi-solid layer
  - None of these
30. The largest layer of the Earth which composes 84% of its volume is :
- Core
  - Asthenosphere
  - Mantle
  - Crust

31. Which of the following is the most stable ecosystem ?
- (A) Marine ecosystem  
(B) Mountain ecosystem  
(C) Desert ecosystem  
(D) All of these
32. Bog is a wetland which receives water from :
- (A) Nearby water bodies  
(B) Rainfall only  
(C) Melting of snow  
(D) None of these
33. How many percent of carbon dioxide increased in the atmosphere since pre-industrial times ?
- (A) About 10%  
(B) About 20%  
(C) About 30%  
(D) About 40%
34. Which one of the following is the anthropogenic radiative forcing of climate ?
- (A) Aerosols  
(B) Cement  
(C) Paper  
(D) Glass
35. Which of the following tools of learning does not provide Information and Communication Technology (ICT) ?
- (A) Laboratories  
(B) Slide Shows  
(C) Videos  
(D) Calculations
36. How many bits does an IP address consist of ?
- (A) 32  
(B) 64  
(C) 24  
(D) 16
37. Which of the following passes does not lie in Ladakh ?
- (A) Khardungla Pass  
(B) Umlingla Pass  
(C) Jelep la Pass  
(D) Namkela Pass
38. Which region of Uttar Pradesh is a Duab ?
- (A) Bhabar  
(B) Gangetic Plain  
(C) Vindhyan Hills  
(D) None of the above
39. Zojila Pass is in which Mountain range ?
- (A) Zaskar Range  
(B) Ladakh Range  
(C) Karakoram Range  
(D) None of these
40. India's largest fresh water reservoir is created by :
- (A) Bansagar Project  
(B) Indira Sagar Project  
(C) Matatila Project  
(D) Hirakud Dam Project

41. The second largest glacier outside the polar region is :
- (A) Gangotri glacier  
(B) Siachen glacier  
(C) Lambert glacier  
(D) Gem glacier
42. In which one of the following States is "Gir forest" located ?
- (A) Maharashtra  
(B) Rajasthan  
(C) Haryana  
(D) Gujarat
43. What is the total (approximate) forest cover of erstwhile State of Jammu and Kashmir ?
- (A) 19%  
(B) 35%  
(C) 20%  
(D) 15%
44. Which of the following is out of sequence Environmental problems can generally be grouped into three categories ?
- (A) Resource Depletion  
(B) Pollution  
(C) Loss of Biodiversity  
(D) Population Explosion
45. Which of the following regions is identified as Country's biggest hotspot for soil erosion ?
- (A) Sutlej Valley in Uttarakhand  
(B) Brahmaputra Valley in Assam  
(C) Indus Valley in Ladakh  
(D) Ganga Valley in U.P.
46. Which type of farming causes more deforestations ?
- (A) Subsistence agriculture  
(B) Commercial farming  
(C) Mixed farming  
(D) All of these
47. Which one of the following Natural Disaster threats looms most at Jammu and Kashmir ?
- (A) Landslides  
(B) Floods  
(C) Earthquakes  
(D) Forest fires
48. The greatest flood ever known which came down the Valley and Srinagar occurred in :
- (A) 2014  
(B) 1903  
(C) 1902  
(D) 1950
49. What is the theme of International Day of Disaster Risk Reduction 2024 ?
- (A) Plastic free world  
(B) Afforestation  
(C) Role of Education in protecting and empowering Youth  
(D) All of these
50. Which of the following Natural Disasters in 2024 is out of sequence ?
- (A) Southern Brazil stricken by unprecedented flooding  
(B) Deadly floods in China  
(C) Unprecedented floods in Dubai, Oman, Bahrain and Qatar  
(D) Deadly floods in Pakistan

51. Who is the father of Disaster Management ?
- Robert Bullard
  - R.K. Pachauri
  - Al Gore
  - None of these
52. An inconvenient Thrust is written by :
- Rachel Carson
  - Wangari Maathai
  - Al Gore
  - Michael Braungart
53. Which country suffered from most disasters (25 in number) in 2023 ?
- China
  - India
  - America
  - Brazil
54. Youngest environmentalist of the world :
- Greta Thunberg
  - David Atterborough
  - Leonardo DiCaprio
  - None of these
55. Which one is out of sequence in the following ?  
The erosion not only threatens valuable agricultural areas but also jeopardizes the existence of entire coastal communities marked by dense populations and infrastructural significance :
- Mumbai
  - Kolkata
  - Chennai
  - Delhi
56. The most of the Himalayan States with high density of population is most vulnerable to :
- Floods
  - Landslides
  - Earthquakes
  - Soil erosion
57. Which of the following organisations coordinates international efforts in disaster risk reduction and it reports on the implementation of the Sendai Framework for Disaster Risk Reduction ?
- UNICEF
  - UNESCO
  - UNDRR
  - All of these
58. Which NGO is an award winning organisation, providing disaster relief, recovery, and preparedness across India ?
- Rapid Response
  - Sakal Relief Fund
  - Care India
  - Smile Foundation
59. Following is the list of International experts on Disaster Management. Which one is out of the sequence ?
- Michael Prietula
  - Nicholas Canfield Read Brown
  - Lisa Briggs
  - R.K. Pachauri
60. Who won the Nobel Prize for Man-made Climate Change ?
- Johan Rockström
  - Wangari Maathai
  - Al Gore
  - All of these

Sr. No. ....

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1. Etymologically the term 'Disaster' comes from the following languages :
- (i) French
  - (ii) Greek
  - (iii) Italian
  - (iv) Latin

Choose the correct answer from the options given below:

- (A) (i), (ii), (iii)
  - (B) (i), (ii), (iv)
  - (C) (ii), (iii), (iv)
  - (D) (i), (ii), (iii), (iv)
2. Etymologically the term 'Hazard' comes from one of the following languages
- (A) French
  - (B) Greek
  - (C) Italian
  - (D) Latin

3. Risk perception is understood as
- (i) Awareness of risk
  - (ii) Dependency on certain subjective and objective factors
  - (iii) Insignificant role of media
  - (iv) Personal experience of disasters
  - (v) Non-belief in prevention and fatalistic attitude

Choose the correct answer from the options given below:

- (A) (iii), (iv) Only
- (B) (i), (iii), (v) Only
- (C) (i), (ii), (iii) Only
- (D) (i), (ii), (iv) Only

4. Joshimath, also known as Jyotirmath, a town and a municipal board recently in news for land subsidence is situated in which of the following districts in the Indian state of Uttarakhand?

- (A) Chamoli
- (B) Nainital
- (C) Rudraprayag
- (D) Uttarkashi

5. Match List I with List II

List I (Disasters)	List II (Year)
1. Fukushima Double Disaster	(i) 2019
2. Chernobyl Disaster	(ii) 2004
3. Asian Tsunami	(iii) 2011
4. Australian Forest Fire	(iv) 1986

Choose the correct answer from the options given below:

- (A) 1 (ii), 2 (iv), 3 (iii), 4 (i)
- (B) 1 (i), 2 (iii), 3 (ii), 4 (iv)
- (C) 1 (iii), 2 (iv), 3 (ii), 4 (i)
- (D) 1 (iv), 2 (iii), 3 (ii), 4 (i)

6. Which is nodal ministry for management of Biological Disasters in India?

- (A) Ministry of Health and Family Welfare
- (B) Ministry of Environment, Forests and Climate Change
- (C) Ministry of Home Affairs
- (D) Ministry of Defence

7. Chernobyl disaster in Ukraine is a kind of

- (i) Natural Disaster
- (ii) Manmade Disaster
- (iii) Nuclear disaster
- (iv) Toxic gas Disaster
- (v) Geothermal Disaster

Choose the correct answer from the options given below:

- (A) (i) & (ii) Only
- (B) (ii) & (iii) Only
- (C) (iii) & (iv) Only
- (D) (iv) & (v) Only

8. Given below are two statements

Statement I: Risk = Hazards × Vulnerability.

Statement II: Risk is precisely defined by ISDR as ‘the probability of harmful consequences, or expected losses resulting from interaction between natural or human- induced hazards and vulnerable conditions’.

In the light of the above statements, choose the *most appropriate* answer from the options given below

- (A) Both Statement I and Statement II are true
- (B) Both Statement I and Statement II are false
- (C) Statement I is correct but Statement II is false
- (D) Statement I is incorrect but Statement II is true

9. Approaches for vulnerability analysis are

- (i) Techno- Centric Analysis
- (ii) Target Group Analysis
- (iii) Situational Analysis
- (iv) Clinical Trial Analysis
- (v) Linguistic Analysis

Choose the correct answer from the options given below:

- (A) (i), (ii) Only
- (B) (i), (ii), (iii) Only
- (C) (iii), (iv) Only
- (D) (iv), (v) Only

10. The major measures including use of new technologies, clean energy resources, and making older technologies more energy efficient to reduce the impact of climate change are examples of :

- (A) Adaptation
- (B) Mitigation
- (C) Resilience
- (D) Resistance

11. Golden Hour in disaster means

- (A) A window of time in which victim is thought to have the greatest chance of survival if given medical attention
- (B) A window of time where victim can be evacuated
- (C) First hour to supply food & water
- (D) First hour to send relief materials

12. Given below are two statements:  
 Statement I: Community is a natural ordered entity typified by the family, implies cultural understanding of living communities  
 Statement II: Society is unstructured and lacking institutionalized organizations  
 In the light of the above statements, choose the *most appropriate* answer from the options given below  
 (A) Both Statement I and Statement II are true  
 (B) Both Statement I and Statement II are false  
 (C) Statement I is correct but Statement II is false  
 (D) Statement I is incorrect but Statement II is true
13. During which phase of disaster cycle should surveillance of health problems be conducted?  
 (A) Preparedness  
 (B) Response  
 (C) Recovery  
 (D) Mitigation
14. Microearthquakes which are usually not felt by people and only recorded by seismographs have a magnitude (Richter scale)  
 (A) Less than 1.0  
 (B) Between 1.0 and 2.0  
 (C) Between 2.0 and 3.0  
 (D) Between 3.0 and 4.0
15. Which of the following is incorrect about the vulnerability profile of India?  
 (A) About 12% (over 40 million hectares) of its land is prone to floods and river erosion  
 (B) About 68% of its cultivable area is vulnerable to droughts  
 (C) Around 59% of the landmass is prone to earthquakes of moderate to very high intensity  
 (D) Close to 7,516 km long coastline is prone to cyclones and tsunamis
16. Disaster management has variety of action items. Which of the following is the overarching goal of disaster management?  
 (A) Collection of valuable data for future management objectives  
 (B) Resettling people in the closest unaffected urban area  
 (C) Restoring community services, facilities and residences to pre-disaster levels  
 (D) Strengthening sewage and drinking water treatment facilities to resist the impact of a future disaster
17. The United Nations Disaster Assessment and Coordination (UNDAC) is part of the international emergency response system for sudden-onset emergencies. Which of the following is not part of UNDAC?  
 (A) Equipment  
 (B) Methodology  
 (C) Staff  
 (D) Training
18. Which of the following does NOT belong to the category of nuclear disaster?  
 (A) Chernobyl disaster  
 (B) Fukushima disaster  
 (C) Love canal disaster  
 (D) Three-mile Island accident

19. As per 'Yokohama Strategy and Plan of Action for a Safer World', what elements contribute to and gain from implementation of Sustainable Development Policies?
- (A) Disaster Prevention, Mitigation, Preparedness & Relief  
 (B) Disaster Risk Reduction, Resilience, Mitigation and Prevention  
 (C) Funding, Prevention, Resilience of Nation  
 (D) Prevention and Mitigation
20. Arrange the following events contributing to Disaster Risk Reduction, in order of the Latest to the Oldest:
- (i) International Conference on DRR, Sendai  
 (ii) International Decade for Natural Disaster Reduction  
 (iii) International Strategy for Disaster Reduction  
 (iv) World Conference on Disaster Reduction, Hyogo  
 (v) World Conference on Natural Disaster Reduction, Yokohama
- (A) (i), (iii), (iv), (v), (ii)  
 (B) (i), (v), (iv), (iii), (ii)  
 (C) (ii), (iii), (iv), (v), (i)  
 (D) (ii), (v), (iv), (iii), (i)
21. Which International Instrument adopted the concept of '*Build Back Better*' ?
- (A) Yokohama Strategy & Plan of Action for a Safer World, 1994  
 (B) Sendai Framework for Disaster Risk Reduction, 2015-2030  
 (C) Hyogo Framework for Action, 2005-2015  
 (D) Rio Declaration, 1992
22. One of the global targets as per Sendai Framework, 2015 is
- (A) To substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2000-2010.  
 (B) To lower global disaster mortality average per 100,000 in decade 2020-2030 as compared to 2010-2020  
 (C) To substantially reduce global disaster mortality by 2025, aiming to lower the average per 100,000 global mortality rate in the decade 2015-2025 compared to the period 2005-2015.  
 (D) To substantially reduce global disaster mortality by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020-2030 compared to the period 2005-2015.
23. The National Disaster Management Authority (NDMA), the apex body for Disaster Management in India, is headed by the
- (A) Chief Justice of India  
 (B) President of India  
 (C) Prime Minister of India  
 (D) Union Home Minister of India

24. The essential elements of disaster as per Section 2(d) of Disaster Management Act, 2005?
- Catastrophe, mishap, calamity or grave occurrence affecting any area
  - Arising only from natural causes (i.e. does not cover man-made causes)
  - Arising only from accident or negligence
  - Beyond coping capacity of society
- Choose the correct answer from the options given below:
- (i), (ii)
  - (i), (ii), (iii)
  - (i), (iii), (iv)
  - (i), (iv)
25. National Disaster Management Act, 2005 proposes National Plan for disaster management for the whole of the country. As per the Act, the National Plan shall be reviewed and updated
- Annually
  - Biennially
  - Every Five years
  - Every Ten years
26. As per Section 2(e) of National Disaster Management Act, 2005 essential elements for disaster management are
- Prevention of danger or threat of any disaster
  - Declaration of standard of disaster risk free infrastructure
  - Building back better
  - Rehabilitation and reconstruction
- Choose the correct answer from the options given below:
- (i), (ii)
  - (ii), (iii)
  - (i), (iv)
  - (iii), (iv)
27. In the Tribal Area, as referred to in the Sixth Schedule to the Constitution, the Co- Chairperson of the District Disaster Management Authority will be
- Chief Executive Member of the district
  - Chief Medical Officer of the district
  - Elected representative of the local authority
  - Superintendent of Police
28. The fellow citizens of country have given the following name to the rescuers of National Disaster Response Force (NDRF)
- Aapda Mitra
  - Angels in Disaster
  - Disaster Warriors
  - Garud Commandos
29. The National Disaster Response Force (NDRF) was constituted under the statutory provision of Disaster Management Act, 2005. In 2005, the NDRF was constituted with 8 Battalions, however, today the number of Battalions are increased to
- 15
  - 18
  - 21
  - 25
30. Who among the following is known for contributions in Indian Nuclear Sciences?
- Chandrasekhara Venkata Raman
  - Homi Jehangir Bhabha
  - Meghnad Saha
  - Subrahmanyam Chandrasekhar

31. Which of the following is the world's most powerful space observatory that has turned its gaze on planets, stars and galaxies in infrared light, which is invisible to the human eye?
- (A) Compton Gamma Ray Observatory  
 (B) Hubble Space Telescope  
 (C) James Webb Space Telescope  
 (D) Spitzer Space Telescope
32. Covaxin produced by the Indian Company Bharat Biotech in collaboration with the Indian Council of Medical Research-National Institute of Virology is a/an
- (A) inactivated virus  
 (B) mRNA vaccine  
 (C) self-amplifying mRNA vaccine  
 (D) viral vector vaccine
33. Who received the Nobel Prize in Physiology or Medicine 2022 for discoveries concerning the genomes of extinct hominins and human evolution ?
- (A) David Julius  
 (B) Svante Pääbo  
 (C) K. Barry Sharpless  
 (D) Anton Zeilinger
34. The term drip-stone is most proximately associated with
- (A) Glacier  
 (B) Precipitation  
 (C) Running water  
 (D) Underground water
35. The scale designed to describe the effects of an earthquake at a given place, on natural features, on industrial installations and on human beings :
- (A) Hadean scale  
 (B) Modified Mercalli scale  
 (C) Moment Magnitude scale  
 (D) Richter scale
36. An Artificial Intelligence (AI) technique that allows computers to understand associations and relationships between objects and events is called
- (A) Cognitive Science  
 (B) Heuristic Processing  
 (C) Pattern Matching  
 (D) Relative Symbolism
37. An attribute of one table matching the primary key of another table is called
- (A) Candidate Key  
 (B) Composite Key  
 (C) Foreign Key  
 (D) Secondary Key
38. As per Wildlife Institute of India and work of Rodgers and Panwar (1988), how many biogeographic zones are explained in India?
- (A) 10  
 (B) 12  
 (C) 16  
 (D) 18

39. Which of the following disaster databases is with regional coverage (and not global coverage)?
- (A) Dartmouth  
(B) DesInventar  
(C) EM-DAT  
(D) NatCatSERVICE
40. Which of the following continents/regions has the maximum percent share of global river runoff?
- (A) Africa  
(B) Asia  
(C) North and Central America  
(D) South America
41. As per the India Seismic Zone Map of India, which of the following combinations is NOT explained?
- (A) Zone I, Zone II, Zone III  
(B) Zone II, Zone III, Zone IV  
(C) Zone II, Zone IV, Zone V  
(D) Zone III, Zone IV, Zone V
42. Match List I with List II

List I (Reservoir)	List II (River)
1. Bhakra	(i) Beas
2. Gandhi Sagar	(ii) Ramganga
3. Kalagarh	(iii) Sutluj
4. Pong	(iv) Chambel

Choose the correct answer from the options given below:

- (A) 1 (i), 2 (iv), 3 (ii), 4 (iii)  
(B) 1 (iii), 2 (iv), 3 (ii), 4 (i)  
(C) 1 (iv), 2 (iii), 3 (i), 4 (ii)  
(D) 1 (iii), 2 (ii), 3 (iv), 4 (i)

43. The Forest Survey of India has been monitoring India's forest and tree resource through periodic assessment and presenting the findings in its biennial publication. The first State of Forest report was brought out in the year
- (A) 1982  
(B) 1986  
(C) 1987  
(D) 1991
44. As per India State of Forest Report (2021), which of the following states has the highest percentage of forest cover w.r.t. total geographical area of the state?
- (A) Maharashtra  
(B) Manipur  
(C) Meghalaya  
(D) Mizoram
45. According to the World Air Quality Report 2021, India is home to following number of the 100 most polluted cities, with New Delhi named as the capital with the worst air quality in the world :
- (A) 39  
(B) 51  
(C) 63  
(D) 75
46. A document, Desertification and Land Degradation Atlas reporting increase in land degradation and desertification was published by
- (A) Defence Research & Development Organisation (DRDO)  
(B) Indian Agricultural Research Institute  
(C) Indian Council of Forestry Research and Education  
(D) Indian Space Research Organisation (ISRO)

47. The Kashmir Valley lies between the following thrusts, making it very vulnerable to earthquakes :
- Karakoram thrust and Ladakh thrust
  - Ladakh thrust and Pir Panjal thrust
  - Pir Panjal thrust and Zaskar thrust
  - Zaskar thrust and Karakoram thrust
48. The possibility of land subsidence incident that happened in Joshimath town was first highlighted around 50 years back by the following published committee report :
- HN Salve
  - Kamal Nath
  - MC Mehta
  - MC Mishra
49. Recently (in the year 2023) the first land subsidence event was reported from which of the following districts of Jammu and Kashmir, resulting in structures being declared unsafe and people being displaced ?
- Anantnag
  - Baramula
  - Doda
  - Ganderbal
50. Most of the country of Turkey is located on which of the following plates?
- Anatolian Plate
  - Cocos Plate
  - Nazca Plate
  - Scotia Plate
51. The book The Wealth of Nations is written by
- Karl Marx
  - Adam Smith
  - Alfred Marshall
  - Anne- Robert Jacques Turgot
52. Who is the author of the book 'Isaac's Storm: a Man, a Time, and the Deadliest Hurricane in History'?
- Erik Larson
  - Jon Krakauer
  - Mike Mullin
  - Sheri Fink
53. Where is Indian National Centre for Ocean Information Services (INCOIS) located?
- Bangalore
  - Chennai
  - Hyderabad
  - Thiruvananthapuram
54. Which of the following is correct name of the principal agency responsible for meteorological observations, weather forecasting and seismology?
- India Meteorological Department
  - India Meteorology Department
  - Indian Meteorological Department
  - Indian Meteorology Department
55. Which of the following is incorrect urban area as per the Census of India?
- A density of population of at least 400 persons per sq.km.
  - A minimum population of 5,000
  - An area where the urbanization rate is over 60%
  - At least 75% of male working population engaged in non-agricultural occupation

56. Which of the following Union Territories has the minimum population density (persons per sq.km) as per Census 2021?
- (A) Andaman and Nicobar Islands  
 (B) Dadra and Nagar Haveli  
 (C) Jammu and Kashmir  
 (D) Ladakh
57. Which of the following United Nations (UN) organization ensures that all countries and international and regional organizations have access to and develop the capacity to use all types of space-based information to support the full disaster management cycle?
- (A) UN-ESCAP  
 (B) UN-SPIDER  
 (C) UNIDIR  
 (D) UNOOSA
58. Who among the following is the Director General, Coalition for Disaster Resilient Infrastructure (CDRI)?
- (A) Amit Prothi  
 (B) Kamal Kishore  
 (C) Rajendra Singh  
 (D) Vinod Kumar Sharma
59. Lunglei Fire Station (LFS), which shared *Subhash Chandra Bose Aapda Prabandhan Puruskar* with Odisha State Disaster Management Authority (OSDMA) for the year 2023 in the field of Disaster Management belongs to the following state :
- (A) Manipur  
 (B) Mizoram  
 (C) Nagaland  
 (D) Tripura
60. Mr. António Manuel de Oliveira Guterres the Secretary-General of the United Nations was earlier Prime Minister of :
- (A) Brazil  
 (B) France  
 (C) Portugal  
 (D) Spain

**ROUGH WORK**

## ROUGH WORK

# ENTRANCE TEST-2021

## SCHOOL OF ENVIRONMENTAL & EARTH SCIENCES

### DISASTER MANAGEMENT

Total Questions : 60

Question Booklet Series

A

Time Allowed : 70 Minutes

Roll No. :

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  - (A) Impact phase
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  - (D) Rescue phase
2. The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazard is the definition of vulnerability given by:
  - (A) Hyogo Framework for Action
  - (B) Sendai Framework for Action
  - (C) IPCC
  - (D) UNDP
3. The level of harm by a hazard is governed by:
  - (A) Magnitude of the hazard
  - (B) Frequency of the hazard
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  - (D) All of the above
4. There are nine tasks in the disaster management. All of the following are tasks of this model EXCEPT:
  - (A) Assess secondary social problems such as health epidemics, displaced persons
  - (B) Counsel those who have suffered trauma and bereavement
  - (C) Control rumors, provide accurate information
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  - (A) Bottom-up plan
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  - (C) Both (A) & (B)
  - (D) None of the above
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  - (A) Hurricanes and volcanoes
  - (B) Hurricanes and floods
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7. Populations and their movements through time are a component of:
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  - (B) Preparedness
  - (C) Recovery
  - (D) Response
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  - (B) Pre-disaster stage
  - (C) During disaster
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  - (A) Disaster manual
  - (B) Disaster guide
  - (C) Disaster plan
  - (D) Disaster record

11. According to UNDP the capacity building response must be created based on which of the following core issues ?
1. Institutional arrangements
  2. Leadership
  3. Knowledge
  4. Accountability
- Choose the correct combination among the following.
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  - (B) Blue Forest
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  - (B) Identify, assess and monitor disaster risks
  - (C) Good governance, legal and policy framework
  - (D) Strengthen disaster preparedness for effective response at all levels
15. The Strategy for a Safer World: Guidelines for Natural Disaster Prevention, Preparedness and Mitigation and its Plan of Action was adopted in which of the following ?
- (A) Hyogo Framework for action
  - (B) Sendai Framework for action
  - (C) Disaster Management Act
  - (D) Yokohama Strategy
16. Choose the wrong statement among the following statements:
- (A) World Conference on Disaster Management in May 1994 was subsequently called the Yokohama Strategy and Plan of Action for a Safer World
  - (B) The issue of Natural Disaster was raised at the U.N. General Assembly in 1992 and was finally formalised at the World Conference on Disaster Management in 1994
  - (C) The Tropical cyclone of 1971 in India is the deadliest one till date
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17. The BIMSTEC Disaster Management Exercise 2020 was held in which of the following cities ?
- (A) Hyderabad, Telangana
  - (B) Kochi, Kerala
  - (C) Puri, Odisha
  - (D) Chennai, Tamil Nadu
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- (A) Characteristic of Disaster Management Act
  - (B) Characteristic of Yokohama Strategy
  - (C) Characteristic of Hyogo Framework for Action
  - (D) Characteristic of Sendai Framework for Action

19. When was the Disaster Management Act, 2005 made effective from ?  
 (A) October 23, 2005  
 (B) November 23, 2005  
 (C) December 23, 2005  
 (D) August 23, 2005
20. Sendai Framework for action was adopted after the:  
 (A) Hyogo Framework for Action  
 (B) Yokohama declaration  
 (C) Agenda-21  
 (D) None of the above
21. How many countries have adopted the Sendai Framework for action ?  
 (A) 155  
 (B) 167  
 (C) 177  
 (D) 187
22. The headquarters of 7th Battalion NDRF is located at:  
 (A) Guwahati  
 (B) Bhatinda  
 (C) Pune  
 (D) Varanasi
23. Sendai Framework for action is a:  
 (A) 15 year agreement  
 (B) 10 year agreement  
 (C) 8 year agreement  
 (D) 3 year agreement
24. How many battalions of SDRF are operational in J & K ?  
 (A) Six  
 (B) Four  
 (C) Three  
 (D) Two
25. Which among the following countries first reached the 'Dark Side' of the Moon:  
 (A) USA  
 (B) India  
 (C) China  
 (D) Russia
26. Which space agency is planning to launch the world's 1st all civilian Earth Orbiter Mission, "Inspiration 4" ?  
 (A) SpaceX  
 (B) European Space Agency  
 (C) NASA  
 (D) ISRO
27. Which method is most effective for the decontamination of individuals ?  
 (A) Bleach and water  
 (B) Soap and water  
 (C) Dry brush  
 (D) Charcoal
28. Among the following statements which one of them is incorrect ?  
 (A) The asthenosphere rises close to the surface beneath mid-ocean ridges  
 (B) The asthenosphere is partially molten  
 (C) The asthenosphere lies beneath the lithosphere  
 (D) The asthenosphere is stronger than the lithosphere
29. Which of the following gas has the highest percentage contribution in global warming ?  
 (A) Nitrous oxide  
 (B) Chlorofluorocarbon  
 (C) Carbon dioxide  
 (D) Sulphur dioxide
30. Which of the following statements regarding the inner core of the earth is correct ?  
 (A) Primary S waves (those generated at the focus of an event) travel through the inner core  
 (B) P waves travel through the inner core at a higher velocity than S waves travel through the inner core  
 (C) P waves do not travel through the inner core  
 (D) The inner core is thought to be a liquid

31. The movement of energy and nutrients through living systems are different because:
- Energy forms chemical compounds and nutrients are lost as heat
  - Nutrients flow in one direction and energy recycles
  - Energy is limited in the biosphere and nutrients are always available
  - Energy flows in one direction and nutrients recycle
32. Xenobots, which were seen in the news recently, are robots developed from the stem cells of which organism ?
- Rabbit
  - Frog
  - Sheep
  - Crocodile
33. As per a recent report available on Global Forest Watch, which region lost about 12.2 million hectares of tree cover in 2020 ?
- Tropical Region
  - Temperate Region
  - Sub-Tropical Region
  - Equatorial Region
34. Communication bandwidth that has the highest capacity and is used by microwave, cable and fibre optic lines is known as:
- Hyper-link
  - Carrier wave
  - Buswidth
  - Broadband
35. Which of the following is the correct data storage hierarchy ?
- Bits, bytes, records, fields, files and databases
  - Bits, bytes, fields, records, files and databases
  - Bits, bytes, fields, files, records and databases
  - Bytes, bits, fields, records, files and databases
36. The acronym "NMEICT" stands for:
- National Mission on E-learning through ICT
  - National Mission on E-governance through ICT
  - National Mission on Education through ICT
  - National Mission on E-commerce through ICT
37. What kind of climatic region is predominantly found in north-east region of India ?
- Sub-tropical wet and dry climate
  - Tropical wet and dry climate
  - Tropical wet climate
  - Littoral climate
38. Among the following, identify the list of States which are prone to cyclones during retreating monsoon season:
- Karnataka and Kerala
  - Andhra Pradesh and Orissa
  - Bihar and Assam
  - Punjab and Haryana
39. How many hectares of Indian land are prone to floods and river erosion ?
- Around 25 million hectares
  - Around 30 million hectares
  - Around 35 million hectares
  - Around 40 million hectares
40. Which of the following conditions are conducive for the formation of tropical cyclones ?
- Large and continuous supply of warm and moist air
  - Large value of Coriolis force
  - Inflow of air at upper level of atmosphere
- Select the correct answer using the codes given below.
- 1 and 3 only
  - 2 and 3 only
  - 1 and 2 only
  - 1, 2 and 3

41. Which Act provides for setting up of National Biodiversity Authority (NBA) ?  
 (A) Wildlife Act, 1972  
 (B) Biodiversity Act, 2002  
 (C) Environmental Protection Act, 1982  
 (D) Forest Convention Act, 1980
42. Which one of the following regions is structurally the most stable one ?  
 (A) The Deccan Plateau  
 (B) The Gangetic Plain  
 (C) The Punjab Plain  
 (D) The Himalayas
43. Which of the following is not a possible outcome of mismanaging forest resources ?  
 (A) Habitat loss  
 (B) Soil loss  
 (C) Regional climate change  
 (D) Selective harvesting
44. What are the benefits of implementing the 'Integrated Watershed Development Programme' ?  
 1. Prevention of soil runoff  
 2. Linking the country's perennial rivers with seasonal rivers  
 3. Rainwater harvesting and recharge of groundwater table  
 4. Regeneration of natural vegetation  
 Select the correct answer using the code given below.  
 (A) 1, 2, 3 and 4  
 (B) 1, 3 and 4 only  
 (C) 2, 3 and 4 only  
 (D) 1 and 2 only
45. Which of the following is known as 'Water Man', who has developed a technique for harvesting rainwater and also revived the age-old technique of collection of rainwater in dams to increase water table in India ?  
 (A) Rajendra Singh  
 (B) K.R. Majumdar  
 (C) H.N. Misra  
 (D) M. Sundaram
46. Which of the following is not a viable protection against deforestation ?  
 (A) Environmental education  
 (B) Boycott products of companies involved in deforestation  
 (C) Privatisation of forest land  
 (D) Reduce the consumption of forest and related products
47. The resources in which there is a natural replenishment at a non-negligible rate are known as:  
 (A) Recyclable resources  
 (B) Renewable resources  
 (C) Depletable resources  
 (D) Environmental resources
48. Which among the following district of J & K does not fall in the Seismic Zone V ?  
 (A) Anantnag  
 (B) Kishtwar  
 (C) Kupwara  
 (D) Kathua
49. Which global technological company was first to launch a web portal which tracks COVID-19 infections worldwide ?  
 (A) Amazon  
 (B) Microsoft  
 (C) Facebook  
 (D) Google
50. Where will be United Nations (UN) Climate Conference also known as COP 26 held in 2021 ?  
 (A) Brisbane, Australia  
 (B) Madrid, Spain  
 (C) Glasgow, United Kingdom  
 (D) Rome, Italy

51. Who has won the Booker Prize 2020 for his debut novel "Shuggie Bain" ?
- (A) Margaret Atwood  
(B) Marieke Lucas Rijneveld  
(C) James Kelman  
(D) Douglas Stuart
52. "Shantir Ogroshena-2021" is a joint Military exercise between India and which other country ?
- (A) Bangladesh  
(B) Afghanistan  
(C) Israel  
(D) Turkey
53. Which of the Indian Journalist has won 2020 Pulitzer award in feature photography ?
- (A) Channi Anand  
(B) Dar Yasin  
(C) Mukhtar Khan  
(D) All the above
54. Which among the following institutions received the Subhas Chandra Bose Aapda Prabandhan Pursakar 2021 award for their contribution in Disaster Management ?
- (A) Tata Institute of Social Sciences  
(B) UN Office for the coordination of Humanitarian Affairs  
(C) Sustainable Environment and Ecological Development  
(D) Human Empowerment Organisation
55. What is the name of the latest earth observation satellite launched by ISRO in November, 2020 along with 9 international customer satellites from Andhra Pradesh ?
- (A) G Sat-30  
(B) India Sat  
(C) KALAM SAT  
(D) EOS-1
56. Marcelo Rebelo de Sousa has been recently elected the President of which of the following countries for the consecutive second time ?
- (A) Portugal  
(B) Hungary  
(C) Poland  
(D) Belgium
57. Which one of the following article deals with the appointment of the Prime Minister and other ministers ?
- (A) Article 76  
(B) Article 75  
(C) Article 74  
(D) Article 72
58. Which age group is included to calculate Child Sex Ratio in India ?
- (A) 0-6 years  
(B) 1-6 years  
(C) 0-5 years  
(D) 0-6 months
59. Who authored the book titled "Pandemonium: The Great Indian Banking Tragedy" ?
- (A) Anand Neelakantan  
(B) Vikas Khanna  
(C) Tamal Bandyopadhyay  
(D) Pradeep Srivastava
60. The 'satellite freight city' is being developed near which of the following cities in India ?
- (A) New Delhi  
(B) Kolkata  
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(D) Gurgaon

Sr. No. ....

# ENTRANCE TEST-2021

SCHOOL OF ENVIRONMENTAL & EARTH SCIENCES

DISASTER MANAGEMENT

Question Booklet Series

A

Total Questions : 60

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 (B) Bhatinda  
 (C) Pune  
 (D) Varanasi
23. Sendai Framework for action is a:  
 (A) 15 year agreement  
 (B) 10 year agreement  
 (C) 8 year agreement  
 (D) 3 year agreement
24. How many battalions of SDRF are operational in J & K ?  
 (A) Six  
 (B) Four  
 (C) Three  
 (D) Two
25. Which among the following countries first reached the 'Dark Side' of the Moon:  
 (A) USA  
 (B) India  
 (C) China  
 (D) Russia
26. Which space agency is planning to launch the world's 1st all civilian Earth Orbiter Mission, "Inspiration 4" ?  
 (A) SpaceX  
 (B) European Space Agency  
 (C) NASA  
 (D) ISRO
27. Which method is most effective for the decontamination of individuals ?  
 (A) Bleach and water  
 (B) Soap and water  
 (C) Dry brush  
 (D) Charcoal
28. Among the following statements which one of them is incorrect ?  
 (A) The asthenosphere rises close to the surface beneath mid-ocean ridges  
 (B) The asthenosphere is partially molten  
 (C) The asthenosphere lies beneath the lithosphere  
 (D) The asthenosphere is stronger than the lithosphere
29. Which of the following gas has the highest percentage contribution in global warming ?  
 (A) Nitrous oxide  
 (B) Chlorofluorocarbon  
 (C) Carbon dioxide  
 (D) Sulphur dioxide
30. Which of the following statements regarding the inner core of the earth is correct ?  
 (A) Primary S waves (those generated at the focus of an event) travel through the inner core  
 (B) P waves travel through the inner core at a higher velocity than S waves travel through the inner core  
 (C) P waves do not travel through the inner core  
 (D) The inner core is thought to be a liquid

31. The movement of energy and nutrients through living systems are different because:
- Energy forms chemical compounds and nutrients are lost as heat
  - Nutrients flow in one direction and energy recycles
  - Energy is limited in the biosphere and nutrients are always available
  - Energy flows in one direction and nutrients recycle
32. Xenobots, which were seen in the news recently, are robots developed from the stem cells of which organism ?
- Rabbit
  - Frog
  - Sheep
  - Crocodile
33. As per a recent report available on Global Forest Watch, which region lost about 12.2 million hectares of tree cover in 2020 ?
- Tropical Region
  - Temperate Region
  - Sub-Tropical Region
  - Equatorial Region
34. Communication bandwidth that has the highest capacity and is used by microwave, cable and fibre optic lines is known as:
- Hyper-link
  - Carrier wave
  - Buswidth
  - Broadband
35. Which of the following is the correct data storage hierarchy ?
- Bits, bytes, records, fields, files and databases
  - Bits, bytes, fields, records, files and databases
  - Bits, bytes, fields, files, records and databases
  - Bytes, bits, fields, records, files and databases
36. The acronym “NMEICT” stands for:
- National Mission on E-learning through ICT
  - National Mission on E-governance through ICT
  - National Mission on Education through ICT
  - National Mission on E-commerce through ICT
37. What kind of climatic region is predominantly found in north-east region of India ?
- Sub-tropical wet and dry climate
  - Tropical wet and dry climate
  - Tropical wet climate
  - Littoral climate
38. Among the following, identify the list of States which are prone to cyclones during retreating monsoon season:
- Karnataka and Kerala
  - Andhra Pradesh and Orissa
  - Bihar and Assam
  - Punjab and Haryana
39. How many hectares of Indian land are prone to floods and river erosion ?
- Around 25 million hectares
  - Around 30 million hectares
  - Around 35 million hectares
  - Around 40 million hectares
40. Which of the following conditions are conducive for the formation of tropical cyclones ?
- Large and continuous supply of warm and moist air
  - Large value of Coriolis force
  - Inflow of air at upper level of atmosphere
- Select the correct answer using the codes given below.
- 1 and 3 only
  - 2 and 3 only
  - 1 and 2 only
  - 1, 2 and 3

41. Which Act provides for setting up of National Biodiversity Authority (NBA) ?  
 (A) Wildlife Act, 1972  
 (B) Biodiversity Act, 2002  
 (C) Environmental Protection Act, 1982  
 (D) Forest Convention Act, 1980
42. Which one of the following regions is structurally the most stable one ?  
 (A) The Deccan Plateau  
 (B) The Gangetic Plain  
 (C) The Punjab Plain  
 (D) The Himalayas
43. Which of the following is not a possible outcome of mismanaging forest resources ?  
 (A) Habitat loss  
 (B) Soil loss  
 (C) Regional climate change  
 (D) Selective harvesting
44. What are the benefits of implementing the 'Integrated Watershed Development Programme' ?  
 1. Prevention of soil runoff  
 2. Linking the country's perennial rivers with seasonal rivers  
 3. Rainwater harvesting and recharge of groundwater table  
 4. Regeneration of natural vegetation  
 Select the correct answer using the code given below.  
 (A) 1, 2, 3 and 4  
 (B) 1, 3 and 4 only  
 (C) 2, 3 and 4 only  
 (D) 1 and 2 only
45. Which of the following is known as 'Water Man', who has developed a technique for harvesting rainwater and also revived the age-old technique of collection of rainwater in dams to increase water table in India ?  
 (A) Rajendra Singh  
 (B) K.R. Majumdar  
 (C) H.N. Misra  
 (D) M. Sundaram
46. Which of the following is not a viable protection against deforestation ?  
 (A) Environmental education  
 (B) Boycott products of companies involved in deforestation  
 (C) Privatisation of forest land  
 (D) Reduce the consumption of forest and related products
47. The resources in which there is a natural replenishment at a non-negligible rate are known as:  
 (A) Recyclable resources  
 (B) Renewable resources  
 (C) Depletable resources  
 (D) Environmental resources
48. Which among the following district of J & K does not fall in the Seismic Zone V ?  
 (A) Anantnag  
 (B) Kishtwar  
 (C) Kupwara  
 (D) Kathua
49. Which global technological company was first to launch a web portal which tracks COVID-19 infections worldwide ?  
 (A) Amazon  
 (B) Microsoft  
 (C) Facebook  
 (D) Google
50. Where will be United Nations (UN) Climate Conference also known as COP 26 held in 2021 ?  
 (A) Brisbane, Australia  
 (B) Madrid, Spain  
 (C) Glasgow, United Kingdom  
 (D) Rome, Italy

51. Who has won the Booker Prize 2020 for his debut novel "Shuggie Bain" ?
- (A) Margaret Atwood  
(B) Marieke Lucas Rijneveld  
(C) James Kelman  
(D) Douglas Stuart
52. "Shantir Ogroshena-2021" is a joint Military exercise between India and which other country ?
- (A) Bangladesh  
(B) Afghanistan  
(C) Israel  
(D) Turkey
53. Which of the Indian Journalist has won 2020 Pulitzer award in feature photography ?
- (A) Channi Anand  
(B) Dar Yasin  
(C) Mukhtar Khan  
(D) All the above
54. Which among the following institutions received the Subhas Chandra Bose Aapda Prabandhan Pursakar 2021 award for their contribution in Disaster Management ?
- (A) Tata Institute of Social Sciences  
(B) UN Office for the coordination of Humanitarian Affairs  
(C) Sustainable Environment and Ecological Development  
(D) Human Empowerment Organisation
55. What is the name of the latest earth observation satellite launched by ISRO in November, 2020 along with 9 international customer satellites from Andhra Pradesh ?
- (A) G Sat-30  
(B) India Sat  
(C) KALAM SAT  
(D) EOS-1
56. Marcelo Rebelo de Sousa has been recently elected the President of which of the following countries for the consecutive second time ?
- (A) Portugal  
(B) Hungary  
(C) Poland  
(D) Belgium
57. Which one of the following article deals with the appointment of the Prime Minister and other ministers ?
- (A) Article 76  
(B) Article 75  
(C) Article 74  
(D) Article 72
58. Which age group is included to calculate Child Sex Ratio in India ?
- (A) 0-6 years  
(B) 1-6 years  
(C) 0-5 years  
(D) 0- 6 months
59. Who authored the book titled "Pandemonium: The Great Indian Banking Tragedy" ?
- (A) Anand Neelakantan  
(B) Vikas Khanna  
(C) Tamal Bandyopadhyay  
(D) Pradeep Srivastava
60. The 'satellite freight city' is being developed near which of the following cities in India ?
- (A) New Delhi  
(B) Kolkata  
(C) Pune  
(D) Gurgaon

## ROUGH WORK

3

Sr. No. **199**.....

# ENTRANCE TEST-2020

SCHOOL OF ENVIRONMENTAL AND EARTH SCIENCES

DISASTER MANAGEMENT

Question Booklet Series **C**

Total Questions : 60

Time Allowed : 70 Minutes

Roll No. : 

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### Instructions for Candidates :

1. Write your Entrance Test Roll Number in the space provided at the top of this page of Question Booklet and fill up the necessary information in the spaces provided on the OMR Answer Sheet.
2. OMR Answer Sheet has an Original Copy and a Candidate's Copy glued beneath it at the top. While making entries in the Original Copy, candidate should ensure that the two copies are aligned properly so that the entries made in the Original Copy against each item are exactly copied in the Candidate's Copy.
3. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.
4. Choose the correct / most appropriate response for each question among the options A, B, C and D and darken the circle of the appropriate response completely. The incomplete darkened circle is not correctly read by the OMR Scanner and no complaint to this effect shall be entertained.
5. Use only blue/black ball point pen to darken the circle of correct/most appropriate response. In no case gel/ink pen or pencil should be used.
6. Do not darken more than one circle of options for any question. A question with more than one darkened response shall be considered wrong.
7. There will be '**Negative Marking**' for wrong answers. Each wrong answer will lead to the deduction of 0.25 marks from the total score of the candidate.
8. Only those candidates who would obtain positive score in Entrance Test Examination shall be eligible for admission.
9. Do not make any stray mark on the OMR sheet.
10. Calculators and mobiles shall not be permitted inside the examination hall.
11. Rough work, if any, should be done on the blank sheets provided with the question booklet.
12. OMR Answer Sheet must be handled carefully and it should not be folded or mutilated in which case it will not be evaluated.
13. Ensure that your OMR Answer Sheet has been signed by the Invigilator and the candidate himself/herself.
14. At the end of the examination, hand over the OMR Answer Sheet to the invigilator who will first tear off the original OMR sheet in presence of the Candidate and hand over the Candidate's Copy to the candidate.

SEAL

SEAL

1. Which electromagnetic wave has the longest wavelength ?  
(A) Gamma rays  
(B) X-rays  
(C) Microwaves  
(D) Radio waves
2. Battery charger converts electrical energy into \_\_\_\_\_ energy.  
(A) Kinetic  
(B) Potential  
(C) Chemical  
(D) Nuclear
3. Penicillin is obtained from \_\_\_\_\_.  
(A) Soil  
(B) Bacteria  
(C) Fungi  
(D) Virus
4. Geostationary orbit is at a height of approximately \_\_\_\_\_ above earth.  
(A) 6 km  
(B) 1000 km  
(C) 3600 km  
(D) 36000 km
5. Liquid part of the blood is composed of \_\_\_\_\_.  
(A) WBC  
(B) Plasma  
(C) RBC  
(D) HB
6. The most abundant element in the universe is \_\_\_\_\_.  
(A) Oxygen  
(B) Hydrogen  
(C) Carbon Dioxide  
(D) Silicon
7. Absolute zero, which is the lower limit of thermodynamic temperature scale, is equivalent to \_\_\_\_\_ on the Celsius scale.  
(A) 273°C  
(B) 0°C  
(C) 100°C  
(D) 973°C
8. In the Solar system the nearest planet to Earth is \_\_\_\_\_.  
(A) Venus  
(B) Mercury  
(C) Mars  
(D) Moon
9. Which of the following was the 1st network initiated the Internet services ?  
(A) Vnet  
(B) Inet  
(C) ARPANET  
(D) NSF Net
10. Acid rain is mainly caused by emission of \_\_\_\_\_ in the atmosphere.  
(A) Sulfur Dioxide and Potassium Nitrate  
(B) Sulfur and Charcoal  
(C) Nitrogen Oxide and Potassium Nitrate  
(D) Sulfur Dioxide and Nitrogen Oxide

JJ-

JJ-316-C



11. The World Wide Web was invented by :  
 (A) Bob Kahn  
 (B) Tim Berners-Lee  
 (C) Steve Jobs  
 (D) Bill Gates
12. The fresh water on the Earth is \_\_\_\_\_ of the total water.  
 (A) 2.5%  
 (B) 5%  
 (C) 7.5%  
 (D) 10%
13. Nobel Prize for research on cancer immunotherapy in 2018 was given to :  
 (A) Olga Tokarczuk  
 (B) James Allison & Tasuku Honjo  
 (C) William Nordhaus & Paul Rommer  
 (D) Arthur Ashkin
14. The different seasons on the Earth are caused by \_\_\_\_\_.  
 (A) Rotation of the Earth  
 (B) Revolution of the Earth  
 (C) Earth's axis' is tilt  
 (D) The Earth's distance from the Sun
15. The North Pole of the Earth is located in \_\_\_\_\_.  
 (A) Arctic Ocean  
 (B) Pacific Ocean  
 (C) Antarctica  
 (D) Norway
16. 'Montreal Protocol' is related to which of the following environmental issues ?  
 (A) CO<sub>2</sub> emissions  
 (B) Chlorofluorocarbon  
 (C) Water pollution  
 (D) Climate change
17. Gir National Park is situated in which State ?  
 (A) Bihar  
 (B) Allahabad  
 (C) West Bengal  
 (D) Gujarat
18. Who among the following persons was the last Governor-General of British India ?  
 (A) Rajaji  
 (B) Lord Canning  
 (C) Warren Hastings  
 (D) Lord Mountbatten
19. Which country is also called "Rainbow Nation" ?  
 (A) Japan  
 (B) South Africa  
 (C) Netherlands  
 (D) Norway
20. Which among the following is the driest desert in the world ?  
 (A) Sahara Desert  
 (B) Cholistan Desert  
 (C) Arabian Desert  
 (D) Atacama Desert

21. Working capital of The European Union is located in which of the following European Cities ?
- (A) London  
(B) Lisbon  
(C) Brussels  
(D) Vienna
22. Which among the following is the motto of United Nations ?
- (A) It's your world !  
(B) Life for All !  
(C) Peace !  
(D) Love and Peace !
23. Who is the author of Book "Playing It My Way" ?
- (A) Kapil Dev  
(B) Ravi Shastri  
(C) Sachin Tendulkar  
(D) Yuvraj Singh
24. The Book 'What young India wants' ? is authored by :
- (A) Amish Tripathi  
(B) Chetan Bhagat  
(C) Durjoy Datta  
(D) Ravinder Singh
25. World Famous Khajuraho Sculptures are located in which of the following States ?
- (A) Gujarat  
(B) M.P.  
(C) Orissa  
(D) U.P.
26. Select the longest serving Woman chief ministers of India :
- (A) Jayalalitha  
(B) Rabri Devi  
(C) Mamta Banerji  
(D) Shiela Dixit
27. Which of these organisations have been awarded Nobel Prize three times ?
- (A) International Committee of the Red Cross  
(B) Amnesty International  
(C) Transparency International  
(D) UNO
28. International Court of Justice is located in which of the following cities ?
- (A) Hague  
(B) Geneva  
(C) Amsterdam  
(D) Muick
29. Which renowned Parliamentarian received Bharat Ratna Award in 2019 for his long and exemplary services to the Indian legislature ?
- (A) Atal Bihari Vajpayee  
(B) Madan Mohan Malviya  
(C) Pranab Mukherjee  
(D) L.K. Advani
30. Arjuna Award in India is given in which of the following fields ?
- (A) Literature  
(B) Education  
(C) Sports  
(D) Music



31. In India National Institute of Disaster Management is located at :
- (A) Manipur  
(B) Punjab  
(C) Hyderabad  
(D) New Delhi
32. Effective hazard management largely relies on :
- (A) Govt. agencies  
(B) Emergency responses  
(C) Pre-disaster planning  
(D) Aid from various agencies
33. The extent to which a community, structure, services 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
34. The Disaster Management Act was made in :
- (A) 2006  
(B) 2003  
(C) 2005  
(D) 2009
35. The level of harm caused by any hazard is governed by :
- (A) Magnitude of the hazard  
(B) Frequency of the hazard  
(C) Intensity at the impact point  
(D) All of the above
36. The point of the earth's surface directly above the point where an earthquake occurs is called the :
- (A) Focus  
(B) Epicenter  
(C) Fracture  
(D) Fault
37. Vulnerability analysis comes in which part of the Disaster Management Cycle ?
- (A) Mitigation  
(B) Rehabilitation  
(C) Response  
(D) Recovery
38. Which of the following groups of people is more vulnerable in the event of disaster ?
- (A) Men, boys, old people  
(B) Men, women, boys  
(C) Women, children, old people  
(D) None of the above
39. Which wave of the earthquake produces rolling effect along the surface ?
- (A) P wave  
(B) S wave  
(C) L wave  
(D) None of the above
40. About 2/3rd of the cyclones that occur in the Indian coastline occur in the \_\_\_\_\_.
- (A) Bay of Bengal  
(B) Coastal area of South India  
(C) Coastal area of West India  
(D) None of the above

41. International Tsunami Information Centre is located in which city ?
- (A) Honolulu  
(B) Goa  
(C) Jakarta  
(D) Hyderabad
42. Indian Meteorological Department (IMD) calls a storm 'Super Cyclone' when the wind blows :
- (A) More than 120 km/hour  
(B) More than 100 km/hour  
(C) More than 220 km/hour  
(D) None of the above
43. A disease that becomes unusually widespread and even global in its reach is referred to as :
- (A) Epidemic  
(B) Pandemic  
(C) Spanish flu  
(D) Hyperendemic
44. When was National Disaster Response Force established ?
- (A) 1999  
(B) 2006  
(C) 2010  
(D) 2014
45. How much percentage of the landmass is prone to earthquakes in India ?
- (A) Around 58%  
(B) Around 60%  
(C) Around 63%  
(D) Around 65%
46. Traveler is related to the journey in the same way as sailor is related to \_\_\_\_\_.
- (A) Ship  
(B) Crew  
(C) Voyage  
(D) Navy
47. In a certain code ROUNDS is written as RONUDS. How will PLEASE be written in the same code ?
- (A) PLASEE  
(B) LPAEES  
(C) PLAESE  
(D) LPAESE
48. Find the odd word in the Series given below :
- (A) Smell  
(B) Taste  
(C) See  
(D) Think
49. What will come at the place of ? Mark 1, 9, 25, 49, ?, 121
- (A) 100  
(B) 91  
(C) 81  
(D) 64
50. Mohan was facing east. He walked 4 km forward and then after turning to his right walked 3 km. Again he turned to his right and walked 4 km. After this he turned back, which direction he was facing at that time ?
- (A) East  
(B) West  
(C) North  
(D) South

51. Complete the given number series from the options given below :  
6, 11, 21, 36, 56, ?  
(A) 99  
(B) 81  
(C) 77  
(D) 64
52. Which word does not belong to the others in the options given below ?  
(A) Dodge  
(B) Flee  
(C) Duck  
(D) Avoid
53. A cyclist was 30 km to the north and then turning to east he goes 40 kms. Again he turns to his right and goes 20 kms. After this he turns to his right and goes 40 kms. How far is he from the starting point ?  
(A) 10 km  
(B) 20 km  
(C) 30 km  
(D) 40 km
54. Introducing a lady, a man said, "her mother is the only daughter of mother-in-law". What is the relation of man with the lady ?  
(A) Son  
(B) Father  
(C) Husband  
(D) Uncle
55. Complete the series : JAK, KBL, LCM, MDN \_\_\_\_\_  
(A) OEP  
(B) NEO  
(C) MEN  
(D) PFQ
56. Choose the word which is different from the rest :  
(A) Dagger  
(B) Knife  
(C) Hammer  
(D) Blade
57. The day before yesterday was Saturday. What day will it be the day after tomorrow ?  
(A) Tuesday  
(B) Friday  
(C) Thursday  
(D) Wednesday
58. In a class of 45 students, Amir's rank from the top is 16th. Ashok is 6 ranks below Amir. What is Ashok's rank from the bottom ?  
(A) 21st  
(B) 22nd  
(C) 25th  
(D) 24th
59. Complete the series by selecting the suitable option from the following alternatives :  
(A) Shimla  
(B) Mysore  
(C) Pune  
(D) Kanpur
60. Complete the number series  
120, 99, 80, 63, 48, ?,  
(A) 35  
(B) 38  
(C) 39  
(D) 40

1. How many 4's are there preceded by 7 but not followed by 3 :  
5 9 3 2 1 7 4 2 6 9 7 4 6 1 3 2 8 7 4 1 3 8 3 2 5 6  
7 4 3 9 5 8 2 0 1 8 7 4 6 3  
(A) Three  
(B) Four  
(C) Six  
(D) Five
2. Find the missing number in the series :  
4, 18, ?, 100, 180, 294, 448  
(A) 48  
(B) 50  
(C) 58  
(D) 60
3. If you write down all the numbers from 1 to 100, then how many times do you write 3 ?  
(A) 11  
(B) 18  
(C) 20  
(D) 21
4. How many meaningful English words can be formed with the letters ESRO using each letter only once in each word ?  
(A) One  
(B) Two  
(C) Three  
(D) Four
5. In a row of boys, if A who is 10<sup>th</sup> from the left and B who is 9<sup>th</sup> from the right interchange their positions, A becomes 15<sup>th</sup> from the left. How many boys are there in the row ?  
(A) 23  
(B) 31  
(C) 27  
(D) 28
6. If FRIEND is coded as HUMJTK, how is CANDLE written in that code ?  
(A) EDRIRL  
(B) DCQHQK  
(C) ESJFME  
(D) DEQJQM
7. What should come in place of question mark (?) in the following number series ?  
132 156 ? 210 240 272  
(A) 196  
(B) 182  
(C) 199  
(D) 204
8. A man walks 5 km toward south and then turns to the right. After walking 3 km he turns to the left and walks 4 km. And then he goes back 10 km straight. Now in which direction is he from the starting place ?  
(A) South  
(B) South-East  
(C) North-West  
(D) West
9. Biped : Quadruped :: Ostrich : ?  
(A) Cat  
(B) Rabbit  
(C) Tortoise  
(D) Rat
10. Fumble is to Finesse as Malign is to :  
(A) Slander  
(B) Extol  
(C) Criticize  
(D) Assurance
11. 34 is related to 12 in the same way as 59 is related to :  
(A) 45  
(B) 38  
(C) 26  
(D) 14

12. Rotate : Energy :: Stop : ?  
 (A) Spin  
 (B) Break  
 (C) Inertia  
 (D) None of the above
13. Choose the most essential part for the word 'Shoe' given below from the following options :  
 (A) Lace  
 (B) Sole  
 (C) Leather  
 (D) Walking
14. Pointing to a person, a man said to a woman, "His mother is the only daughter of your father". How was the woman related to the person ?  
 (A) Daughter  
 (B) Mother  
 (C) Wife  
 (D) Aunt
15. Which word does NOT belong with the others ?  
 (A) Guitar  
 (B) Flute  
 (C) Violin  
 (D) Cello
16. What was the theme of World Wetlands Day celebrated on 2<sup>nd</sup> February 2019 ?  
 (A) Conservation of Wetland  
 (B) Wetland Preservation  
 (C) Wetlands and the Environment  
 (D) Wetlands and Climate Change
17. Where was the World Sustainable Development Summit 2019 held :  
 (A) Tokyo  
 (B) Beijing  
 (C) New Delhi  
 (D) Mumbai
18. Who was the recipient of Ashok Chakra for year 2019 ?  
 (A) Hangpan Dada  
 (B) Major Nitin Gagoi  
 (C) Wing Commander Abhinandan  
 (D) Nazir Ahmad Wani
19. The Government of India has established NITI Aayog to replace the :  
 (A) Human Rights Commission  
 (B) Planning Commission  
 (C) Law Commission  
 (D) Finance Commission
20. The Indian Tsunami Early Warning Centre (ITEWC) established at Indian National Centre for Ocean Information Sciences is located in :  
 (A) Chennai  
 (B) Goa  
 (C) Kochi  
 (D) Hyderabad
21. The Golden Man Booker Prize, 2018 for the fiction "The English Patient" was given to which one of the following authors ?  
 (A) Jack E. Davis  
 (B) Michael Ondaatje  
 (C) Martyna Majok  
 (D) Anne Charnock
22. Jacinda Ardern was recently in the news headlines, who is he/she :  
 (A) Prime Minister of Australia  
 (B) President of Indonesia  
 (C) Prime Minister of New Zealand  
 (D) Prime Minister of Swaziland
23. The author of the book, 'The Art of Living—A Guide to Contentment, Joy and Fulfillment' is :  
 (A) Shashi Tharoor  
 (B) Dalai Lama  
 (C) Arundhati Roy  
 (D) Sudha Murthy

24. Bharat Ratna the highest civilian award in India was conferred in 2019 to :
- (A) Budhaditya Mukherjee  
(B) Kuldip Nayar  
(C) Ismail Omar Guelleh  
(D) Pranab Mukherjee
25. Which of the following pairs has got the Nobel Peace Prize for 2018 ?
- (A) Denis Mukwege and Nadia Murad  
(B) William D. Nordhaus and Paul M. Romer  
(C) James P. Allison and Tasuku Honjo  
(D) Frances H. Arnold and Sir Gregory P. Winter
26. The headquarter of UNISDR is located at :
- (A) Bangkok, Thailand  
(B) New York, USA  
(C) Geneva, Switzerland  
(D) Paris, France
27. Which one of the following is associated with the issue of control and phasing out of the use of ozone-depleting substances ?
- (A) Bretton Woods Conference  
(B) Montreal Protocol  
(C) Kyoto Protocol  
(D) Nagoya Protocol
28. Consider the following about Green Climate Fund (GCF) :
1. It was established under United Nations Environment Programme (UNEP).
  2. It is aimed at achieving the goal set out by United Nations Framework Convention on Climate Change (UNFCCC).
  3. It is a mechanism to redistribute money from the developed to the developing world.
- Choose the correct answer using the codes below :
- (A) 2 and 3 only  
(B) 1 and 2 only  
(C) 1 and 3 only  
(D) All of the above
29. Nursultan has been recently made the new capital of which of the following countries ?
- (A) Azerbaijan  
(B) Turkemanistan  
(C) Kazakhstan  
(D) Tajikistan
30. Which of the following cities has been named by UNESCO as the World Book Capital for 2019 ?
- (A) Athens  
(B) Kuwait City  
(C) Bangkok  
(D) Sharjah
31. Match the following from inventions (List I) and inventors (List II) :
- | List I           | List II            |
|------------------|--------------------|
| A. Tape Recorder | 1. Michael Faraday |
| B. Cresco Graph  | 2. James Watt      |
| C. Steam Engine  | 3. J.C. Bose       |
| D. Dynamo        | 4. Poulson         |
- Select the correct matching :
- |     | A | B | C | D |
|-----|---|---|---|---|
| (A) | 4 | 3 | 2 | 1 |
| (B) | 4 | 2 | 3 | 1 |
| (C) | 1 | 2 | 4 | 3 |
| (D) | 1 | 2 | 3 | 4 |
32. Tides occur in oceans and seas due to which of the following ?
1. Gravitational Force of the Sun
  2. Gravitational Force of the Moon
  3. Gravitational Force of the Earth
- Select the correct answer using the code given below :
- (A) 1 only  
(B) 2 and 3 only  
(C) 1 and 3 only  
(D) 1, 2 and 3

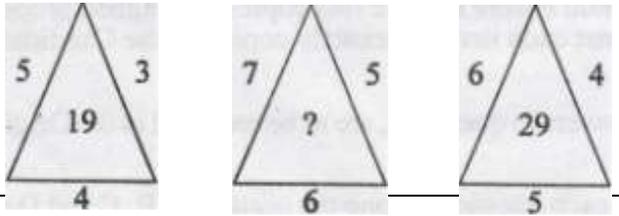
33. Which one of the following has the highest value of specific heat ?  
(A) Alcohol  
(B) Water  
(C) Kerosene  
(D) Methane
34. The process of removal of toxic wastes from the body of an organism is called :  
(A) Transport  
(B) Respiration  
(C) Excretion  
(D) Nutrition
35. The movement of a plant part in response to a chemical stimulus is called :  
(A) Hydrotropism  
(B) Chemotropism  
(C) Thigmotropism  
(D) Phototropism
36. Where is the Central Drug Research Institute of India located ?  
(A) Delhi  
(B) Bangalore  
(C) Madras  
(D) Lucknow
37. H1N1 virus is sometimes mentioned in the news with reference to which one of the following diseases ?  
(A) AIDS  
(B) Bird flu  
(C) Swine flu  
(D) Dengue
38. Most of the clouds are formed in the :  
(A) Troposphere  
(B) Mesosphere  
(C) Stratosphere  
(D) Thermosphere
39. Of the following, the rock that is most resistant to both chemical and mechanical weathering is :  
(A) Shale  
(B) Limestone  
(C) Marble  
(D) Quartzite
40. Global climate change is being attributed to the atmospheric increase in what two gases produced by human activities ?  
(A) Oxygen and Hydrogen  
(B) Methane and Carbon dioxide  
(C) Nitrous oxide and Sulphur dioxide  
(D) Ozone and Methane
41. Which of the following is not related to information security on the Internet ?  
(A) Data Hiding  
(B) Water Marking  
(C) Data Encryption  
(D) Information Retrieval
42. Most powerful and swift computer which can send an information in one thousand billionth part of a second is known as :  
(A) Super computer  
(B) Mini computer  
(C) Mainframe computer  
(D) Desktop computer
43. Encoding or scrambling data for transmission across a network is known as :  
(A) Detection  
(B) Protection  
(C) Decryption  
(D) Encryption
44. A software that manages computer and devices connected to it is :  
(A) Operating system  
(B) RAM  
(C) ROM  
(D) Both (B) and (C)

45. HTML stands for :
- Hyper Text Managing Links
  - Hyper Text Manipulating Links
  - Hyper Text Markup Language
  - Hyper Text Manipulation Language
46. International Day for Disaster Risk Reduction (DRR) is celebrated every year on :
- January, 13
  - October, 13
  - December, 10
  - None of these
47. As the magnitude of natural disaster increases, their frequency of occurrence :
- Remains same
  - Increases
  - Decreases
  - None of these
48. Which of the following theories of Disaster Management informs organisational readiness and response in a disaster ?
- The problem solving task model
  - Structure-functional theory
  - Both (A) and (B)
  - None of these
49. As per the Disaster Management Act, 2005, the National Disaster Management Authority (NDMA), may have how many number of members, including a Vice-Chairperson :
- 7
  - 5
  - 9
  - 11
50. Which of the following sections, of the Disaster Management Act, 2005, calls for establishing a National Institute of Disaster Management (NIDM) ?
- Section 39
  - Section 41
  - Section 53
  - Section 42
51. Consider the following pairs :
- Earth Summit, 1993 : Rio de Janeiro
  - World Conference on Disaster Management, 1994 : Yokohama
  - National Institute of Disaster Management, 1995 : Hyderabad
- Which of the above pairs are correctly matched ?
- 1 only
  - 1 and 2 only
  - 3 only
  - 1, 2 and 3
52. Which of these is/are flood prevention and mitigation strategy ?
- Construction of flood protection embankments
  - Depopulating the flood plains
  - Afforestation
  - Decongesting river channels
- State the correct option using the codes given below :
- 1 and 2 only
  - 1, 2 and 3 only
  - 2, 3 and 4 only
  - 1, 2, 3 and 4
53. State Crisis Management Committee is chaired by :
- Chief Minister
  - Finance Minister
  - Chief Secretary
  - Finance Secretary
54. 'Managing Disaster Risk in Emerging Economies'— is a report of :
- World Bank
  - Asian Development Bank
  - Ministry of Home Affairs, Govt. of India
  - National Institute of Disaster Management, India

55. Disasters that develop slowly over time are termed which of the following ?
- (A) Latent
  - (B) Creeping
  - (C) Delayed
  - (D) Sudden-onset
56. What does the acronym ISDR stand for ?
- (A) International Significant Disaster Resources
  - (B) International Sustainable Development Report
  - (C) International Strategy for Disaster Reduction
  - (D) Inter-governmental Strategy for Developing Recreation
57. Disaster at Chernobyl (USSR), Three Mile Island (USA), and Fukusima (JAPAN) are all related to :
- (A) Disaster caused by Earthquake
  - (B) Disaster caused by Tsunami
  - (C) Epidemic disaster
  - (D) Nuclear disaster
58. Asian Disaster Preparedness Centre is located at :
- (A) Bangkok
  - (B) Kerala
  - (C) Fiji
  - (D) Jakarta
59. The process of identifying the probability of occurrence of a natural hazard of a given intensity at a specific location based on an analysis of natural processes and site conditions is termed as :
- (A) Disaster calculation
  - (B) Hazard assessment
  - (C) Hazard calculation
  - (D) None of the above
60. The structural and non-structural measures are elements of high category of Risk Reduction measures which are categorised as :
- (A) Socio-economic measures
  - (B) Environmental measures
  - (C) Physical measures
  - (D) Post disaster measures

**2018**

1. Fill in the blanks: 1,2,3, 1,4,9, 1 ..... 27  
(A) 5  
(B) 4  
(C) 16  
(D) 8
2. Fill in the blanks: 6, 5, 24, 25, 144, .....
- (A) 155  
(B) 160  
(C) 170  
(D) 175
3. Which number replaces the question mark?



- (A) 25  
(B) 37  
(C) 41  
(D) 47
4. PEDIATRICIAN is to CHILDREN as  
PODIATRIST is to :  
(A) Heart  
(B) Feet  
(C) Adult  
(D) Bones
5. What is the product of all the numbers in the dial of a telephone?  
(A) 1,58,480  
(B) 1,59,450  
(C) 1,59,480  
(D) None of these

6. A is 3 years older to B and 3 years younger to C, while B and D are twins. How many years older is C to D?  
(A) 2  
(B) 3  
(C) 6  
(D) 12
7. Ornithologist: Bird: : Archeologist: ..... ?  
(A) Islands  
(B) Mediators  
(C) Archeology  
(D) Aquatic
- Fear: Threat : : Anger : ..... ?  
(A) Compulsion  
(B) Panic  
(C) Provocation  
(D) Force
9. The total ages of Amar, Akbar and Anthony is 80 years. What was the total of their ages three years ago?  
(A) 71 years  
(B) 72 years  
(C) 74 years  
(D) 77 years
10. Rahul put his timepiece on the table in such a way that at 6 P.M., hour hand points to North. In which direction would the minute' hand point at 9.15 P.M.?  
(A) South-East  
(B) South  
(C) North  
(D) West

11. Find out the odd word from the given alternatives :
- Swimming
  - Sailing
  - Diving
  - Driving
12. Find the odd word from the given alternatives:
- Discernment
  - Perception
  - Penetration
  - Insinuation
13. Find the odd letter out from the given alternatives :
- PQXZ
  - ABeD
  - CQBN
  - PRMN
14. If we say the child has an IQ of 100, what does this mean :
- The performance of the child is below average
  - The performance of the child is above average
  - The mental age of the child is equal to his actual age
  - The performance of the child cannot be better
15. If the third day of the month is Monday, then which day will be on 5<sup>th</sup> day after 21<sup>st</sup> of the month ?
- Tuesday
  - Monday
  - Thursday
  - Wednesday
16. Chandrayan 1 was launched on 22nd October, 2008 in India from:
- Shadnagar
  - Sri Harikota
  - Chennai
  - Ahmedabad
17. The Ganges originates from:
- Siachen glacier
  - Chota Shigri glacier
  - Nehnar glacier
  - Gangotri glacier
18. The birth anniversary of which former President is celebrated on 15<sup>th</sup> October every year ?
- A.P.J. Abdul Kalam
  - Pratibha Patel
  - K. Narayanan
  - Rajendra Prasad
19. *International Mountain Day* is celebrated World over on:
- 11<sup>th</sup> December
  - 7<sup>th</sup> December
  - 20<sup>th</sup> April
  - 4<sup>th</sup> August
20. 'Arundhati Roy is the first Indian to win Booker Prize in 1997 for her book:
- The Curfewed Night
  - The God of Small Things
  - A Suitable Boy
  - Forbidden Verses
21. The 2016 Nobel peace prize was awarded to:
- Juan Manuel Santos
  - Barack Obama
  - Valdimir Putin
  - Francois Hollande
22. Guindy National Park is located in :
- Gujarat
  - Bangalore
  - Chennai
  - Andhra Pradesh

23. Who was first to reach the South Pole?  
 (A) Roald Amundsen  
 (B) Ferdinand Magellan  
 (C) Robert Peary  
 (D) None of these
24. Which lady has become the first full time woman defence minister of India ?  
 (A) Indira Gandhi  
 (B) Nirmala Sitharamam  
 (C) Najma Heptullah  
 (D) Sushma Swaraj
25. Which Internet web portal changed its name to Altaba Inc. ?  
 (A) Google  
 (B) Yahoo  
 (C) MSN  
 (D) Twitter
26. When pressure is increased, the melting point of ice:  
 (A) Increases  
 (B) Does not change  
 (C) Decreases  
 (D) Depends on the impurities in the ice
27. The natural disaster in which carbon dioxide suddenly erupts from a deep lake water is known as :  
 (A) Glacial  
 (B) Liminic  
 (C) Lacustrine  
 (D) Fluvial
28. Combustion is a :  
 (A) Physical and chemical process  
 (B) Biological process  
 (C) Physical process  
 (D) Chemical process
29. Natural radioactivity was discovered by:  
 (A) Ernst Rutherford  
 (B) Marie Curie  
 (C) Henri Becquerel  
 (D) Enrico Fermi
30. The maximum fixation of solar energy is done by :  
 (A) Green Plants  
 (B) Bacteria  
 (C) Fungi  
 (D) Protozoa
31. Araneology is a :  
 (A) Rearing of bees  
 (B) Study of aphids  
 (C) Study of spiders  
 (D) Study of mites
32. Which bacteria is responsible for the formation of curd?  
 (A) Fibrobacteres  
 (B) Lactobacillus  
 (C) Gemmatimonadetes  
 (D) Lentisphaerae

33. In poorly ventilated buildings, which one of the following inert gases could get accumulated?  
 (A) Helium  
 (B) Neon  
 (C) Argon  
 (D) Radon
34. Washing soda is common name for:  
 (A) Sodium carbonate  
 (B) Calcium bicarbonate  
 (C) Sodium bicarbonate  
 (D) Calcium carbonate
35. Who created *Bitcoin*?  
 (A) Notosoki Sakamoto  
 (B) Gavin Andresen  
 (C) Satoshi Nakamoto  
 (D) Paul Krugman
36. The Law of Natural Selection is associated with :  
 (A) John Dalton  
 (B) Charles Darwin  
 (C) Johannes Kepler  
 (D) Gregor Mendal
37. The soil of India's Eastern and Western coasts is:  
 (A) Alluvial  
 (B) Black cotton  
 (C) Red rocky  
 (D) Laterite
38. Pollination of wind is called:  
 (A) Autogamy  
 (B) Entomophily  
 (C) Anemophily  
 (D) Omithophily
- The instrument that measures and records the relative humidity of air is :  
 (A) Hydrometer  
 (B) Lactometer  
 (C) Hygrometer  
 (D) Barometer
40. Badlands develop as a result of :  
 (A) Weathering of rocks  
 (B) Sheet erosion  
 (C) Gully erosion  
 (D) None of these
41. The angle of dip at the magnetic equator of earth is :  
 (A)  $90^\circ$   
 (B)  $45^\circ$   
 (C)  $0^\circ$   
 (D)  $180^\circ$
42. It is a situation that poses a level of threat to life, health, property or environment:  
 (A) Disaster  
 (B) Risk  
 (C) Hazard  
 (D) Vulnerability
43. Extrusive igneous rocks have:  
 (A) Few grains  
 (B) No grains  
 (C) Grains of big size  
 (D) Grains which are not visible

44. Which one of these is also known as read/write memory?
- (A) ROM  
(B) RAM  
(C) DVD  
(D) Hard Disk
45. A gigabyte is equal to :
- (A) 1024 Megabyte  
(B) 1024 Kilobyte  
(C) 1024 Terrabyte  
(D) 1024 Bytes
46. Disaster Risk Reduction agreement approved by United Nations for 15 years i.e. 2015 to 2030 :
- (A) Hyogo Framework  
(B) Sendai Framework  
(C) Yokohama Strategy  
(D) Kyoto Protocol
47. International Atomic Energy Agency (IAEA) has its headquarters at:
- (A) New York (USA)  
(B) Vienna (Austria)  
(C) Tokyo (Japan)  
(D) Geneva (Switzerland)
48. Who wrote "War and Peace" ?
- (A) Leo Tolstoy  
(B) Mahatma Gandhi  
(C) Charles Dickson  
(D) Rudyard Kipling
49. Of the following, which is not a natural disaster?
- (A) Nuclear Explosion  
(B) Earthquake  
(C) Volcanic Eruption  
(D) Lightning
50. Tornadoes are common in :
- (A) India  
(B) Bangladesh  
(C) China  
(D) USA
51. The word Tsunami has been derived from:
- (A) Tamil  
French  
(B)  
(C) Japanese  
(D) Latin
52. Disaster Management includes:
- (A) Mitigation  
(B) Reconstruction  
(C) Rehabilitation  
(D) All of the above
53. National Institute of Disaster Management (NIDM) is at:
- (A) Mumbai  
(B) Kolkata  
(C) Hyderabad  
(D) New Delhi
54. The National Disaster Management Act was enacted in the year: .
- (A) 2006  
(B) 2003  
(C) 2005  
(D) 2009

55. The Chairman of National Disaster Management Authority (NDMA) is :
- (A) Home Minister of India
  - (B) Prime Minister of India
  - (C) Vice President of India
  - (D) President of India
56. International Tsunami Information Centre is located at:
- (A) Honolulu
  - (B) Colombo
  - (C) Jakarta
  - (D) Andaman
57. A place where earthquake originates is called:
- (A) Epicenter
  - (B) Focus
  - (C) Fault line
  - (D) Crust

What does the acronym "ISDR" stand for?

- (A) International Significant Disaster Response
- (B) International Sustainable Development Report
- (C) International Strategy for Disaster Reduction
- (D) International Strategy for Developing Recreation

The specialized central force raised up for dealing with disasters in India is called as :

- (A) National Disaster Rapid Force
- (B) National Disaster Response Force
- (C) National Disaster Reduction Force
- (D) National Disaster Raised Force

Which of the following is not a Geological Disaster?

- (A) Volcanoes
- (B) Earthquakes
- (C) Tsunami
- (D) Sea Surges

Sr. No. ....057.....

# ENTRANCE TEST-2017

SCHOOL OF EARTH & ENVIRONMENTAL SCIENCES

DISASTER MANAGEMENT

Question Booklet Series

A

Total Questions : 60

Time Allowed : 70 Minutes

Roll No. :

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### Instructions for Candidates :

1. Write your Roll Number in the space provided at the top of this page of Question Booklet and fill up the necessary information in the spaces provided on the OMR Answer Sheet.
2. OMR Answer Sheet has an Original Copy and a Candidate's Copy glued beneath it at the top. While making entries in the Original Copy, candidate should ensure that the two copies are aligned properly so that the entries made in the Original Copy against each item are exactly copied in the Candidate's Copy.
3. All entries in the OMR Answer Sheet, including answers to questions, are to be recorded in the Original Copy only.
4. Choose the correct / most appropriate response for each question among the options A, B, C and D and darken the circle of the appropriate response completely. The incomplete darkened circle is not correctly read by the OMR Scanner and no complaint to this effect shall be entertained.
5. Use only blue/black ball point pen to darken the circle of correct/most appropriate response. In no case gel/ink pen or pencil should be used.
6. Do not darken more than one circle of options for any question. A question with more than one darkened response shall be considered wrong.
7. There will be 'Negative Marking' for wrong answers. Each wrong answer will lead to the deduction of 0.25 marks from the total score of the candidate.
8. Only those candidates who would obtain positive score in Entrance Test Examination shall be eligible for admission.
9. Do not make any stray mark on the OMR sheet.
10. Calculators and mobiles shall not be permitted inside the examination hall.
11. Rough work, if any, should be done on the blank sheets provided with the question booklet.
12. OMR Answer sheet must be handled carefully and it should not be folded or mutilated in which case it will not be evaluated.
13. Ensure that your OMR Answer Sheet has been signed by the Invigilator and the candidate himself/herself.
14. At the end of the examination, hand over the OMR Answer Sheet to the invigilator who will first tear off the original OMR sheet in presence of the Candidate and hand over the Candidate's Copy to the candidate.

1. Which of the following is not commonly referred to as a measure of central tendency for normal distribution?
  - (A) Mid range
  - (B) Median
  - (C) Mean
  - (D) Mode
2. Average rate of growth can best be studied by
  - (A) Arithmetic mean
  - (B) Geometric mean
  - (C) Mode
  - (D) Median
3. Scatter diagram is
  - (A) Mathematical method of finding out correlation
  - (B) Positional method of finding out correlation
  - (C) Graphical method of finding out correlation
  - (D) None of the above
4. Human Development Index (HDI) is constructed with reference to :
  - i. Life expectancy at birth, real GDP per capita, gross enrolment ratio, adult literacy rate
  - ii. Life expectancy at birth, real GDP per capita, combined gross enrolment ratio, adult literacy rate
  - iii. Life expectancy , GDP per capita, infant mortality rate, literacy rate
  - iv. GDP per capita, infant mortality rate, literacy rate
  - (A) i and ii
  - (B) i and iii
  - (C) i, ii and iv
  - (D) iii only
5. Productivity of Indian agriculture can be enhanced by
  - i. Increased public investment
  - ii. Increased irrigation facilities
  - iii. Higher support price to farmers
  - iv. Shifting workers from industry to agriculture

Select the correct answer from the given codes

  - (A) ii and iv
  - (B) i, ii, and iii
  - (C) ii, iii, and iv
  - (D) iii, iv, and i
6. Jurrasic period is famous for the dominance of
  - (A) Dinosaurs
  - (B) Dense forests
  - (C) Leafless plants
  - (D) All of above
7. Temperature decreases with increase in height at the rate of
  - (A) 1 degree centigrade per 1000 m
  - (B) 2 degrees centigrade per 1000 m
  - (C) 6.5 degrees centigrade per 1000 m
  - (D) 10.5 degrees centigrade per 1000 m
8. How much area of the oceans is covered by continental shelves?
  - (A) 7 percent
  - (B) 7.5 per cent
  - (C) 8 per cent
  - (D) 8.5 per cent
9. The El Nino which influences Indian monsoon is:
  - (A) A cold ocean current that flows northward along the coast of Chile
  - (B) A warm ocean current that flows westward along the coast of Ecuador and Peru
  - (C) A low pressure system over western coast of Spain
  - (D) None of above
10. Which one of the following is the indigenous satellite of India?
  - (A) NOAA
  - (B) METEOR-3
  - (C) APPLE
  - (D) SPOT-1
11. Asian Ministerial Conference on Disaster Risk Reduction 2016 was held at:
  - (A) Islamabad, Pakistan
  - (B) New Delhi, India
  - (C) Kathmandu, Nepal
  - (D) None of above
12. Which of the following is conducted to reduce hazard risk ?
  - (A) Mitigation
  - (B) Preparedness
  - (C) Response
  - (D) Recovery
13. What is the most important action to be taken before an earthquake occurs ?
  - (A) Cry and make loud shouts to alert people
  - (B) To locate safe spots in each room
  - (C) Move to higher ground
  - (D) Keep household items on higher places

14. Global 'warming produces
- (A) Increase in temperature with increase in precipitation  
 (B) Decrease in temperature with decrease in precipitation  
 (C) Unpredicted droughts and floods  
 (D) All of above
15. Which of the following is the contributory reason for the drop in the number of earthquake deaths in a geographic region?
- (A) Nonstructural mitigation  
 (B) Building codes  
 (C) Public education  
 (D) None of the above
16. According to earthquake vulnerability, Srinagar city lies on
- (A) Zone II (B) Zone III  
 (C) Zone IV (D) Zone V
17. Chemical released by chlorofluoro carbons that causes depletion of ozone layer in atmosphere is
- (A) Sulphuric acid (B) Chlorine  
 (C) Nitrogen (D) Sodium chloride
18. Which is not an objective of ELA?
- (A) Recycling and reduction of waste  
 (B) Risk analysis and disaster management  
 (C) People's participation in environmental planning  
 (D) Assessment of international funding
19. The environmental planning is:
- (A) The analysis of how we can prevent the poaching of environment  
 (B) the analysis of how people impact natural resources  
 (C) the analysis of how we can preserve our biodiversity  
 (D) the supply of management tool to conserve our environment
20. Currently population of India is growing at the rate of:
- (A) 1.23% per year (B) 2.12% per year  
 (C) 3% per year (D) 5% per year
21. Which of the following diseases spreads through respiratory route?
- (A) Influenza (B) Mumps  
 (C) Measles (D) All of Above
22. Climate change points to a need for greater cooperation at
- (A) local level (B) Regional level  
 (C) International level (D) Cross-border level
23. A, P, R, X, S and Z are sitting in a row. S and Z are in the centre. A and P are at the end. R is sitting to the left of A. Who is to the right of P?
- (A) A (B) X  
 (C) S (D) Z
24. Risk in disasters is equal to
- (A) Hazard x Vulnerability  
 (B) Hazard + Vulnerability  
 (C) Hazard - Vulnerability  
 (D) Hazard / Vulnerability
25. The difference of two numbers is 5 and the difference of their square is 135. The sum of numbers is
- (A) 27 (B) 25  
 (C) 30 (D) 32
26. 4 men and 6 women finish a job in 8 days. While 3 men and 7 women finish it in 10 days. 10 women working together will finish it in
- (A) 24 days (B) 32 days  
 (C) 36 days (D) 40 days
27. Find the odd number out from 10,25,45,54,60,75,80
- (A) 10 (B) 45  
 (C) 54 (D) 75
28. A place where an earthquake originates is called the
- (A) Focus (B) Plate tectonics  
 (C) Earthquake zone (D) Epicentre

*Chart ab  
 Series-13*

29. National Disaster Management Authority (NDMA) of India is headed by:
- (A) President of India  
(B) Prime Minister of India  
(C) External Minister of India  
(D) Home Minister of India
30. Which of the following was termed the "International Decade for Natural Disaster Reduction"?
- (A) 1980-1989 (B) 1985-1994  
(C) 1990-1999 (D) 2005-2015
31. Which one of the following is not correctly matched?
- (A) Jammu city – Jammu and Kashmir  
(B) Kolkata – West Bengal  
(C) Pune – Maharashtra  
(D) Pathankot – Himachal Pradesh
32. One fathom is equal to :
- (A) 5 feet (B) 6 feet  
(C) 6.5 feet (D) 7 feet
33. England was previously known by the name
- (A) Ister (B) Albion  
(C) Scythia (D) Mare-Interim
34. Which one of the following is richer in coal deposits?
- (A) Brahmaputra valley (B) Damodar valley  
(C) Godavari valley (D) Mahanadi valley
35. A line joining points of equal time is known by word
- (A) Isobar (B) Isobath  
(C) Isochrone (D) Isocline
36. Mark the right sequence of atmospheric layers from crust upwards:
- (A) Troposphere. Stratosphere. Thermosphere. Ionosphere. Mesosphere.  
(B) Troposphere. Stratosphere. Ionosphere. Mesosphere. Thermosphere.  
(C) Ionosphere, Mesosphere. Troposphere. Stratosphere. Thermosphere.  
(D) Troposphere. Stratosphere. Mesosphere. Ionosphere. Thermosphere.
37. Which of the following types of weathering is common in both cold and hot climatic regions?
- (A) Exfoliation  
(B) Granule disintegration  
(C) Carbonation  
(D) Block disintegration
38. Name the instrument used to measure the atmospheric pressure
- (A) Barometer (B) Thermometer  
(C) Spectrometer (D) Pyrometer
39. The United Nations has estimated that the world population will reach to eleven thousand million by the year
- (A) 2030 (B) 2040  
(C) 2050 (D) 2060
40. Who believed that similar locations lead to similar mode of life ?
- (A) F. Ratzel (B) C. Ritter  
(C) R. Mill (D) E.C. Semple
41. Malaysia is considered as a prosperous land because
- (A) It is the largest producer of Tin  
(B) It is situated on a busy trade route  
(C) It has large plantation of rubber  
(D) All of above
42. The outermost layer of sun is called
- (A) Chromosphere (B) Corona  
(C) Lithosphere (D) Photosphere
43. Sublimation describes the direct transition from
- (A) Solid to vapour (B) Vapour to liquid  
(C) Vapour to solid (D) Liquid to vapour
44. GIS stands for:
- (A) Google Information System  
(B) Geographic Information System  
(C) Geological Information System  
(D) None of above

45. The functioning of an ecosystem involves:  
 (A) Flow of energy and circulation of nutrients  
 (B) An increasing simplicity of relations  
 (C) Increasing animal population  
 (D) Increasing no. of trees etc.
46. Xerophytes are  
 (A) Plants that grow in areas of high rainfall  
 (B) Plants which can withstand high degree of salinity  
 (C) Plants which grow in areas of moderate moisture supply  
 (D) Plants which can withstand extreme aridity
47. The green house effect is due to:  
 (A) Absorption of ultraviolet radiation by sea water  
 (B) Absorption of infrared radiation by carbon dioxide and water vapour in the atmosphere  
 (C) Infrared reflection by oceanic surfaces  
 (D) Absorption of infrared radiation by plants
48. Look at the series:7,10,8,11,9,12,.... What number should come next?  
 (A) 7 (B) 10  
 (C) 12 (D) 13
49. Which one of the following is used in pencils?  
 (A) China clay (B) Charcoal  
 (C) Graphite (D) Silicon
50. Professor Amartya Sen is known in the field of:  
 (A) History  
 (B) Economics  
 (C) Disaster Management  
 (D) International Studies.
51. "CD" computer abbreviation usually means:  
 (A) Compact Disc  
 (B) Command Disc  
 (C) Copy Density  
 (D) Change Data
52. Who said "I therefore want freedom immediately; this very night before dawn ....."  
 (A) Nelson Mandela  
 (B) Mahatma Gandhi  
 (C) Ali Mohammad Jinnah  
 (D) Fidel Castro
53. Permanent Secretariat of SAARC countries to coordinate implementation of programs is located at:  
 (A) New Delhi (B) Karachi  
 (C) Kathmandu (D) Dhaka
54. A schedule is a list of questions which will be answered in an interview by  
 (A) An interviewer (B) A respondent  
 (C) A surveyor (D) A researcher
55. Which one may be defined as a method of measuring individual's social behaviour?  
 (A) Sociometry (B) Sample method  
 (C) Verstehen method (D) Interview method
56. What number should come next 2,4,16 ..... ?  
 (A) 32 (B) 64  
 (C) 196 (D) 256
57. Study of the solid earth is known as:  
 (A) Geomorphology (B) Geography  
 (C) Geochronology (D) Geology
58. Which is the most Important Indicator of ancient climate?  
 (A) Radioactivity of the deposits  
 (B) Type of cementing material  
 (C) Order of superposition of beds  
 (D) Type and distribution of fossils
59. The predominant agent in contact metamorphism is:  
 (A) Temperature (B) Pressure  
 (C) Chemical fluid (D) None of these
60. Which one of the following is treated as "Gift of Nile" ?  
 (A) Iraq (B) Egypt  
 (C) Muscat (D) Iran

Sr. No. .... 005

# ENTRANCE TEST-2016

FACULTY OF PHYSICAL AND MATERIAL SCIENCE

M.A./M.Sc. DISASTER MANAGEMENT

Total Questions : 60  
Time Allowed : 70 Minutes

Question Booklet Series **A**

Roll No. :

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CWG-33211-A

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SEAL

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(C) Determinism (D) Environmentalism
2. A place where an earthquake originates is called the :  
(A) Focus (B) Tsunami  
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3. Abbreviation "GIS" stands for :  
(A) Global Information System (B) Geographic Information System  
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(A) Crystallization (B) Solidification  
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(A) 5,976 feet (B) 6,276 feet  
(C) 6,176 feet (D) 6,076 feet
7. The capital city of Australia is :  
(A) Melbourne (B) Hobart  
(C) Brisbane (D) Canberra
8. The areas up to the 100 meters around the premises such as hospitals, educational institutions and courts are :  
(A) Silence Zones (B) Atrophic Zones  
(C) EMP Zones (D) Irrigation Zones

9. Which one of the following metropolitan cities does not belong to Maharashtra State ?
- (A) Nagpur (B) Mumbai  
(C) Pune (D) Jamshedpur
10. Which one of the following is the indigenous satellites of India ?
- (A) APPLE (B) NOAA  
(C) Meteor-3 (D) SPOT-1
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- (A) Hecateu (B) Hippocrates  
(C) Herodotus (D) Homer
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- (A) Algae → Daphnia → Dragon Fly Nymph → Newt → Grass Snake  
(B) Daphnia → Dragon Fly Nymph → Newt → Algae → Grass Snake  
(C) Grass Snake → Newt → Dragon Fly Nymph → Daphnia → Algae  
(D) Newt → Grass Snake → Dragon Fly Nymph → Algae →
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- (A) Lava (B) Sial  
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16. What will be the outcome of Eutrophication of surface waters ?
- (A) Overproduction of biomass  
(B) Decrease in nitrogen concentration  
(C) Decrease in phosphorus concentration  
(D) Decrease in both nitrogen and phosphorus concentrations

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(C) Calcium carbonate                    (D) Calcium chloride
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(C) Rain water harvesting                (D) Waste land development
19. Natural resource which has a definite cycle is called :
- (A) Exhaustible non renewable          (B) Inexhaustible  
(C) Non Conventional                      (D) Exhaustible renewable
20. The geometric mean of the numbers 2, 4, 8, 16, 32 is :
- (A) 12    (B) 16  
(C) 8    (D) 6
21. Risk is a measure of likelihood and what other factor ?
- (A) Consequence                            (B) Resilience  
(C) Fatalities                                (D) None of the above
22. Disasters that develop slowly over time are termed which of the following ?
- (A) Latent                                      (B) Creeping  
(C) Delayed                                  (D) Sudden-onset
23. Which of the following is not one of the four phases of "Comprehensive Emergency Management" ?
- (A) Risk Management                      (B) Preparedness  
(C) Response                                (D) Recovery

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(A) 2 (B) 3  
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33. Headquarters of Amnesty International is located at :  
(A) New York (B) London  
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34. Which of the following Indian States is flood prone as well as draught prone ?  
(A) Bihar (B) Uttar Pradesh  
(C) West Bengal (D) Orrisa
35. The International Court of Justice is located in the city of :  
(A) Paris, France (B) The Hauge, Netherlands  
(C) Kolkota, India (D) Tokyo, Japan
36. The solidified lava of a volcano belongs to which rock family ?  
(A) Igneous (B) Metamorphic  
(C) Sedimentary (D) Fossilized
37. Amount of oxygen in the earth's atmosphere comprises of :  
(A) 51% (B) 41%  
(C) 31% (D) 21%
38. Group of 8 (G8) countries are :  
(A) Canada, France, Germany, Italy, Japan, UK, USA and Russia  
(B) Canada, France, Germany, India, Japan, UK, USA and Russia  
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39. Which political leader has attributed "New Temple of Resurgent India" to Bhakra Nangal Dam ?
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- (A) Ministry of Agriculture  
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50. Which of the following should be used in extinguishing electrical fires ?
- (A) Water  
(B) Foam type fire extinguisher  
(C) Carbon tetrachloride fire extinguisher  
(D) Carbon dioxide fire extinguisher
51. "The missile man of India", Dr. Abdul Kalam died in :
- (A) June 2015 (B) July 2015  
(C) August 2015 (D) September 2015
52. Why is our vulnerability to natural disasters growing ?
- (A) Because the frequency of volcanic eruptions is increasing  
(B) Because the human population is increasing  
(C) Because the number of earthquakes each year is increasing  
(D) Because the number of floods each year is increasing

53. Who proposed the location of agricultural location ?
- (A) Von Thunen (B) Jonassons  
(C) Weber (D) Wegner
54. Virgin forests are :
- (A) Which have not been cleared  
(B) Which have been recklessly cut  
(C) Which have not been touched sofar  
(D) None of above
55. "Abion" was the past name of which country :
- (A) India (B) England  
(C) Saudi Arabia (D) Sri Lanka
56. Name the city in which "Haneda International Airport" is located :
- (A) Atlanta (B) Tokyo  
(C) New York (D) Germany
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- (A) Lava (B) Sial  
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58. The height of mountain beyond which the amount of rainfall decreases upward is called as :
- (A) Maximum rainfall line (B) Minimum rainfall line  
(C) Optimum rainfall line (D) Stagnant rainfall line
59. Which one of the following is the most important element of ecosystem ?
- (A) Ecological succession (B) Energy flow  
(C) Food chain (D) Food web
60. Who gave the definition "Economics is the Science of Wealth" ?
- (A) J.K. Mehta (B) Adam Smith  
(C) Robbins (D) Marshall

# ROUGH WORK

Sr. No. .... 005

# ENTRANCE TEST-2016

FACULTY OF PHYSICAL AND MATERIAL SCIENCE

M.A./M.Sc. DISASTER MANAGEMENT

Total Questions : 60  
Time Allowed : 70 Minutes

Question Booklet Series **A**

Roll No. :

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CWG-33211-A

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- (A) Water  
(B) Foam type fire extinguisher  
(C) Carbon tetrachloride fire extinguisher  
(D) Carbon dioxide fire extinguisher
51. "The missile man of India", Dr. Abdul Kalam died in :
- (A) June 2015 (B) July 2015  
(C) August 2015 (D) September 2015
52. Why is our vulnerability to natural disasters growing ?
- (A) Because the frequency of volcanic eruptions is increasing  
(B) Because the human population is increasing  
(C) Because the number of earthquakes each year is increasing  
(D) Because the number of floods each year is increasing

53. Who proposed the location of agricultural location ?
- (A) Von Thunen (B) Jonassons  
(C) Weber (D) Wegner
54. Virgin forests are :
- (A) Which have not been cleared  
(B) Which have been recklessly cut  
(C) Which have not been touched sofar  
(D) None of above
55. "Abion" was the past name of which country :
- (A) India (B) England  
(C) Saudi Arabia (D) Sri Lanka
56. Name the city in which "Haneda International Airport" is located :
- (A) Atlanta (B) Tokyo  
(C) New York (D) Germany
57. The molten rocks below the earth surface is known as :
- (A) Lava (B) Sial  
(C) Sima (D) Magma
58. The height of mountain beyond which the amount of rainfall decreases upward is called as :
- (A) Maximum rainfall line (B) Minimum rainfall line  
(C) Optimum rainfall line (D) Stagnant rainfall line
59. Which one of the following is the most important element of ecosystem ?
- (A) Ecological succession (B) Energy flow  
(C) Food chain (D) Food web
60. Who gave the definition "Economics is the Science of Wealth" ?
- (A) J.K. Mehta (B) Adam Smith  
(C) Robbins (D) Marshall

# ROUGH WORK

**M.A./M.Sc. Disaster Management**

1. Which of the following is used in pencils ?  
(A) Graphite (B) Silicon  
(C) Charcoal (D) Phosphorous
2. Permanent hardness of water can be removed by adding :  
(A) chlorine (B) washing soda  
(C) potassium permanganate (D) bleaching powder
3. Which of the following is the lightest metal ?  
(A) Mercury (B) Lithium  
(C) Lead (D) Silver
4. Potassium Permanganate is used for purifying drinking water, because :  
(A) it is a sterilising agent  
(B) it dissolves the impurities of water  
(C) it is a reducing agent  
(D) it is an oxidising agent
5. The inert gas which is substituted for nitrogen in the air used by deep sea divers for breathing, is :  
(A) Argon (B) Xenon  
(C) Helium (D) Krypton
6. Reading of a barometer going down is an indication of :  
(A) Snow (B) Storm  
(C) Intense heat (D) Rainfall
7. CD-ROM stands for :  
(A) Compactable Read Only Memory  
(B) Compact Data Read Only Memory  
(C) Compactable Disk Read Only Memory  
(D) Compact Disk Read Only Memory

**SEAL**

**/B**

8. WAN stands for :
- (A) Wap Area Network (B) Wide Area Network  
(C) Wide Array Net (D) Wireless Area Network
9. Who has won the Shanti Swarup Bhatnagar Award 2014 for biological sciences ?
- (A) Dr. Kavirayani Ramakrishna Prasad  
(B) Dr. Roop Malik  
(C) Dr. Anurag Agarwal  
(D) Dr. S. Venkata Mohan
10. Which gas is the chief constituent of Photochemical Smog in Metropolitan cities of India ?
- (A) Nitric Oxide (B) Nitrogen Oxide  
(C) Sulphur Dioxide (D) Carbon Monoxide
11. Which country of Africa was highly affected by Ebola has been recently declared ebola-free by WHO ?
- (A) Sierra Leone (B) Liberia  
(C) Nigeria (D) Guinea
12. Who has been appointed as India's new Chief Economic Advisor ?
- (A) Arvind Subramanian (B) Raghuram Rajan  
(C) Kaushik Basu (D) Jahangir Aziz
13. Who has been awarded the Nobel Prize for literature 2014 ?
- (A) Alice Munro (B) Patrick Modiano  
(C) Malala Yousufzai (D) Mo Yan
14. Who among the following bollywood actors has been appointed as the UNICEF Goodwill Ambassador for South Asia ?
- (A) Amitabh Bachchan (B) Aamir Khan  
(C) Akshay Kumar (D) Shahrukh Khan

15. In the recently concluded Asian Games 2014, what was the rank of India in the final medal tally?

(A) 6<sup>th</sup>

(B) 7<sup>th</sup>

(C) 8<sup>th</sup>

(D) 9<sup>th</sup>

16. Who among the following is the present chairman of the Indian Space Research Organisation (ISRO)?

(A) V. Adimurthy

(B) K. Radhakrishnan

(C) G. Madhavan Nair

(D) K. Kasturirangan

17. Which of the following Light Combat Aircraft (LCA SP 1) took its successful maiden flight recently and has been declared ready for its induction into IAF?

(A) Tejas

(B) Rudra

(C) Kiran

(D) Dhruv

18. The *Lycodon Odishii*, a new species discovered in Odisha is of:

(A) Bird

(B) Fish

(C) Snake

(D) Frog

19. Which among the following places has been decided as the next SAARC Cultural Capital for the year 2015-2016?

(A) Bamiyan

(B) Shenzhen

(C) Kathmandu

(D) New Delhi

20. Mount Ontake which had an unexpected eruption recently is located in:

(A) Indonesia

(B) Japan

(C) South Korea

(D) North Korea

21. Which among the following is known as "Aquatic Panda"?

(A) Ganges River Dolphin

(B) Chinese White Dolphin

(C) Indus River Dolphin

(D) Amazon River Dolphin

22. WHO is supplying a free drug to India *Liposomal Amphoterecin B* for the total eradication of:
- (A) Kala Azar (B) Kala Motia  
(C) Gastroenteritis (D) Chikungunya
23. Name the satellite developed by NASA to predict the frequency of occurrence of droughts in the world.
- (A) SMAP (B) TMAP  
(C) DMAP (D) NMAP
24. Who among the following has received the MIDORI prize for biodiversity 2014 ?
- (A) Kamal Bawa (B) Kapil Sibal  
(C) Pranab Acharya (D) Subhasis Dey
25. Which of the following types of clouds are also called as "Sheep clouds" or "Wool-Pack clouds" ?
- (A) Alto cumulus (B) Alto stratus  
(C) Nimbo stratus (D) Cirrus
26. Which among the following was the first country to impose Carbon Tax ?
- (A) Russia (B) New Zealand  
(C) USA (D) Sweden
27. Who is the author of the famous plays, *The Captives* (1963), *Monsoon* (1966), *The Refugee* (1971) and *Angkor* (1973) ?
- (A) Badal Sircar (B) Habib Tanvir  
(C) Asif Currimbhoy (D) Girish Karnad
28. Where are the headquarters of International Atomic Energy located ?
- (A) New York (B) Geneva  
(C) Vienna (D) Paris
29. Cultivation on hilly slopes with small patches of land in descending order is known as:
- (A) Contour farming (B) Sloppy farming  
(C) Track farming (D) None

30. Who has authored the book *Curfewed Night* ?  
(A) Tapan Bose (B) Basharat Peer  
(C) Agha Shahid Ali (D) Kushwant Singh
31. The Elastic Rebound Theory to explain the mode and causes of earthquake was given by :  
(A) N. Krishna Brahman (B) H. Hess  
(C) H.F. Reid (D) H.E. Horton
32. Acronym "GPRS" stands for :  
(A) General Packet Radio Service  
(B) Global Package Radiation Service  
(C) Ground Provision Radio Service  
(D) Global Package Remission Service
33. Acid rains are caused by :  
(A) Concentration of Methane gas in the lower stratosphere  
(B) Release of CFC's in the atmosphere  
(C) Concentration of Sulphuric acid in the atmosphere  
(D) All the above
34. The most potent greenhouse gas among the following is :  
(A) Carbon Dioxide (B) Methane  
(C) Water Vapour (D) Ozone
35. Pacific Tsunami Warning Centre (PTWC) is located at :  
(A) Hawaii (B) Cook Island  
(C) Alaska (D) Samoa
36. Flash floods are often caused by :  
(A) Rainfall over many days (B) Dikes and dams that are too high  
(C) Less depth of the rivers (D) Thunderstorms

SEAL

37. An event similar to a Tsunami that can occur in lakes due to avalanche, earthquake and other mechanisms is called a :
- (A) Seiche (B) Splash  
(C) Slosh (D) Tidal Wave
38. The point at which a fault first ruptures in the earth is called :
- (A) Hypocentre (B) Hypercentre  
(C) Hypicentre (D) Epicentre
39. The Disaster Management Act in India was enacted on :
- (A) 26<sup>th</sup> December, 2005 (B) 30<sup>th</sup> May, 2005  
(C) 21<sup>st</sup> December, 2007 (D) 30<sup>th</sup> May, 2007
40. The national agency responsible for laying down the policies, plans and guidelines for disaster management in India is :
- (A) National Disaster Management Authority (NDMA)  
(B) National Institute of Disaster Management (NIDM)  
(C) National Remote Sensing Centre (NRSC)  
(D) None of the above
41. The central force constituted for the purpose of specialized response to natural and man-made disasters is named as :
- (A) Central Reserve Police Force  
(B) Central Industrial Security Force  
(C) National Disaster Response Force  
(D) National Disaster Reserve Force
42. Risk Management involves :
- (A) Eliminating all workplace hazards  
(B) Identifying and monitoring risks  
(C) Identifying risks, assessing risks and estimating or controlling risks  
(D) Hiring an employee with the job of managing risks

43. One of the following events cannot be categorised as a type of natural disaster :

- (A) Earthquakes (B) Cyclones  
(C) Volcanic Eruptions (D) Nuclear Leak

44. Cyclonic Storms are :

- (A) Hydrological Disasters (B) Meteorological Disasters  
(C) Health Disasters (D) None of the above

45. It is a ten year plan to make the world safer from natural hazards :

- (A) United Nations Framework Convention on Climate Change  
(B) Hyogo Framework for Action  
(C) Kyoto Protocol  
(D) None of the above

46. The Indian Ocean Earthquake occurred on :

- (A) 26<sup>th</sup> December, 2004 (B) 24<sup>th</sup> December, 2004  
(C) 8<sup>th</sup> October, 2005 (D) 24<sup>th</sup> December, 2005

47. Which two natural hazards have caused the most damage both in terms of loss of life and monetary losses over the past 50 years on the global scale ?

- (A) Hurricanes and Volcanoes (B) Hurricanes and Floods  
(C) Hurricanes and Tornadoes (D) Hurricanes and Earthquakes

48. Over 90 percent of Volcanic activity is associated with :

- (A) Subduction Zones (B) Transform Boundaries  
(C) Hot Spots (D) Plate Tectonic Boundaries

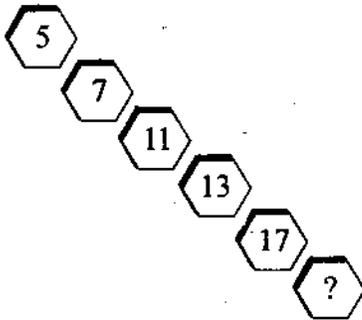
49. The Bhopal gas tragedy was caused by :

- (A) Phosgene (B) Carbon Monoxide  
(C) Methyl isocyanate (D) Chlorine

50. It is a situation that poses a level of threat to life, health, property or environment :

- (A) Disaster (B) Hazard  
(C) Risk (D) Vulnerability

51. Look at this series : 2, 1, (1/2), (1/4), ..... What number should come next ?  
 (A) (1/3) (B) (1/8)  
 (C) (2/8) (D) (1/16)
52. Look at this series : 22, 21, 23, 22, 24, 23, ..... . What number should come next ?  
 (A) 22 (B) 24  
 (C) 25 (D) 26
53. Odometer is to mileage as compass is to :  
 (A) speed (B) hiking  
 (C) needle (D) direction
54. Marathon is to race as hibernation is to :  
 (A) winter (B) bear  
 (C) dream (D) sleep
55. Optimist is to cheerful as pessimist is to :  
 (A) gloomy (B) mean  
 (C) petty (D) helpful
56. Sponge is to porous as rubber is to :  
 (A) massive (B) solid  
 (C) elastic (D) inflexible
57. Which number completes the puzzle ?



- (A) 21 (B) 18  
 (C) 19 (D) 23

58. Which number replaces the question mark ?



- (A) 35  
(C) 38

- (B) 41  
(D) 39

59. This question consists of two words which have a certain relationship to each other followed by four pairs of related words. Select the pair which has the same relationship.

LIGHT : BLIND

- (A) speech : dumb  
(C) tongue : sound

- (B) language : deaf  
(D) voice : vibration

60. Pick out the most effective word(s) from the given words to fill in the blank to make the sentence meaningfully complete.

*Fate smiles.....those who untiringly grapple with stark realities of life.*

- (A) with  
(C) on

- (B) over  
(D) round

SEAL