

| |
|-------------|
| Seat No. |
|-------------|

Total No. of Pages : 28

M.Sc. Entrance Examination, 2024
Department of Environmental Science
Subject Code : 58727

Day and Date : Monday, 29-07-2024**Total Marks : 100****Time : 10.30 am to 12.00 pm**

Instructions :

- 1) All questions are compulsory.
 - 2) Each question carries 1 mark.
 - 3) Answers should be marked in the given OMR answer sheet by darkening the appropriate option.
 - 4) Follow the instructions given on OMR sheet.
 - 5) Rough work shall be done on the sheet provided at the end of question paper.
-

1. Which of the following organization work for biodiversity conservation?

- | | |
|----------------|---------|
| a) WWF | b) IUCN |
| c) Green Peace | d) IPCC |

2. In vermi-composting are used to produce compost.

- a) Algae
- b) Fungi
- c) Bacteria
- d) Worms

3. Carbon monoxide gas affects humans by forming in the blood.
- a) HbCO
 - b) HbCO₂
 - c) HbCO₃
 - d) Hb O₂
4. What is GIS?
- a) Geological Information system
 - b) Geographical information system
 - c) Geographical information source
 - d) Geological index system
5. The place where the worst nuclear disaster took place is
- a) Washington
 - b) Chernobyl
 - c) Bhopal
 - d) Japan
6. The main source of energy in the environment is
- a) Solar energy
 - b) Chemical energy
 - c) Nuclear energy
 - d) Bio-electrical energy

7. Photosynthesis is found in
- a) Consumers
 - b) Producers
 - c) Decomposers
 - d) Parasites
8. is the phenomenon where Earth retains heat.
- a) Air pollution
 - b) Greenhouse effect
 - c) Global effect
 - d) Land pollution
9. Earth Day is celebrated on
- a) 5th June
 - b) 22nd March
 - c) 22nd April
 - d) 16th October
10. Smog" is a mixture of
- a) Smoke and Fog
 - b) Snow and Fog
 - c) Snow and dust
 - d) SO₂ and Fog

11. One of the following is not a nutrition deficiency disease.
- a) Kwashiorkor
 - b) Marasmus
 - c) Goiter
 - d) Plague
12. energy can be converted into electrical energy by a solar cell.
- a) Chemical
 - b) Solar
 - c) Wind
 - d) Magnetic
13. Carrier of Dengue disease is mosquito.
- a) Culex
 - b) Aedes
 - c) Anophelis
 - d) House fly
14. Wildlife Week is celebrated in between
- a) 1st to 7th June
 - b) 1st to 7th February
 - c) 15th to 21st October
 - d) 1st to 7th October

15. The science that deals with the relationship of various organisms with their environment is known as
- a) Ecology
 - b) Anthropology
 - c) Geology
 - d) Economies
16. The pyramid of energy is always
- a) Upright
 - b) Inverted
 - c) Spindle shaped
 - d) Round
17. The World Wetland Day is celebrated on
- a) 22nd March
 - b) 5th June
 - c) 16th September
 - d) 2nd February
18. Human population growth curve is a curve.
- a) Parabola shaped
 - b) S shaped
 - c) Zig zag
 - d) J shaped

19. The unit of sound measurement is
- a) Joules
 - b) Calories
 - c) Decibel
 - d) Hertz
20. The chemical responsible for Ozone hole is
- a) CFC
 - b) H_2S
 - c) CH_4
 - d) NO_2
21. problem is not created by noise pollution.
- a) Hypertension.
 - b) Diarrhea
 - c) Deafness
 - d) Irritation
22. are the three R's in environmental protection.
- a) Read, Register, Recall
 - b) Random, Register, Recollect
 - c) Reduce, Rebuild, Restrict
 - d) Reduce, Reuse, Recycle

23. Greenhouse Effect is
- a) Cultivation of crops in green house to conserve heat
 - b) Trapping of heat energy by upper atmosphere
 - c) Increase of heat due to atmospheric pollution
 - d) Trapping of solar energy due to carbon dioxide gas
24. Ozone layer is present in
- a) Troposphere
 - b) Mesosphere
 - c) Stratosphere
 - d) Lithosphere
25. The days and nights are formed because of
- a) Earth's rotation
 - b) Earth's revolution
 - c) Sun's rotation
 - d) Sun's revolution
26. Non-green plants like mushroom can't make their own food because
- a) They lack chlorophyll
 - b) They are too small
 - c) They lack roots to suck water
 - d) They lack leaves

27. Self-purification is a phenomenon associated with
- a) Flowing streams
 - b) Ground water
 - c) Sewage flow in sewers
 - d) Dams
28. Heat is energy in the process of being transferred from
- a) Low pressure to high pressure
 - b) Hot object to cold object
 - c) High pressure to low pressure
 - d) Cold object to hot object
29. Highest percentage of gas in air is
- a) Oxygen
 - b) Carbon dioxide
 - c) Carbon monoxide
 - d) Nitrogen
30. is not having a single river in it.
- a) Maharashtra
 - b) Lakshdewip
 - c) Assam
 - d) Tripura

31. Floods can be prevented by
- a) Making land sloppy
 - b) Removing soil cover
 - c) Cutting forests
 - d) Making dams on river
32. 5th June is celebrated as
- a) World Environment Day
 - b) World Population Day
 - c) World Hygiene Day
 - d) None of the above
33. DDT is a
- a) Non-biodegradable pollutant
 - b) Biodegradable pollutant
 - c) Antibiotic
 - d) Anti allergic
34. In polluted lake, the index of pollution can be measured by using this species
- a) Frog
 - b) Daphnia
 - c) Artemia
 - d) None of the above

35. Xerophytes are found in
- a) Desert
 - b) Tropical rainforest
 - c) Deciduous forest
 - d) Tundra
36. BOD stands for
- a) Biochemical Oxygen Dressing
 - b) Biotic Oxygen Dropping
 - c) Biochemical Oxygen Demand
 - d) None of the above
37. The best source of renewable energy is
- a) Coal
 - b) Petroleum
 - c) Sunlight
 - d) Cattles
38. The removal of soil by action of water and wind is
- a) Erosion
 - b) Pollution
 - c) Gleization
 - d) Manology

39. Study of plant environment is
- a) Anatomy
 - b) Ecology
 - c) Sociology
 - d) All of the above
40. Smog is.
- a) Fog+Ash
 - b) Smoke + Fog
 - c) $\text{CO} + \text{H}_2$
 - d) Smoke + Ash
41. Natural resources are
- a) Exhaustible resources.
 - b) Inexhaustible resources
 - c) Both of above
 - d) None of the above
42. SO_2 and CO_2 are the example of
- a) Primary Pollutants
 - b) Secondary Pollutants
 - c) Smog
 - d) None of the above

43. Ozone is formed in the
- a) Troposphere
 - b) Mesosphere
 - c) Stratosphere
 - d) Thermosphere
44. Which chemical cause to damage to ozone layer?
- a) CFC's
 - b) CH₄
 - c) SO₂
 - d) NO₂
45. Soil is considered as in ecosystem.
- a) Edaphic factor
 - b) Non-edaphic factor
 - c) Both of above
 - d) None of the above
46. A cancer producing substance is
- a) Mutagen
 - b) Toxicogen
 - c) Rubiscogen
 - d) Carcinogen

52. UNEP Stands for
- a) United National Economic Programme
 - b) United Nations Environment Programme
 - c) United National Energy Programme
 - d) None of above
53. CRZ Stands for
- a) Costal Regulation Zone
 - b) City Regulation Zone
 - c) Citizens rule for Zoo
 - d) None of the above
54. Which is the following are human impacts on environment?
- a) Hunting and Gathering
 - b) Agriculture and conservationism
 - c) Industry and environmentalism
 - d) All of the above
55. Which of the following damaging the layers in the stratosphere?
- a) O_3
 - b) CFCs
 - c) CF_2-CF_2
 - d) $CaOCl_2$

56. Which element found more in earth's crust?
- a) Oxygen
 - b) Silicon
 - c) Aluminum
 - d) Gold
57. Nucleic acids have important genetic material
- a) Gene
 - b) Chromosome
 - c) Both a & b
 - d) None of the above
58. Biotic community can be grouped into
- a) Producer
 - b) Consumer
 - c) Decomposer
 - d) All of the above
59. Which of the following is only source of energy that keeps natural ecosystem in functional state?
- a) Nuclear power
 - b) Sunlight
 - c) Thermal Power
 - d) All of the above

60. Organisms of ecosystems are linked together in
- a) Food chains
 - b) Food webs
 - c) Biotic communities
 - d) None of the above
61. The Periyar National Park (PNR) is located in state.
- a) Orissa
 - b) Rajasthan
 - c) Karnataka
 - d) Kerala
62. Phytoplanktons are members ofecosystem.
- a) Forest
 - b) Aquatic
 - c) Desert
 - d) Grassland
63. The process of amplification of specific DNA sequences by an enzymatic process is termed as.....
- a) Amplification
 - b) Translation
 - c) Polymerase Chain Reaction
 - d) Microarray

64. The term 'Green Revolution' is coined by

- a) M. S. Swaminathan
- b) William Gaud
- c) Charles Elton
- d) Eugene Odum

65. Alum is used as

- a) A disinfectant of water
- b) coagulant of water
- c) A fertilizer
- d) A smelling agent of water

66. planet is surrounded by a ring.

- | | |
|-----------|---------|
| a) Venus | b) Moon |
| c) Saturn | d) Mars |

67. The metal constituent of chlorophyll is.

- a) Calcium
- b) Magnesium
- c) Selenium
- d) Manganese

68. A place where an earthquake originates is called the
- a) Focus
 - b) Tsunami
 - c) Fault Line
 - d) Epicenter
69. What is source of sulphur dioxide?
- a) Power stations and industries using fossil fuels
 - b) Exhaust fumes of motor vehicles
 - c) incomplete burning of wood
 - d) None of these
70. The word 'ecology" (Ökologie) was coined in 1866 by:
- a) Charles Darwin
 - b) Robert Whittaker
 - c) Arthur Tansley
 - d) Ernst Haeckel
71. What is the primary cause of the greenhouse effect?
- a) Plastic pollution
 - b) Solar radiation
 - c) Ozone depletion
 - d) Greenhouse gas emissions

72. Which of the following is a major contributor to ocean acidification?
- a) Deforestation
 - b) Industrial waste
 - c) Plastic pollution
 - d) increased carbon dioxide levels in ocean water
73. Tehri dam is built on river.
- a) Narmada
 - b) Ganga
 - c) Yamuna
 - d) Bhagirathi
74. received the Nobel Prize for the contribution in sustainable development in 2004.
- a) Rajendrasing Rana
 - b) Wangari Maathai
 - c) LeymahGhowee
 - d) Al Gore
75. Which part of plant evaporates water?
- a) Stomata
 - b) Fruit
 - c) Branch
 - d) Root

76. Bhopal Gas Tragedy was caused due to leakage of gas
- a) MIC b) LPG
- c) CNG d) SO₂
77. Who is the author of 'Silent Spring'?
- a) Rachel Carson
- b) James Lovelock
- c) E. P. Odem
- d) Vandana Shiva
78. Night blindness is caused by deficiency of vitamin
- a) A b) B
- c) C d) D
79. The branch of medical science which is concerned with the study of disease as it affects a Community of people is called
- a) Epidemiology
- b) oncology
- c) paleontology
- d) pathology
80. Yeast, used in making bread is a
- a) plant b) fungus
- c) bacteria d) seed

81. White revolution was a programme related to increase in
- a) Food production
 - b) Sugar production
 - c) Milk production
 - d) None of these
82. Resource is one
- a) Which is always available in nature
 - b) it is used by all living organisms
 - c) Exists in natural form
 - d) which becomes one when used by man.
83. How does acid rain affect the environment?
- a) By precipitating clean and fresh rainwater only in freshwater bodies
 - b) By precipitating clean and fresh rainwater in all water bodies at once
 - c) By consuming all polluted water and precipitate clean water from water cycle
 - d) By precipitating acidic rainwater
84. Which of the following material is not in use as compared to others
- a) Glacial ice
 - b) revarine water
 - c) Lakes
 - d) estuarine water

85. Grit chamber removes
- a) Gravel and sand
 - b) Oil Soap and Grease
 - c) Vegetable cutting, peels
 - d) Suspended organic substances
86. What is the major problem with wind energy?
- a) Generates energy from wind
 - b) It is a renewable source of energy
 - c) Requires large area of land
 - d) Compact and does not require large area of land
87. Sunderbans contains
- a) Mangrove Plants
 - b) Alpine tree
 - c) Teak forest
 - d) Grass
88. Who amongst the following formed Narmada Bachao Andolan?
- a) Medha Patkar
 - b) Arundhati Roy
 - c) Salim Ali
 - d) Bahuguna

93. Richter scale measures
- a) Wind Intensity
 - b) Oceanic Depth
 - c) Intensity of tides
 - d) Earthquake Intensity
94. Sustainable development requires that energy resource.....
- a) cannot be exhausted completely
 - b) can be completely exhausted
 - c) can destroy the environment
 - d) cannot meet the growing demand
95. Among the following which is the best description of a Carbon negative company?
- a) It removes as much carbon dioxide from the atmosphere as they contribute.
 - b) It removes more CO₂ from the atmosphere than it contributes.
 - c) It releases more CO₂ into the atmosphere than it removes.
 - d) It balances the whole amount of greenhouse gas released and the amount removed from the atmosphere.

96. What's the biggest contributor of greenhouse gas (GHG) emissions when you travel?
- a) Eating meals in restaurants
 - b) Travelling through railways
 - c) Traveling through airplane
 - d) Keep shopping at various places
97. What is the full form of UNFCCC with respect to global warming convention?
- a) United Nations Framework Convention on Climate Change.
 - b) United Nations Federation Convention on Climate Change
 - c) United Nations Framework Center on Climate Change
 - d) United Nations Federation Center on Climate Change
98. Who measures the global warming rate?
- a) Astrologers
 - b) Physicist
 - c) Philosopher
 - d) Climatologist

99. A compound microscope uses
- a) 2 lenses
 - b) 1 lens
 - c) 4 lenses
 - d) 5 lenses
100. is an analytical technique commonly used for separating a mixture of chemical substances into its individual components, so that the individual components can be thoroughly analyzed.
- a) Electrophoresis
 - b) Chromatography
 - c) Scanning electron microscopy
 - d) Complexometric titration

◆◆◆

ROUGH WORK

