

Code No.

R – 2114

**Entrance Examination for Admission to the P.G. Courses in the
Teaching Departments, 2023**

CSS

ENVIRONMENTAL SCIENCES

General Instructions

1. The Question Paper is having 100 Objective Questions, each carrying one mark.
2. The answers are to be (✓) 'tick marked' **only** in the "**Response Sheet**" provided.
3. **Negative marking** : **0.25 marks** will be deducted for each wrong answer .

Time : 2 Hours

Max. Marks : 100

To be filled in by the Candidate									
Register Number	in Figures								
	in words								

Choose appropriate answer from the options in the questions.

(100 × 1 = 100 marks)

1. Name the gas that is vital in maintaining atmospheric temperature.
 - a) Helium
 - b) Carbon Dioxide
 - c) Nitrogen
 - d) None of the above

DO NOT WRITE HERE

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2. What is the estimated percentage of forest land that India should ideally have?
- a) 25%
 - b) 50%
 - c) 54%
 - d) 33%
3. Which of these is the most naturally occurring and frequent disaster?
- a) Forest fire
 - b) Drought
 - c) Earthquake
 - d) Flood

4. National Science day is celebrated on _____ every year.
 - a) Jan – 5
 - b) Jan – 12
 - c) Feb – 28
 - d) March – 28
5. What does the word Tsunami Mean?
 - a) Earthquake wave
 - b) High wave
 - c) Harbor wave
 - d) Tidal wave
6. What is full form of CFC?
 - a) Chlorofluorocarbon
 - b) Chlorinefluorocarbon
 - c) Chlorofluridcarbon
 - d) Chromatefluorocarbon
7. The Wild Life (Protection) Act in India was established in
 - a) 1952
 - b) 1972
 - c) 1980
 - d) 1970
8. Jim Corbett National Park was established in
 - a) Uttar pradesh
 - b) Tamil Nadu
 - c) Gujarat
 - d) Uttarkhand
9. World Water Day is celebrated on
 - a) March 12
 - b) March 22
 - c) March 25
 - d) March 30
10. In which year, U.N. Conference on human environment was held at Stockholm
 - a) 1986
 - b) 1972
 - c) 1984
 - d) 1992

11. Most industrial furnaces give rise to a grey, powder residue of unburned material called
- a) Dry Ash
 - b) Ash residue
 - c) Ash fly
 - d) Fly ash
12. Bhopal gas tragedy was occurred in the year
- a) 1980
 - b) 1981
 - c) 1982
 - d) 1984
13. The most abundantly available fossil fuel in India is
- a) Coal
 - b) Natural Gas
 - c) Petroleum
 - d) Oil
14. Energy flow in ecosystem is
- a) Unidirectional
 - b) Bidirectional
 - c) Multidirectional
 - d) None of the above
15. Conservation outside the natural habitat is
- a) Insitu conservation
 - b) Exsitu conservation
 - c) Invivo conservation
 - d) Exvivo conservation
16. Which one of the following is an example of nonrenewable resource?
- a) Water
 - b) Vegetation
 - c) Wind
 - d) Coal
17. Noise is measured in
- a) Joule
 - b) Decibel
 - c) Hertz
 - d) Ohm
18. Algal bloom results in
- a) Global warming
 - b) Salination
 - c) Eutrophication
 - d) Biomagnification

19. A high Biological Oxygen Demand (BOD) indicates that
- a) Water is pure
 - b) Absence of microbes
 - c) High chemical pollution
 - d) High level of microbial pollution
20. What is the largest source of the world's commercial energy consumption?
- a) Coal
 - b) Oil
 - c) Natural gas
 - d) Nuclear
21. How many Ramsar sites are there in India?
- a) 28
 - b) 68
 - c) 75
 - d) 72
22. The atmosphere consists of 79% Nitrogen and 21% Oxygen by?
- a) Weight
 - b) Volume
 - c) Density
 - d) All of these
23. When is World Wetland Day celebrated?
- a) 5 June
 - b) 2 February
 - c) 14 November
 - d) 27 May
24. Minamata disease is related to which of the following?
- a) Mercury pollution
 - b) Arsenic pollution
 - c) Lead pollution
 - d) None of these
25. The species restricted to be present in one region are called
- a) Endemic species
 - b) Endangered species
 - c) Keystone species
 - d) Edge species

26. Which one of the following is not a gaseous biogeochemical cycle?
- a) Water cycle
 - b) Carbon cycle
 - c) Phosphorus cycle
 - d) Sulphur cycle
27. Which one of the following is used as a refrigerant?
- a) Freon
 - b) Methanol
 - c) Ethanol
 - d) Propanol
28. The headquarters of IUCN is located at
- a) Vienna, Austria
 - b) New Delhi, India
 - c) New York, USA
 - d) Gland, Switzerland
29. Which out of the following is a measure to control air pollution?
- a) Reduction in use of fossil fuels
 - b) Increasing use of renewable energy resources
 - c) Using catalytic convertors in vehicles
 - d) All of the above
30. The relationship between two organisms in which one receives benefit at the cost of other is known as
- a) Predation
 - b) Parasitism
 - c) Scavenging
 - d) Symbiosis
31. Mesothelioma' is caused by toxicity of
- a) Cadmium
 - b) Nickel
 - c) Arsenic
 - d) Carbon monoxide
32. Environmental Protection Act was enacted in India during
- a) 1986
 - b) 1982
 - c) 1992
 - d) 1974

33. Removal of top fertile soil by water is called
- a) Leaching
 - b) Siltation
 - c) Weathering of soil
 - d) Soil erosion
34. A species represent an environmental cause and symbol for a defined habitat is called
- a) Flagship species
 - b) Umbrella species
 - c) Keystone species
 - d) Indicator species
35. Which one of the following does not belong to the EIA process?
- a) Establishing the baseline environmental status
 - b) Identification, prediction and assessment of environmental impacts
 - c) Suggesting the mitigation and compensation measures
 - d) Implementation of EMS auditing procedures.
36. Lignite, bituminous and anthracite are different types of
- a) Nuclear fuel
 - b) Coal
 - c) Natural gas
 - d) Biogas
37. According to Darcy's law for ground water movement, velocity is proportional to
- a) Hydraulic gradient
 - b) Square of hydraulic gradient
 - c) Square root of hydraulic gradient
 - d) Reciprocal of hydraulic gradient
38. Which of the following particles is called the particulate pollutants?
- a) Ozone
 - b) Radon
 - c) Fly Ash
 - d) All of the above
39. What is the most abundant greenhouse gas in the atmosphere?
- a) Methane
 - b) Nitrogen dioxide
 - c) Water vapor
 - d) Carbon dioxide

40. Which one of the following is not among the three R's to save the environment?
- a) Reduce
 - b) Recover
 - c) Recycle
 - d) Reuse
41. The main goal of the creation of golden rice is to provide
- a) A more nutritious rice that contains vitamin B
 - b) A frost-resistant rice
 - c) A form of rice that contains a preservative
 - d) A more nutritious rice that contains vitamin A
42. Green Accounting' means measuring the National Income of the country, taking into account the estimation of
- a) The total forest area of the country
 - b) The destruction of forest cover of the country
 - c) Pollution and environmental damage
 - d) Area of reclaimed fallow land
43. Lichens are an indicator of pollution.
- a) As they are sensitive to pollution
 - b) As they adapted a polluted environment
 - c) As they show an association between other plants
 - d) As they grow faster than other plants
44. Chlorofluorocarbon is used in
- a) Refrigerators
 - b) Air conditioners
 - c) Perfumes
 - d) All of the above

45. Which of the following causes an outbreak of jaundice?
- a) Air pollution
 - b) Water pollution
 - c) Thermal pollution
 - d) Soil pollution
46. What is Freon?
- a) Difluoro Dichloro Ethane
 - b) Difluoro Dichloro Methane
 - c) Difluoroamines Dichloro Methane
 - d) Difluoro Methylornithine
47. Which of these resources does not produce CO₂ during electricity generation?
- a) Coal
 - b) Methane
 - c) Uranium
 - d) Biogas
48. The only country in the world having a full-fledged ministry for Development of New and Renewable Resources is
- a) India
 - b) Bhutan
 - c) USA
 - d) China
49. Which of the following is the cleanest fossil fuel?
- a) Natural gas
 - b) Diesel
 - c) Petroleum
 - d) Coal
50. Wind turbines convert wind energy to
- a) Mechanical energy
 - b) Electrical energy
 - c) Heat energy
 - d) Solar energy
51. Which of the following is a product of pyrolysis of biomass?
- a) Producer gas
 - b) Steel
 - c) Agricultural residue
 - d) Sodium

52. Which of the following are used to produce ethanol when there is water shortage?
- a) Sugarcane
 - b) Wheat
 - c) Corn
 - d) Sorghum
53. Which of the following organic compounds are present in biogas?
- a) Butane gas and carbon dioxide
 - b) Methane gas and carbon dioxide
 - c) Nitrogen
 - d) Sodium
54. The natural residence of every organism is known as
- a) Biome
 - b) Niche
 - c) Habit
 - d) Habitat
55. Shelford's law of tolerance is named after
- a) Arthur Shelford
 - b) Edward Shelford
 - c) Ernest Shelford
 - d) None of these
56. Acid rain is a result of excess amount _____ in the atmosphere
- a) CO_2
 - b) NH_3
 - c) SO_2 and NO_2
 - d) CO
57. A pond is
- a) A biome
 - b) A community of plants and animals
 - c) A natural ecosystem
 - d) None of the above
58. The largest ecosystem in the world is
- a) Forests
 - b) Grasslands
 - c) Great lakes
 - d) Oceans

59. Which one is nature's cleaner?
- a) Consumers
 - b) Producers
 - c) Decomposers and scavengers
 - d) Symbionts
60. Which one of the following is a primary consumer in the rice field ecosystem?
- a) Lion
 - b) Grasshopper
 - c) Wolf
 - d) Phytoplankton
61. What type of pyramid shows the best efficiency of an ecosystem?
- a) Pyramid of number
 - b) Pyramid of biomass
 - c) Pyramid of volume
 - d) Pyramid of energy
62. What is the name of the species that invade a bare area?
- a) Keystone species
 - b) Phylogenetic species
 - c) Pioneer species
 - d) Evolutionary species
63. What is ecological succession on rock?
- a) Psammosere
 - b) Lithosere
 - c) Halosere
 - d) Hydrosere
64. When the government of India did pass the Water (Prevention and Control of Pollution) Act?
- a) 1972
 - b) 1974
 - c) 1982
 - d) 1986
65. What is the excess growth of plankton in water due to the presence of nutrients called?
- a) Fungal bloom
 - b) Algal bloom
 - c) Plantae bloom
 - d) Animal bloom

66. Which of the following is the effect of high BOD?
- a) More aquatic plants
 - b) More fishes
 - c) Higher dissolved oxygen
 - d) Lower dissolved oxygen
67. Which of the following is a waterborne disease?
- a) Typhoid
 - b) Cholera
 - c) Diarrhea
 - d) All of the above
68. Which of the following salts are the main causes of temporary hardness?
- a) Calcium sulphate
 - b) Magnesium sulphate
 - c) Magnesium chloride
 - d) Magnesium carbonate
69. Blue baby syndrome is due to the presence of
- a) Excess sulphate in drinking water
 - b) Excess chlorine in drinking water
 - c) Excess heavy metals in drinking water
 - d) Excess nitrates in drinking water
70. What is the resultant of adding two 70dB noise?
- a) 70 dB
 - b) 72 dB
 - c) 73 dB
 - d) 71 dB
71. 'Silent Spring' a landmark book written by Rachel Carson highlighted the environmental problems due to
- a) Excessive use of pesticides
 - b) Excessive air pollution due to industrial operations and vehicles in cities
 - c) Excessive noise produced by industrial operations and vehicles in cities
 - d) None of the above

72. EIA is a regulatory instrument' tool which
- a) helps in early identification and prevention of impacts
 - b) helps in generating public awareness about environmental issues
 - c) helps in formulating environmental management plan for residual issues
 - d) All of the above
73. Contamination of a confined ground water aquifer is
- a) insignificant and reversible impact
 - b) long term and significant impact
 - c) negative but short-term impact
 - d) None of the above
74. Most stable ecosystem is
- a) Forest
 - b) Desert
 - c) Ocean
 - d) Mountain
75. Who coined the term acid rain?
- a) Otto Wallach
 - b) Herman Emil Fisher
 - c) Ernest Flower
 - d) Robert Angus Smith
76. Chipko movement was started to conserve
- a) Forests
 - b) Wetland
 - c) Deserts
 - d) Ocean
77. Ozone day is observed on
- a) 3rd January
 - b) 16th September
 - c) 10th November
 - d) 26th March

78. COD stands for
- a) Chemical Oxygen Demand
 - b) Carbon and Oxygen Demand
 - c) Climate of Deserts
 - d) None of the above
79. In which year Silent Valley was declared as National Park?
- a) 1981
 - b) 1984
 - c) 1986
 - d) 1990
80. First International Conference on "Wetland Conservation" was held in
- a) Kolkatta
 - b) Ramsar
 - c) Ramsahar
 - d) Stockholm
81. Thickness of ozone layer is measured in
- a) Decibels
 - b) Dobson unit
 - c) Meter
 - d) Armstrong unit
82. Which country has organized its cabinet meeting under the sea to drag attention of the world towards the Global Warming and its threats?
- a) Maldives
 - b) Indonesia
 - c) Switzerland
 - d) Japan
83. Zeolite softening process removes
- a) Permanent hardness
 - b) Temporary hardness
 - c) Both temporary and permanent hardness
 - d) Dissolved gases
84. The cumulative frequency curve is also called
- a) Ogive
 - b) Histogram
 - c) Bar graph
 - d) Median

85. What is the ratio of the sum of observations and the total number of observations called?
- a) Median
 - b) Standard Deviation
 - c) Mean
 - d) Central Tendency
86. The data which have already been collected by someone are called
- a) Primary data
 - b) Fictitious data
 - c) Array data
 - d) Secondary data
87. What is the difference between maximum and minimum values of a given observation called?
- a) Class Interval
 - b) Range
 - c) Class
 - d) Class mark
88. When the organic matter present in the sanitary landfill decomposes, it generates
- a) Methane
 - b) Nitrogen
 - c) Hydrogen
 - d) All of the above
89. The aerobic method of mechanical composting practised in India is called
- a) Indore method
 - b) Surat method
 - c) Bangalore method
 - d) Chennai method
90. An engineered facility for the disposal of municipal solid waste is called
- a) Septic tank
 - b) Sanitary landfills
 - c) Dug wells
 - d) Tandom landfills
91. An active volcano Mauna Loa is located in
- a) Hawaii, USA
 - b) Brazil
 - c) Japan
 - d) None of the above
92. International Tsunami information Center is located in
- a) Honolulu
 - b) Goa
 - c) Jakarta
 - d) Puducherry

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ANSWER SHEET

1	A	B	C	D	E
2	A	B	C	D	E
3	A	B	C	D	E
4	A	B	C	D	E
5	A	B	C	D	E
6	A	B	C	D	E
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95	A	B	C	D	E
96	A	B	C	D	E
97	A	B	C	D	E
98	A	B	C	D	E
99	A	B	C	D	E
100	A	B	C	D	E

ROUGH WORK

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