

P.G. ENTRANCE EXAMINATION, APRIL 2022

ENVIRONMENTAL SCIENCE

Time : Two Hours

Maximum : 400 Marks

*Each question carries 4 marks.
1 mark will be deducted for each wrong answer.*

1. Father of Indian Ecology.
(a) Puri. (b) Misra.
(c) Shukla. (d) Gadgil.
2. Which of the following is the cause of ouch-ouch disease ?
(a) Mercury. (b) Silica.
(c) Cadmium. (d) Lead.
3. Which of the following is a non -recording rain gauge ?
(a) Weighing type rain gauge. (b) Simon's rain gauge.
(c) Tipping bucket type rain gauge. (d) Float type rain gauge.
4. The workers of Asbestos factory may suffer from :
(a) Dysentery. (b) Vomiting.
(c) Lung Cancer. (d) Leukemia.
5. The coldest part of atmosphere is present in :
(a) Mesosphere. (b) Troposphere.
(c) Ionosphere. (d) Exosphere.
6. An example of bacterial disease is :
(a) Cold. (b) Mumps.
(c) Chicken pox. (d) Pertussis.

Turn over

7. The causative agent of Mad Cow disease :
- (a) Bacteria. (b) Prions.
(c) Worms. (d) Virus..
8. According to Darcy's law, yield of ground water is :
- (a) No relation to hydraulic head.
(b) Directly proportional to hydraulic head
(c) Inversely proportional to hydraulic head.
(d) None of these.
9. Which of the following is the first trophic level in the food chain ?
- (a) Green plants. (b) Herbivores.
(c) Carnivores. (d) Decomposers.
10. Which among the following is measured by Dobson unit ?
- (a) Thermal conductivity. (b) Noise level.
(c) Radiation. (d) Ozone concentration.
11. The excess presence of which of the following cause the teeth of children mottled and discoloured :
- (a) Fluorides. (b) Chlorides.
(c) Hardness. (d) All of the above.
12. The major pollutant from automobile exhaust is :
- (a) NO. (b) CO.
(c) SO₂. (d) Soot.
13. Intellectual Property Rights (IPR) protect the use of information and ideas that are of :
- (a) Ethical value. (b) Moral value.
(c) Social value. (d) Commercial value.
14. What is called the biodiversity of habitat ?
- (a) Gamma diversity. (b) Beta diversity.
(c) Alpha diversity. (d) Delta diversity.

15. GPS means :
- (a) Global Projecting System. (b) Global Positioning System.
(c) Global Processing System. (d) Global Parsing System.
16. Indian Forest Act was passed in :
- (a) 1984. (b) 1948.
(c) 1934. (d) 1927.
17. Which is the only drive -in beach in Kerala ?
- (a) Muzhuppilangad. (b) Cherai.
(c) Kovalam. (d) Bakel.
18. The use of microorganism metabolism to remove pollutants such as oil spills in the water bodies is called :
- (a) Bioaccumulation. (b) Bioremediation.
(c) Bioreduction. (d) Biomethanation.
19. The place of which Eastern Ghats and Western Ghats meet together is known as :
- (a) Karnataka. (b) Mumbai.
(c) Kanyakumari. (d) Orissa.
20. For which of the following reason, it is necessary to secure a large area of the forest ?
- (a) Ecological balance. (b) To gets more rain.
(c) Conservation of wildlife. (d) Absorption of carbon dioxide.
21. Earth's democracy; Justice, Sustainability and Peace is written by :
- (a) Vandana Shiva. (b) Anil Agarwal.
(c) Allen Schanaiberg. (d) Ulrich Beck.
22. Which one is the secondary pollutant ?
- (a) CO_2 . (b) CO .
(c) SO_2 . (d) O_3 .

23. Which of the following pose threat to the historical monument Taj ?
- (a) Floods in Yanuna River.
 - (b) Temperature mediated spoilage of marble.
 - (c) Air pollutants from Mathura Refinery.
 - (d) Weathering of marble.
24. Agenda-21 refers to :
- (a) UN Secretary General's Report to the Security Council.
 - (b) Rio Earth Summit's document.
 - (c) Charter of Demands of the Developing countries.
 - (d) India's modernization program to usher in the 21st century.
25. The pollutant that reduces the oxygen carrying capacity of blood is :
- (a) Lead.
 - (b) CO.
 - (c) As.
 - (d) Cd.
26. pH meter measures _____.
- (a) H ions activity.
 - (b) H ions concentration.
 - (c) H_2CO_3 .
 - (d) All the above.
27. Montreal protocol aims at controlling the production and consumption of :
- (a) Oxygen Depleting Substance.
 - (b) Water Depleting Substance.
 - (c) Ozone Depleting Substance.
 - (d) Hydrogen Depleting Substance.
28. Which of the following reacts with haemoglobin of the blood and produce toxic effect ?
- (a) CO_2 .
 - (b) CO.
 - (c) O_3 .
 - (d) SO_2 .
29. 'Smog' is a mixture of :
- (a) Smoke and Fog.
 - (b) Snow and Fog.
 - (c) Snow and Dust.
 - (d) Sulphur Dioxide and Fog.

30. _____% of earth's surface is covered by land.
- (a) 25.50%. (b) 28.15%.
(c) 25.16%. (d) 29%.
31. Tuberculosis (TB) is an example of :
- (a) Pandemic.
(b) Prodemie.
(c) Endemic.
(d) Epidemic..
32. Chipco movement is a public agitation that occurred in :
- (a) Mansbal area in Kashmir. (b) Silent valley in Kerala.
(c) Sundarban area in Bengal. (d) Tehri Garhwal area of Uttar Pradesh.
33. The organisms of different species, living in a habitat are called as :
- (a) Community. (b) Family.
(c) Ecosystem. (d) Population.
34. Mosquito larvae and pupae can be exterminated through small fish like :
- (a) Gold Fish. (b) Guppies.
(c) Tubifax Worms. (d) Seahorse.
35. The first tidal energy station was built in :
- (a) France. (b) Spain.
(c) Portugal. (d) Denmark.
36. Climate change conference, COP26 was held at :
- (a) Canada. (b) Sweden.
(c) Paris. (d) Glasgow.
37. Free swimming aquatic animals are called :
- (a) Benthos. (b) Nekton.
(c) Microbes. (d) Phytoplankton.

38. A famous environmentalist and lawyer :
- (a) Jahangir Baba. (b) Anna Hazare.
(c) M.C. Mehta. (d) Madhav Gadgil.
39. An organism that can monitor air pollution :
- (a) Lichens. (b) Algae.
(c) Fungi. (d) Bacteria.
40. In our country the Vana Mahotsav Day is observed on :
- (a) Second of October. (b) First of December.
(c) Tenth of August. (d) First of July.
41. Quinine is extracted from :
- (a) Eucalyptus plant. (b) Aconite plant.
(c) Cinchona plant. (d) Money plant.
42. Which of the following is not an air pollutant ?
- (a) Smoke. (b) Carbon Dioxide.
(c) Nitrogen Gas. (d) Sulphur Dioxide.
43. An exotic plant.
- (a) Nelumbo. (b) Eichhornia.
(c) Mangifera. (d) Azadirachta.
44. The polluting strength of sewage is usually characterized by its :
- (a) BOD. (b) Nitrogen content.
(c) Organic Carbon. (d) Eutrophication.
45. In context of the environment, the term "dirty dozen" refers to :
- (a) Most harmful greenhouse gases.
(b) Ozone depleting substance.
(c) Persistent organic pollutants.
(d) None of the above.

46. *Lantana* is :
- (a) A toxic weed.
 - (b) An exotic species.
 - (c) An endemic species.
 - (d) An edible plant.
47. The major contributor of Carbon monoxide is :
- (a) Domestic sector.
 - (b) Stationary fuel combustion.
 - (c) Industries.
 - (d) Motor vehicles.
48. The head quarters of IUCN :
- (a) Newyork, USA.
 - (b) Paris, France.
 - (c) Vienna, Austria.
 - (d) Morges, Switzerland.
49. The type of diversity, including all the different kinds of living things found in a certain habitat is called as :
- (a) Species diversity.
 - (b) Genetic diversity.
 - (c) Ecosystem diversity.
 - (d) Population diversity.
50. A taxon with restricted geographical distribution is termed as.
- (a) Rare.
 - (b) Vulnerable.
 - (c) Extinct.
 - (d) Endemic.
51. Biodiversity :
- (a) Decreases towards the equator.
 - (b) Increases towards the equator.
 - (c) Remains the same throughout the planet.
 - (d) Has no effect on the change in latitude.
52. IUCN is also called as :
- (a) Worldwide conservation consortium.
 - (b) Worldwide conservation union.
 - (c) World conservation union.
 - (d) World conservation consortium.

53. The slow rate of decomposition of fallen logs in nature is due to their :
- (a) Poor nitrogen content. (b) Low moisture content.
(c) Low cellulose content. (d) Anaerobic environment around them.
54. Ethanol is commercially produced through a particular species of :
- (a) *Aspergillus*. (b) *Saccharomyces*.
(c) *Clostridium*. (d) *Trichoderma*.
55. When the two ecosystems overlap each other, the area is called ?
- (a) Habitat. (b) Niche.
(c) Ecotone. (d) Ecotype.
56. Concept of ecological pyramids was proposed by :
- (a) Odum. (b) Clements.
(c) Tansley. (d) Charles Elton.
57. Identify the algae known for a biological activity called bioluminescence.
- (a) *Spirogyra*. (b) *Noctiluca*.
(c) *Cyclotella*. (d) *Chlorella*.
58. Which one of the following plant is monoecious ?
- (a) *Pinus*. (b) *Marchantia*.
(c) *Papaya*. (d) *Cycas*.
59. "Complete competitors cannot coexist" is true for :
- (a) Primary succession. (b) Secondary succession.
(c) Competitive exclusion. (d) Character displacement.
60. In an aquatic ecosystem, the trophic level equivalent to cows in grasslands is :
- (a) Nekton. (b) Zooplankton.
(c) Phytoplankton. (d) Benthos.
61. Lichens can be used as :
- (a) Source of wood. (b) Initial vegetation for waste lands.
(c) To check the air pollution. (d) Bio-indicator for water and air pollution.

62. Identify the correctly matched pair :

- (a) Basal Convention - Biodiversity Conservation.
- (b) Montreal Protocol - Global warming.
- (c) Kyoto protocol - Climatic change.
- (d) Ramsar Convention - Ground water pollution.

63. Digestive processes of plants and animals :

- (a) Cannot be matched.
- (b) Are very similar.
- (c) Greatly vary.
- (d) Are alike due to similar digestive systems.

64. Lime is added to the soil which is too :

- (a) Sandy.
- (b) Salty.
- (c) Alkaline.
- (d) Acidic.

65. The least porous soil among the following is :

- (a) Loamy soil.
- (b) Silty soil.
- (c) Clay soil.
- (d) Peaty soil.

66. The percentage of forest cover recommended by the National Forest policy (1988) is :

- (a) 33% for plains and 67% for hills.
- (b) 37% for plains and 63% for hills.
- (c) 20% for plains and 70% for hills.
- (d) 23% for plains and 77% for hills.

67. Darwin's finches are a good example of :

- (a) Convergent evolution.
- (b) Industrial melanism
- (c) Connecting link.
- (d) Adaptive radiation.

Turn over

68. Which one of the following has maximum genetic diversity in India ?
- (a) Tea. (b) Teak.
(c) Mango. (d) Wheat.
69. Which one of the following is not a gaseous biogeochemical cycle in ecosystem ?
- (a) Nitrogen cycle. (b) Carbon cycle
(c) Oxygen cycle. (d) Phosphorus cycle.
70. A naturally occurring substance that has a definite chemical composition is a :
- (a) Mineral. (b) Compound.
(c) Metal. (d) Rock.
71. Give an example of Biosphere Reserve of India.
- (a) Corbett Park. (b) Kawal.
(c) Pachmari. (d) Guindy.
72. Superbugs are :
- (a) Mycoplasma. (b) Bacteria.
(c) Virus. (d) Prions.
73. Blue Whale is placed under :
- (a) Endangered. (b) Vulnerable.
(c) Rare. (d) Extinct.
74. The district of Kerala which does not have forest :
- (a) Kasargode. (b) Kochi.
(c) Malappuram. (d) Alappuzha.
75. MAB stands for :
- (a) Man and Biosphere. (b) Man and Biology.
(c) Man and Biotechnology. (d) Man and Biofertilizers.
76. Sacred groves are examples of :
- (a) In-situ conservation. (b) In-vivo conservation.
(c) Ex-situ conservation. (d) Ex-vivo conservation.

77. Algal bloom results in :
- (a) Siltation. (b) Salination.
(c) Sedimentation. (d) Eutrophication.
78. Indira Gandhi had stated in the _____ Conference in 1972 that poverty is the greatest polluter.
- (a) Paris. (b) SAARC.
(c) Stockholm. (d) Vienna.
79. The movement 'Pani Panjayath' was initiated by :
- (a) Misra. (b) Sambaji.
(c) Gauridevi. (d) Vilasrao Salunke.
80. In 1991, Honourable Supreme Court of India issued a directive to :
- (a) Ban endosulphan.
(b) Prevent noise pollution.
(c) Prevent atmospheric pollution.
(d) Make all curricula environment oriented.
81. Ramsar Convention 1971 for the conservation of wetlands was held at :
- (a) Italy. (b) Iraq.
(c) Iran. (d) India
82. Apiko movement was in :
- (a) Rajasthan. (b) Maharashtra.
(c) Andrapradesh. (d) Kamataka.
83. An imaginary line drawn along the earth from North Pole to South Pole, which divide the globe into Eastern Hemisphere and Southern Hemisphere is known as :
- (a) Equator.
(b) Prime Meridian.
(c) Latitude.
(d) Longitude.

Turn over

84. What is the hazardous pollutant released from circuit board ?

- (a) Cadmium.
- (b) Lead.
- (c) Arsenic.
- (d) Mercury.

85. Flag ship species of Choolannur sanctuary.

- (a) Tiger.
- (b) Peacock.
- (c) Elephant.
- (d) Rhino.

86. Nitrogen fixing blue green algae.

- (a) Clostridium.
- (b) Rhizobium.
- (c) Nostoc.
- (d) Nitrosomonas.

87. First Biosphere reserve of India.

- (a) Agasthyamalai.
- (b) Great Nicobar.
- (c) Sunder bans.
- (d) Nilgiri.

88. The Wildlife (Protection) Act was passed in the year.

- (a) 1983.
- (b) 1987.
- (c) 1972.
- (d) 1984.

95. Isohyets are the imaginary lines joining the points of equal :
- (a) Pressure.
 - (b) Rainfall.
 - (c) Humidity.
 - (d) Height.
96. The instrument used for measuring evaporation is :
- (a) Atmometer.
 - (b) Hygrometer.
 - (c) Lysimeter.
 - (d) Anemometer.
97. The Rainfall intensity of light rain is :
- (a) 3mm/Hr.
 - (b) 2.5mm/Hr.
 - (c) 5mm/Hr.
 - (d) 7.5mm/Hr
98. The World Wetland day is :
- (a) June-11.
 - (b) August-6
 - (c) February-2.
 - (d) July -1
99. The World oceans day is :
- (a) June-8.
 - (b) September-28.
 - (c) September-16.
 - (d) December-1.
100. The term Green revolution was coined by :
- (a) William Gaud.
 - (b) M.S.Swaminathan.
 - (c) Norman Borlaugh.
 - (d) Henry Wallace.