

1. According to the National Forest Policy of India, 1988, _____ of land area should be under forest and trees.
 - (A) 35%
 - (B) 45%
 - ☒ (C) 33%
 - (D) 23%
2. Which landform does wind erosion create?
 - ☒ (A) Mushroom rock
 - (B) Erratics
 - (C) Moraine
 - (D) Ripple
3. Which of the following technologies involves heating waste in the absence of oxygen?
 - (A) Incineration
 - ☒ (B) Pyrolysis
 - (C) Composting
 - (D) Sublimation
4. _____ is an example of a depositional landform.
 - (A) Gorge
 - (B) Delta
 - (C) Cliff
 - ☒ (D) Canyon
5. A brownish-gray haze caused by the action of solar ultraviolet radiation on atmosphere polluted with hydrocarbons and oxides of nitrogen is
 - (A) water vapor
 - (B) smog
 - (C) photochemical smog
 - ☒ (D) All of the above
6. Eutrophication means
 - ☒ (A) thermal change in water
 - (B) filling up of water body with aquatic plant life due to extra nourishment
 - ☒ (C) solid waste
 - (D) None of the above
7. The thickness of crust on the ocean floor is about
 - ☒ (A) 5 km-10 km
 - (B) 15 km-20 km
 - (C) 25 km-30 km
 - (D) 35 km-40 km

8. The oceanic crust is known as

(A) SIMA because it is rich in silica (Si) and magnesium (Mg)

(B) NIFE because it is rich in nickel (Ni) and iron (Fe)

(C) SINI because it is rich in silica (Si) and nickel (Ni)

(D) SIAL because it is rich in silica (Si) and aluminum (Al)

9. Available resources that are not being tapped fully for now are called

(A) actual resources

(B) man-made resources

(C) potential resources

(D) biotic resources

10. The ratio of mass of water vapor to mass of air indicates

(A) absolute humidity

(B) specific humidity

(C) relative humidity

(D) approximate humidity

11. Organisms with a wide tolerance of environmental factors exhibit

(A) narrow distribution, low population

(B) wide distribution, high population

(C) narrow distribution, high population

(D) wide distribution, low population

12. The unit for the coefficient of permeability is expressed as

(A) metre per second (m/s)

(B) centimetre per second (cm/s)

(C) metre per day (m/day)

(D) All of the above

13. The Carboniferous period is defined as a geologic period characterized by

(A) significant recovery

(B) development of extensive forests

(C) emergence of reptiles and flying organisms

(D) All of the above

14. The law of flow of water through the soil was first studied and formulated by

(A) Vasily Dokuchaev

(B) Henry Darcy

(C) Rattan Lal

(D) Vera Baltz

15. _____ is the central chemical element in the chlorophyll molecule.

- (A) Magnesium ✓
- (B) Potassium
- (C) Zinc
- (D) Manganese

16. Which of the following popularizes the concept of 'sustainable development'?

- (A) The Rio Declaration
- (B) The Kyoto Protocol
- (C) The Brundtland Report
- (D) The Paris Agreement ✓

17. Choose the correct statement about CITES (1973).

- (A) It regulates trade in endangered species of wild fauna and flora. ✓
- (B) It protects the wildlife corridors.
- (C) It monitors the behavior of wild animals.
- (D) It controls the population size of wild animals.

18. Which among the following is a suitable soil type for growing almost all kinds of crops?

- (A) Black soil
- (B) Mountain soil
- (C) Alluvial soil ✓
- (D) Lateritic soil

19. Which technique is commonly used to assess land cover and land use?

- (A) Remote sensing and GIS ✓
- (B) Field sampling
- (C) Interviews with local communities
- (D) Map analysis

20. The gas having the highest contribution to the greenhouse effect is

- (A) carbon dioxide (CO_2) ✓
- (B) methane (CH_4)
- (C) nitrous oxide (N_2O)
- (D) ozone (O_3)

21. In Atomic Absorption Spectroscopy (AAS), atoms absorb radiation when they are in

- (A) excited state
- (B) ionized state ✓
- (C) ground state ✓
- (D) plasma state ✓

22. Which gas among the following was leaked during the Bhopal Gas Tragedy in 1984?

- (A) Methyl isocyanide
- (B) Methyl isocyanate
- (C) Methyl isochloride ✓
- (D) None of the above

23. Which of the following is the correct sequence of IUCN threat categories (from highest risk to lowest)?

- ☒ (A) Endangered → Vulnerable → Critically endangered
- ☒ (B) Critically endangered → Endangered → Vulnerable
- ☐ (C) Vulnerable → Critically endangered → Endangered
- ☐ (D) Endangered → Critically endangered → Vulnerable

24. The main reason for lower temperatures at higher altitudes is

- ☐ (A) greater distance from the sun
- ☒ (B) reduced absorption of heat due to thinner air
- ☐ (C) the presence of glaciers
- ☐ (D) high cloud cover

25. When were the Sustainable Development Goals (SDGs) adopted, and which year is set as the target for achieving these goals?

- ☐ (A) 2000 and 2025
- ☐ (B) 2020 and 2050
- ☐ (C) 2018 and 2040
- ☒ (D) 2015 and 2030

26. The substance derived from the primary pollutants in chemical reactions is called

- ☐ (A) contaminant
- ☒ (B) secondary pollutant
- ☐ (C) major pollutant
- ☐ (D) tertiary pollutant

27. The heavy metal primarily associated with Itai-itai disease is

- ☒ (A) cadmium
- ☐ (B) lead
- ☐ (C) arsenic
- ☐ (D) mercury

28. Footprint most commonly used to evaluate an individual's contribution to climate change is

- ☐ (A) water footprint
- ☒ (B) carbon footprint
- ☐ (C) land footprint
- ☐ (D) biodiversity footprint

29. The main pollutant responsible for acid rain is

- ☐ (A) carbon dioxide (CO_2)
- ☒ (B) sulphur dioxide (SO_2)
- ☐ (C) methane (CH_4)
- ☐ (D) nitrous oxide (N_2O)

30. The Paris Agreement deals with

- ☐ (A) ozone layer protection and phasing out ozone depleting substances
- ☐ (B) safe disposal and control of hazardous waste
- ☒ (C) greenhouse gas emissions reduction and enhance their resilience to climate change impacts
- ☐ (D) desertification control and conservation

31. When the Environmental Lapse Rate (ELR) is greater than the Adiabatic Lapse Rate (ALR), then which of the following occurs?

- (A) Unstable atmosphere
- (B) Stable atmosphere
- (C) Pleasant weather condition
- (D) None of the above

32. The first zone of purification in a sand bed is

- (A) heterotrophic zone ✓
- (B) Schmutzdecke zone
- (C) electrolytic zone ✓
- (D) autotrophic zone ✓

33. The country with highest bio-capacity reserve in 2024 is

- (A) USA ✓
- (B) Brazil ✓
- (C) China ✓
- (D) India ✓

34. According to the National Oceanic and Atmospheric Administration (NOAA), the range of total human-caused global surface temperature increase from 1850–1900 to 2010–2019 is

- (A) 0.8 °C to 1.3 °C
- (B) 0.5 °C to 1.0 °C ✓
- (C) 1.2 °C to 1.5 °C
- (D) None of the above

35. Algal bloom results in

- (A) global warming
- (B) eutrophication
- (C) salinization
- (D) biomagnification

36. The Hargila Army in Assam is associated with conservation of

- (A) Greater Adjutant Stork
- (B) Lesser Adjutant Stork
- (C) Marabou Stork
- (D) None of the above

37. Which of the following is true about latitude and temperature?

- (A) Temperature increases with increasing latitude
- ✓ (B) Temperature decreases with increasing latitude
- ✗ (C) Latitude has no effect on temperature
- ✗ (D) Latitude affects only rainfall, not temperature

38. The concept of Environmental Impact Assessment (EIA) in India was formally introduced through

- (A) the Environment (Protection) Act, 1986
- (B) the National Green Tribunal Act, 2010
- (C) a notification of the Government of India under the Environmental Protection Act, 1994 ✓
- (D) the Wildlife Protection Act, 1972

39. The Ramsar Convention (1971) is related to the conservation of

- (A) deserts
- (B) forests
- (C) grasslands
- (D) wetlands

40. Epiphytes, including orchids, acquire water from

- (A) drizzle
- (B) soil moisture
- (C) moisture from the atmosphere and tree bark
- (D) rainfall

41. 'Fecal snow' is the characteristic of

- (A) São Paulo
- (B) Mexico City
- (C) Karachi ✓
- (D) Rio de Janeiro ✓

42. The Cartagena Protocol deals with

- (A) biosafety ✓
- (B) institutional participation ✓
- (C) benefit sharing ✓
- (D) carbon pool ✓

43. The Hailey National Park established in India in 1936 is now known as

- (A) Dudhwa National Park
- (B) Rajaji National Park
- (C) Jim Corbett National Park
- (D) Kaziranga National Park

44. Group of essential non-metallic minerals includes

- (A) coal, silica, clay
- ✓ (B) iron, copper, aluminum, zinc
- ✓ (C) granite, limestone, marble
- ✗ (D) gold, platinum, silver

45. The atmospheric pressure at sea level is

- (A) 101.325 kPa
- (B) 14.696 psi
- (C) 760 torr
- (D) All of the above

46. The average salinity of earth's oceans is about _____ of salt per kilogram of seawater.

- (A) 34.7 grams
- (B) 55 grams
- (C) 75.6 grams
- (D) 95 grams

47. In thermodynamics, heat flows into a system is taken to be positive, and heat flows out of the system is taken as _____.

- (A) positive, positive
- ~~(B) negative, negative~~
- (C) negative, positive
- (D) positive, negative

48. A farmer who uses excessive amount of pesticides observed a decline in the bird population in his fields. This decline is likely due to

- (A) biodilution
- ~~(B) biomagnification~~
- (C) bioseston
- ~~(D) biodegradation~~

49. The global impact of utilizing chlorofluorocarbons (CFCs) in refrigerators and air conditioners is

- (A) more rainfall
- (B) ozone layer depletion
- (C) noise pollution
- (D) soil infertility

50. The major pollutant in vehicle exhaust is

- (A) ozone
- ~~(B) carbon monoxide~~
- (C) sulphur
- (D) nitrogen

51. Standing dead or dying tree is called

(A) snag

(B) litter

(C) dry biomass

(D) biochar

52. Zoonotic diseases are those that

(A) affect only humans

(B) spread only through water

(C) are caused by air pollutants

(D) spread from animals to humans

53. The 'State of the World's Forests' and the 'State of Food Security and Nutrition in the World' Reports are published by

(A) WHO

(B) UNEP

(C) FAO

(D) UNESCO

54. Wangari Maathai, who won the Nobel Peace Prize in 2004, is renowned for

(A) the Anti-nuclear Campaign

(B) the Appiko Movement

(C) the Green Belt Movement in Kenya

(D) the Silent Valley Movement

55. Rachel Carson, the author of *Silent Spring* (1962), highlighted the detrimental effects of

(A) plastic pollution in oceans

(B) deforestation of tropical forest

(C) carcinogen

(D) pesticides (DDT)

56. _____ monitors and gives global alerts on disease outbreaks linked with climate change.

(A) IUCN

(B) WHO

(C) UNEP

(D) IPCC

57. Tsunamis are usually caused by
- (A) earthquakes in oceanic regions
 - (B) volcanic eruptions on land
 - (C) landslides in mountains
 - (D) glacial melting

58. Focal point within the earth where an earthquake originates is known as

- (A) epicenter
- ~~(B) fault line~~
- (C) hypocenter
- ~~(D) focal depth~~



59. Environmental impacts associated with the construction of high-rise dams include

- ☒ (A) flooding along downstream
- ☒ (B) deforestation and loss of biodiversity
- ☒ (C) loss of livelihood and displacement of human settlement
- (D) All of the above

60. A cool breeze after a hot day brings all of us considerable relief. This breeze is actually the moving air. The basic process that causes this movement of air is

- ☒ (A) elevation difference between the two regions
- ~~(B) moving leaves of the plants~~
- ~~(C) temperature difference between the two regions~~
- ~~(D) striking of air with the mountains~~

61. _____ is often cited as an umbrella species in India.

- (A) House sparrow
- (B) Tiger
- (C) Peacock
- (D) Cobra

62. Which of the following is **not** a step in the EIA process?

- ~~(A) Mitigation~~
- (B) Adaptation
- ~~(C) Screening~~
- ~~(D) Scoping~~

63. The air pollutant most harmful for lichens is

- (A) SO_2 ✓
- (B) CO_2 ✓
- (C) NO_2 ✓
- (D) peroxyacetyl nitrate (PAN)

64. The '10% law' of energy transfer between trophic levels in an ecosystem was proposed by

- (A) Charles Elton
- (B) Raymond Lindeman
- ☒ (C) Eugene Pleasants Odum
- (D) Arthur George Tansley

65. The _____ Normalized Differential Vegetation Index (NDVI) or the ☒ Enhanced Vegetation Index (EVI) are derived from remote sensing data and are correlated with

- (A) biomass and productivity
- ☒ (B) respiration and photosynthesis
- ☒ (C) energy flow and nutrient uptake
- (D) girth and height of trees

66. A method that employs the analysis of DNA sequences from a specific genomic region unique to each species is known as

- (A) FTR barcoding
- (B) metabarcoding
- (C) DNA barcoding ✓
- (D) fusion barcoding

67. Which among the following is the deadliest tsunami in history?

- (A) Atlantic Ocean earthquake in Portugal, Lisbon
- (B) Indian Ocean earthquake in Indonesian Islands of Sumatra
- (C) Indian Ocean earthquake in Indonesia, Karkatoa
- (D) Pacific Ocean earthquake in Japan, Enshunada Sea

68. _____ is regarded as the father of Green Revolution in India.

- (A) Sunderlal Bahuguna
- (B) Medha Patkar
- (C) M. C. Mehta
- (D) M. S. Swaminathan

69. Which plant is semi-autotrophic and semi-heterotrophic in nature?

- (A) Asplenium
- (B) Utricularia ✓
- (C) Adiantum
- (D) Marchantia

70. _____ are good indicators of air pollution.

- (A) Fungi
- (B) Mosses
- (C) Orchids
- (D) Lichens

71. The climatic conditions that are most conducive for the formation of calcite and/or halite in a soil are

- (A) high precipitation-low temperature
- (B) high precipitation-high temperature
- (C) high precipitation-moderate temperature ✓
- (D) low precipitation-high temperature ✓

72. The 'Red Data Book' contains data of

- (A) all plant species
- (B) all animal species
- (C) threatened species
- (D) economically important species

73. Which factor explains that in general temperate and polar regions have less biodiversity than tropical regions?

- (A) The polar regions were populated earliest in the history of earth ✓
- (B) The tropical regions contain more microecosystems
- (C) The polar regions receive more intense solar energy ✓
- (D) The tropical regions are subjected to extreme changes of season

74. The Ozone Day is observed on

- (A) 3rd January
- (B) 16th September
- (C) 10th November
- (D) 26th March

75. In the 2025 SDG Index released by the United Nations Development Programme (UNDP), among 167 countries, India is placed at _____ position.

- (A) 105th
- (B) 95th
- (C) 87th
- (D) 99th

76. Ethanol is an alcohol used as a blending agent with gasoline to increase octane and cut down

- (A) carbon monoxide emissions
- (B) nitrogen oxide emissions
- (C) Both (A) and (B)
- (D) None of the above

77. _____ is known as a beta-hydroxy acid (BHA).

- (A) Oxyacid
- (B) Carbonic acid
- (C) Salicylic acid
- (D) Carboxylic acid

78. 'Ecological footprint' in human ecology refers to

- (A) physical space that humans occupy
- (B) the impacts of human activities and lifestyle on earth's ecosystems
- (C) pollution levels in urban cities
- (D) erosion of traditional wisdom in human populations

79. Under the EIA Notification, 2006, projects are categorized into Category A and Category B primarily on the basis of

- (A) financial investment and involvement of skilled manpower
- (B) richness of biodiversity and its possible levels of threats
- (C) project size, capacity and environmental sensitivity of location
- (D) international environmental treaties

80. The difference in vegetation on north-and south-facing slopes in the Northern Hemisphere is mainly due to the variation in

- (A) soil type
- (B) slope steepness
- (C) the amount of sunlight received
- (D) annual rainfall pattern

81. Which term describes both an organism's physical space and its functional role within the community?

- (A) Home range
- (B) Habitat
- (C) Ecological niche
- (D) Ecotone

82. Eichhornia, widely used to treat eutrophic water, domestic sewage and industrial wastewater due to its extensive root system, strong reproductive capacity and excellent tolerance to polluted growth conditions and environment, is

- (A) saprotroph
- (B) aquatic plant
- (C) parasitic plant
- (D) bacterium

BOD = 8
DO = 2

83. High levels of microbial pollution and presence of significant organic matter in water indicate

- (A) high Biochemical Oxygen Demand (BOD)
- (B) low Biochemical Oxygen Demand (BOD)
- (C) high Dissolved Oxygen (DO)
- (D) low Dissolved Oxygen (DO)

84. Which of the following elements is considered a micronutrient for plants?

- (A) Nitrogen ✓
- (B) Potassium ✓
- (C) Calcium ✓
- (D) Manganese

85. The process of removing pollutants through biological treatment can be done by

- (A) lichens
- (B) phytoplankton
- (C) algae
- (D) Both (B) and (C)

86. Detritus food chain starts from

- (A) green plants
- (B) grass
- (C) dead organic matter
- (D) phytoplankton

BOD = 8
DO = 2
good

87. Pollination that occurs through wind is known as

- (A) ornithophily
- (B) anemophily
- (C) entomophily ✓
- (D) geitonogamy ✓

88. DNA replication in prokaryotes and eukaryotes occurs in

- (A) ribosomes and chromosomes
- (B) nucleus and cytoplasm
- (C) nucleoid and cytoplasm
- (D) cytoplasm and nucleus

89. A measure of the variety and abundance of species within a single, specific ecological unit or local site, like a pond or a patch of forest, is known as

- (A) genetic diversity
- (B) species diversity
- (C) alpha diversity
- (D) beta diversity

90. Why is ice (solid water) less dense than liquid water and floats?

- (A) Due to the weakening of hydrogen bonds between water molecules
- (B) Due to the formation of crystalline hydrogen bond structure
- (C) Due to the formation of the open oxygen-bonded structure
- (D) Due to thermal expansion and the breaking of hydrogen bond's balance

91. The concentration (in ppm) of nitrogen present in the atmosphere is

- (A) 780840
- (B) 390420
- (C) 78084
- (D) 900000

92. With the help of ____, SO_2 can be removed from industrial exhaust.

- (A) electrostatic precipitators
- (B) solvents
- (C) scrubber
- (D) None of the above

93. Particulate matter has been found to cause harm to human health with respect to their size and the size that causes greatest harm to human health measures

- (A) more than 3.5 micrometer
- (B) more than 2.5 micrometer
- (C) 2.5 micrometer or less in diameter
- (D) less than 3.5 micrometer

94. ____ is a catalyst that is fitted into filters in order to reduce emission of poisonous gases.

- (A) Selenium
- (B) Rhodium
- (C) Magnesium
- (D) Manganese

95. Atmospheric air temperature decreases with increasing altitude because

☒ (A) air density increases with altitude

☐ (B) air pressure decreases with altitude *low pressure, high temp*

☐ (C) air circulation decreases with altitude

☐ (D) air temperature increases with altitude

96. According to international convention, the line that marks the outermost boundary of the earth's atmosphere is

(A) Space line

(B) Boundary line

☒ (C) Kármán line

(D) Astronaut line

97. A glacier is considered 'in balance' when the amount of snow that falls and accumulates at its surface (the accumulation zone) is equal to

(A) the amount of ice lost through calving and melting

(B) the amount of ice lost through evaporation

☒ (C) Both (A) and (B)

(D) None of the above

98. An equatorial west to east remote sensing satellite orbiting the earth at an altitude of 36000 km is called

(A) Sun-synchronous satellite

☒ (B) Geostationary satellite

(C) Space shuttle

(D) Stereo imager

99. The Montreal Protocol was made effective from

(A) 1976

(B) 1986

☒ (C) 1987

(D) 1989

100. During the process of heat transfer in solids, liquids and gases, hotter and energetic molecules collide with cooler and less energetic molecules, transferring thermal energy through a chain reaction. This direct contact and energy transfer between particles without the movement of the medium itself is

☒ (A) conduction

(B) convection

(C) scattering

(D) radiation