

**QUESTION BANK****MODULE 1**

1. Which of the following statements define Environmental Engineering?
  - a) Information on environment
  - b) Waste disposal
  - c) Pollution control of various kinds
  - d) All of the mentioned**Answer: d) All of the mentioned**
2. Which of the following is a renewable source of energy?
  - a) Ocean currents
  - b) Solar energy
  - c) Biomass
  - d) All of the above**Answer: d) All of the above**
3. What is the estimated percentage of forest land that India should ideally have?
  - a) 15%
  - b) 50%
  - c) 44%
  - d) 33%**Answer: (d) 33%**
4. An extensive number of chains interlinked in an ecosystem form a \_\_\_\_\_ together.
  - a) Food chain
  - b) Food web
  - c) Carbon cycle
  - d) Nitrogen cycle**Answer: (b) Food web**
5. Which one of these does NOT refer to the direct use of forest products?
  - a) Grass for grazing
  - b) Gums and resins
  - c) Medicine
  - d) Bamboo for baskets**Answer: (b) Gums and resins**
6. Name the day that is celebrated as the World Environment Day.
  - a) June 5th
  - b) June 6th
  - c) June 8th
  - d) June 10<sup>th</sup>**Answer: a. June 5th**
7. What's the reason behind the blue color of the sky?
  - a) The water vapor is present
  - b) The sunlight gets scattered due to the air molecules

- c) The blue light gets absorbed by the air
- d) The blue light is emitted through the atmosphere

**Answer: b. The sunlight gets scattered due to the air molecules**

8. Environmental science is defined by which of the following statements?
- a) study of the interactions between the environment's and humans only
  - b) study of the interactions between the environment's and physical components
  - c) study of the interactions between the environment's and chemical component
  - d) study of the interactions between the environment's physical, chemical, and biological components

**Answer: d) study of the interactions between the environment's physical, chemical, and biological components**

9. Which of the following is a non-renewable energy source?
- a) Solar power
  - b) Wind power
  - c) Natural gas
  - d) Biomass

**Answer: C) Natural gas**

10. What does the term "biodiversity" refer to \_\_\_\_
- a) The variety of life forms in a given area
  - b) The number of endangered species
  - c) The rate of species extinction
  - d) The spread of invasive species

**Answer: A) The variety of life forms in a given area**

11. What does the global environment consists of \_\_\_\_
- a) Atmosphere
  - b) Hydrosphere
  - c) Biosphere
  - d) All of the above

**Answer: d) All of the above**

12. What are the physical hazards to the environment?
- a) Radioactive and UV radiation
  - b) Pesticides and heavy metals
  - c) Bacteria and viruses
  - d) None of the above

**Answer: a) Radioactive and UV radiation**

13. Plants utilize solar energy and make their own food through \_\_\_\_
- a) Wind energy
  - b) Fossil Fuels
  - c) Hydro power
  - d) Photosynthesis

**Answer: d) Photosynthesis**

14. Photosynthesis is a process by which green plants turn \_\_\_\_\_ into food using energy from sunlight.

- a) Carbon-dioxide and water
- b) Hydrogen Sulphide
- c) NO<sub>2</sub>
- d) Water

**Answer: a) Carbon-dioxide and water**

15. \_\_\_\_\_ is the power that is generated from moving water such as river.

- a) Electric charge
- b) Hydro power
- c) Bio-gas
- d) None of the above

**Answer: b) Hydro power**

16. Which of the following are the fossil fuels?

- a) Coal
- b) Natural gas
- c) Petroleum
- d) All of the above

**Answer: d) All of the above**

17. Abiotic components of an ecosystem includes \_\_\_\_\_

- a) Producers
- b) Living organisms
- c) Organic components
- d) None of the above

**Answer: c) Organic components**

18. The biotic components of an ecosystem includes \_\_\_\_\_

- a) Living organisms
- b) Organic components
- c) Consumers
- d) None of the above

**Answer: a) Living organisms**

19. Biotic components is classified into \_\_\_\_

- a) Producers
- b) Consumers
- c) Decomposers
- d) All of the above

**Answer: d) All of the above**

20. The primary class of the consumers is called \_\_\_\_

- a) Herbivore
- b) Carnivore
- c) Tertiary
- d) Omnivores

**Answer: a) Herbivore**

21. Gross primary productivity (GPP) is called \_\_\_\_

- a) Organic matter synthesized per unit time

- b) Organic matter synthesized per unit area
- c) Rate of increase in body weight plus loss through respiration, grazing and damages
- d) All of the above

**Answer: d) All of the above**

22. Net primary productivity (NPP) is called \_\_\_\_

- a) Organic matter stored per unit time
- b) Organic matter stored per unit area
- c) Organic matter synthesized by photosynthesis minus utilization in respiration and losses
- d) All of the above

**Answer: d) All of the above**

23. Types of ground detritus are \_\_\_\_

- a) Dried plants
- b) Underground Dead animals
- c) Dead roots
- d) None of the above

**Answer: a) Dried plants**

24. Types of below ground detritus are \_\_\_\_

- a) Dead plants
- b) Underground Dead animals and plants
- c) Animals remains
- d) Excretions

**Answer: b) Underground Dead animals**

25. Energy “flows” through the ecosystem in the form of \_\_\_\_\_

- a) Hydrogen-Hydrogen bonds
- b) Carbon-Hydrogen bonds
- c) Carbon-Carbon bonds
- d) Hydrogen-Oxygen bonds

**Answer: c) Carbon-Carbon bonds**

26. The autotrophs obtain the inorganic nutrients from the inorganic nutrient pool, which is usually the soil or water surrounding the plants or algae. The inorganic nutrients include \_\_\_\_

- a) The phosphorous in our teeth, bones, and cellular membranes
- b) The nitrogen in our amino acids
- c) The iron in our blood
- d) All of the above

**Answer: d) All of the above**

27. \_\_\_\_\_ is the gradual process by which ecosystems change and develop over a period of time

- a) Inhibition Hypothesis
- b) Ecological succession
- c) Food Chain
- d) None of these

**Answer: b) Ecological succession**

28. \_\_\_\_\_ is the path of food from a given final consumer back to a producer

- a) Food chain
- b) Producer
- c) Inhibition Hypothesis
- d) None of above

**Answer: a) Food chain**

29. How many number of trophic levels are present in Food chain?

- a) 2-4
- b) 3-5
- c) 3-6
- d) 6-9

**Answer: c) 3-6**

30. An ecological pyramid is a \_\_\_\_\_ representation of an ecological parameter.

- a) Postural
- b) Graphical
- c) Numeral
- d) None of these

**Answer: b) Graphical**

31. The word bio-diversity refers to the variety of living organisms which includes

- a) Flora
- b) Fauna
- c) Both flora and fauna
- d) None of the above

**Answer: c) Both flora and fauna**

32. The process of using the raw material from which new species arise through evolution like breed new crop varieties and disease resistant crops is called \_\_\_\_

- a) Species diversity
- b) Ecosystem diversity
- c) Genetic diversity
- d) All of the above

**Answer: c) Genetic diversity**

33. Species diversity is seen in \_\_\_\_

- a) Natural ecosystem
- b) Agricultural ecosystem
- c) Both natural and agricultural ecosystem
- d) None of the above

**Answer: c) Both natural and agricultural ecosystem**

34. Distinctive ecosystem includes \_\_\_\_

- a) Forest
- b) Deserts
- c) Aquatic ecosystem
- d) All of the above

**Answer: d) All of the above**

35. Ecosystem consists of \_\_\_\_
- a) Terrestrial
  - b) Aquatic
  - c) Both terrestrial and aquatic
  - d) None of the above

**Answer: c) Both terrestrial and aquatic**

## MODULE 2

36. Which of the following is/are types of pollution that affect the environment?
- a) Air pollution
  - b) Water pollution
  - c) Land pollution
  - d) All of the above

**Answer: d) All of the above**

37. Which of the following is NOT a primary pollutant?
- a) Oxygen
  - b) Ground-level ozone
  - c) Carbon monoxide
  - d) Carbon dioxide

**Answer: a) Oxygen**

38. Solid waste can be classified into \_\_\_\_
- a) Municipal solid waste (MSW) and agricultural waste
  - b) Hazardous and industrial waste
  - c) Agricultural waste
  - d) All of the above

**Answer: d) All of the above**

39. Which of the following air pollution control device has maximum efficiency?
- a) Spray tower
  - b) Wet cyclonic scrubber
  - c) Dynamic precipitator
  - d) Electrostatic precipitator

**Answer: d) Electrostatic precipitator**

40. Which of the following is not a part of photochemical smog?
- a) SPM (Suspended Particulate Matter)
  - b) SO<sub>2</sub>
  - c) O<sub>3</sub>
  - d) NO<sub>2</sub>

**Answer: a) SPM**

41. The high level of lead air pollutant exposure causes \_\_\_\_
- a. Blue baby disease
  - b. Fluorosis

- c. Damage to blood, brain, kidney and reproductive system
- d. Bone marrow disease

**Answer: c) Damage to blood, brain, kidney and reproductive system**

42. The air pollutants released to the atmosphere by burning of hydrocarbons combined with nitrogen oxide compounds are \_\_\_\_

- a. CO
- b. O<sub>3</sub>
- c. Suspended Particulate Matter
- d. Dust particles

**Answer: c) O<sub>3</sub>**

43. The catalytic converter converts the harmful pollutants into \_\_\_\_

- a. CO<sub>2</sub>, H<sub>2</sub>O and N<sub>2</sub>
- b. CO
- c. Hydrocarbons
- d. NO<sub>x</sub> and SO<sub>2</sub>

**Answer: a) CO<sub>2</sub>, H<sub>2</sub>O and N<sub>2</sub>**

44. The effect of air pollution on property causes \_\_\_\_

- a. Killing of tissues
- b. Erosion and corrosion
- c. Effects the respiratory system
- d. Causes lack of appetite, air born diseases etc.

**Answer: b) Erosion and corrosion**

45. Oxygen depleting waste water pollution causes \_\_\_\_

- a. Sediment erosion
- b. Radioisotopes
- c. Fish killing and oxygen depletion
- d. None of the above

**Answer: c) Fish killing and oxygen depletion**

46. Poisoning of water is caused by \_\_\_\_

- a. Hazardous waste
- b. Hot water
- c. Human waste
- d. Paper and cardboards

**Answer: a) Hazardous waste**

47. Which of the following type of pollution is Cultural eutrophication?

- a) Noise pollution
- b) Thermal pollution
- c) Soil pollution
- d) Water pollution

**Answer: d) Water pollution**

48. What is the cause of the soil pollution?

- a) Acid rain
- b) Ozone

- c) Aerosol
- d) None of the above

**Answer: a) Acid rain**

49. The disease caused by Fluorine contamination in drinking water?

- a) Fluorosis
- b) Blue baby disease
- c) Bone marrow disease
- d) None of the above

**Answer: a) Fluorosis**

50. Which of the mentioned devices are used for removing vapour phase/gaseous pollutants?

- a) Wet scrubber
- b) Absorption towers
- c) Catalytic converters
- d) All of the above

**Answer: d) All of above**

51. Which of the following gas is not colorless?

- a) SO<sub>3</sub>
- b) Pb
- c) NO
- d) O<sub>3</sub>

**Answer: c) NO**

52. Which of these gases is not permitted to be released by the Prevention and Control of Pollution Act by the Government?

- a. Sulphur Dioxide
- b. Carbon Monoxide
- c. Nitrogen Oxide
- d. All of the above

**Answer: d) All of the above**

53. Which of these elements is present in the drinking water that can lead to numerous fatal diseases?

- a. Phosphorus
- b. Calcium
- c. Arsenic
- d. None of the above

**Answer: c) Arsenic**

54. Which of the following gases is the primary cause of acid rain?

- a. Nitrogen
- b. Carbon dioxide
- c. Sulfur dioxide
- d. Methane

**Answer: c) Sulfur dioxide**

55. What are the classification of air pollution sources \_\_\_\_

- a. Stationary sources
- b. Mobile sources
- c. Stationary and mobile sources
- d. None of the above



**Answer: c) Stationary and mobile sources**

56. Effects of air pollution on plants are \_\_\_\_

- a. Necrosis
- b. Chlorosis
- c. Abcission
- d. All of the above

**Answer: d) All of the above**

57. Sources of water pollution are \_\_\_\_

- a. Industrial effluents
- b. Domestic sewage
- c. Fertilizers and pesticides
- d. All of the above

**Answer: d) All of the above**

58. Excess pesticides causes

- a. Biomagnifications
- b. Eutrophication
- c. Sediments
- d. Thermal pollution

**Answer: a) Biomagnifications**

59. NO<sub>3</sub> contamination in drinking water causes \_\_\_\_

- a. Biomagnifications
- b. Fluorosis
- c. Methaemoglobinaceae (Blue baby disease)
- d. None of the above

**Answer: c) Methaemoglobinaceae (Blue baby disease)**

60. Solid waste is classified as \_\_\_\_

- a. Municipal solid waste
- b. Industrial waste
- c. Hazardous and biomedical waste
- d. All of the above

**Answer: d) All of the above**

61. Municipal solid waste is also called as \_\_\_\_\_

- a. Bio-medical waste
- b. Industrial waste
- c. Leachate
- d. Trash and garbage

**Answer: d) Trash and garbage**

62. Composting of solid waste generates \_\_\_\_

- a. Medical waste
- b. Manure (Fertilizer)
- c. Hazardous waste
- d. None of above

**Answer: b) Manure (Fertilizer)**

63. A engineered facility used for disposal of solid waste on land is called \_\_\_\_

- a. Dumping yard
- b. Industries
- c. Landfills
- d. Transport trucks

**Answer: c) Landfills**

64. Bio-medical waste which is a disposal of bio-hazardous material is generated mainly in

\_\_\_\_

- a. Schools and colleges
- b. Hotels
- c. Hospitals and nursing homes
- d. Municipal area

**Answer: c) Hospitals and nursing homes**

65. How many categories of bio-medical waste are classified by The Ministry of Environment and Forests?

- a. 7
- b. 8
- c. 9
- d. 10

**Answer: c) 9**

66. Burning of recover metal from wires and cables leads to emissions of \_\_\_\_\_

- a. Carbon dioxide
- b. Hydrogen Sulphide
- c. Brominated and Chlorinated dioxins
- d. None of these

**Answer: c) Brominated and Chlorinated dioxins**

67. Disposal of E-waste into soil leads to toxic substances mainly \_\_\_\_

- a. Lead
- b. Mercury
- c. Cadmium
- d. All of the above

**Answer: d) All of the above**

68. Disposal of E-waste into the environment causes \_\_\_\_

- a. Atmospheric pollution by dismantling activities
- b. Pollution of underground aquifer and groundwater
- c. Soil pollution by toxic substances deposited in landfills
- d. All of the above

**Answer: d) All of the above**

69. Construction and demolition waste (C&D) are categorized into three categories \_\_\_\_

- a. Non-dangerous, hazardous, and semi-hazardous
- b. Dangerous, hazardous, and semi-hazardous
- c. Hazardous
- d. Dirt and recyclable

**Answer: a) Non-dangerous, hazardous, and semi-hazardous**

70. Main causes of construction waste are \_\_\_\_\_

- a. Irresponsible beam cutting and fabrication
- b. Inaccurate quantifying concrete
- c. Improper material storage
- d. All of the above

**Answer: d) All of the above**

71. The second leading cause of construction waste production is \_\_\_\_

- a. Recycling and reuse of material
- b. Pipes and wires
- c. Improper material storage
- d. Steel reinforcement

**Answer: c) Improper material storage**

72. Noise is a \_\_\_\_\_ sound

- a. Unwanted
- b. Wanted
- c. Urbanization
- d. Heavy and light machinery work

**Answer: a) Unwanted**

73. What are the sources of noise pollution?

- a. Road traffic
- b. Industry
- c. Construction
- d. All of the above

**Answer: d) All of the above**

74. The ear registers pain due to noise pollution at \_\_\_\_\_ decibel

- a. 40
- b. 85
- c. 120
- d. None of the above

**Answer: c) 120**

75. The guidelines on C&D waste management follow the waste managing hierarchy framework which includes \_\_\_\_\_ in order to reduce waste of materials.

- a. Recovery
- b. Repurpose
- c. Reconstruct
- d. None of the above

**Answer: a) Recovery**

### MODULE 3

76. Which of the following is an effect of deforestation?

- a. Increased oxygen levels
- b. Soil erosion

- c. Decreased greenhouse gases
- d. Increase in biodiversity

**Answer: b) Soil erosion**

77. What is the primary cause of deforestation?

- a. Urbanization and construction
- b. Agriculture
- c. UV radiation
- d. None of the above

**Answer: a. Urbanization and construction**

78. Which of the following greenhouse gas is contributed by cattle farming?

- a. Carbon monoxide
- b. Nitrous oxide
- c. Methane
- d. All of the mentioned

**Answer: c) Methane**

79. Name the gas that is vital in maintaining atmospheric temperature.

- a. Oxygen
- b. Carbon Dioxide
- c. Nitrogen
- d. None of the above

**Answer: b) Carbon Dioxide**

80. Why carbon dioxide is called a greenhouse gas?

- a. Because they absorb heat
- b. Because they absorb moisture
- c. Because they absorb oxygen
- d. Because they absorb hydrogen

**Answer: a) Because they absorb heat**

81. Which of the following is the main reason for producing the atmospheric greenhouse effect?

- a. Absorption and re-emission of ultraviolet radiations by the atmosphere
- b. Absorption and re-emission of infrared radiations by the atmosphere
- c. Absorption and re-emission of visible light by the atmosphere
- d. None of the above

**Answer: b) Absorption and re-emission of infrared radiations by the atmosphere**

82. Which of the following is a greenhouse gas?

- a. Nitrogen
- b. Oxygen
- c. Carbon dioxide
- d. Argon

**Answer: c) Carbon dioxide**

83. What would be the temperature of the earth without greenhouse gas?

- a. 15°C
- b. -18°C
- c. 27°C
- d. 40°C

**Answer: b. -18°C**

84. What is the primary cause of global warming?

- a. Deforestation

- b. Increased use of fossil fuels
- c. Industrial pollution
- d. All of the above

**Answer: d) All of the above**

85. Which of the following radiations of the sun do greenhouse gases trap?

- a. Infrared radiations
- b. UV radiations
- c. Visible radiations
- d. All the radiations

**Answer: a) Infrared radiations**

86. Which of the following is not a part of photochemical smog?

- a. SPM
- b. PAN
- c. O<sub>3</sub>
- d. NO<sub>2</sub>

**Answer: a) SPM**

87. Which of these layers of the atmosphere consists of the ozone layer that is responsible for absorbing the Ultra-Violet (UV) light?

- a. Troposphere
- b. Mesosphere
- c. Stratosphere
- d. None of these

**Answer: c) Stratosphere**

88. Which of these elements is considered to be the largest source of commercial energy consumption in the world?

- a. Nuclear
- b. Natural gas
- c. Oil
- d. Coal

**Answer: c) Oil**

89. Name the most frequent as well as naturally happening disaster.

- a. Earthquake
- b. Flood
- c. Tsunami
- d. None of the above

**Answer: b) Flood**

90. Why are radiations harmful?

- a. Radiations leads to skin cancer
- b. Radiations cause anemia
- c. Radiations changes body tissues
- d. Radiations are not stable

**Answer: a) Radiations leads to skin cancer**

91. Which of the following statements means water vapor?

- a. Water vapor is the gaseous phase of water
- b. Water vapor is the liquid phase of water
- c. Water vapor is the solid phase of water
- d. All of the mentioned

**Answer: a) Water vapor is the gaseous phase of water**

92. Name the most frequent as well as naturally happening disaster.

- a. Earthquake
- b. Flood
- c. Tsunami
- d. None of the above

**Answer: b) Flood**

93. Which of the following practices can help in water conservation?

- a. Drip irrigation
- b. Over-irrigation
- c. Excessive use of fertilizers
- d. Deforestation

**Answer: a) Drip irrigation**

94. Due to solar radiations, wind and current etc, the plastic breakdown into \_\_\_\_

- a. Water
- b. Tyre
- c. Microplastics and nanoplastics
- d. Macroplastics

**Answer: c. Microplastics and nanoplastics**

95. The size of the microplastics?

- a. Less than 10 mm
- b. Less than 8 mm
- c. Less than 15 mm
- d. Less than 5 mm

**Answer: d. Less than 5 mm**

96. The size of the nanoplastics?

- a. Less than 100 nm
- b. Less than 100 mm
- c. Less than 500 nm
- d. Less than 5 mm

**Answer: a. Less than 100 nm**

97. Several chemicals used in the production of plastic materials are known to be \_\_\_\_

- a. Income decline
- b. Economic loss
- c. Carcinogenic in nature
- d. None of these

**Answer: c. Carcinogenic in nature**

98. The type of gases released by Incinerated plastic waste are \_\_\_\_

- a. Dioxins, Methane and carbon dioxide
- b. CO<sub>2</sub>
- c. H<sub>2</sub>O
- d. All of the above

**Answer: a. Dioxins, Methane and carbon dioxide**

99. Average % textile dyes have been found in wastewater from the textile industry?

- a. 2 %
- b. 10 %
- c. 10- 25 %
- d. 20 %

Answer: c. 10- 25 %

100. Name the three major types of pollution caused by the textile industry.

- a. Water pollution
- b. Air pollution
- c. Soil pollution
- d. All of the above

Answer: d. All of the above

101. How many litres of water are required to produce 1 Kg of cotton?

- a. 1,000
- b. 10,000
- c. 500
- d. 5,000

Answer: b. 10,000

102. The chemical and dyeing process release \_\_\_\_\_ into the atmosphere

- a. VOC
- b. Methane
- c. Water
- d. Carbon

Answer: a. VOC

103. How to prevent textile pollution?

- a. Using Chemicals
- b. Using pesticides
- c. Using detergents
- d. Using natural dyes

Answer: d. Using natural dyes

104. The rainwater with pH less than 5.7 is called \_\_\_\_

- a. Rain
- b. Hailstorm
- c. Acid rain
- d. None of the above

Answer: c. Acid rain

105. Acid rain is caused by oxides of \_\_\_\_.

- a. Nitric acid
- b. SO<sub>2</sub> and NO<sub>3</sub>
- c. Sulphur
- d. None of the above

Answer: b. SO<sub>2</sub> and NO<sub>3</sub>

106.Name the state which has witnessed nearly 1,000 forest fires up to April 2021

- a. Karanataka
- b. Uttarakand
- c. Bhupal
- d. Bangalore

**Answer: b. Uttarakand**

107.Effects of forest fire is \_\_\_\_

- a. Regrowth
- b. Huge loss of economy
- c. Huge loss of tress
- d. None of the above

**Answer: c. Huge loss of tress**

108.The condition when water quantity of any region exceed the normal requirement level is called \_\_\_\_

- a. Drought
- b. Floods
- c. Arid
- d. Physical destruction

**Answer: b. Floods**

109.The extreme situation, due to insufficiency of precipitation over a longer period causing damages to crops is called \_\_\_\_

- a. Floods
- b. Hurricane
- c. Drought
- d. Damage to air

**Answer: c. Drought**

110.Name the types of floods.

- a. Slow-on set and Rapid-on set Flood
- b. Ice dammed and coastal floods
- c. Strom surge flood
- d. All of the above

**Answer: d. All of the above**

111.Soil moisture drought is also called as \_\_\_\_

- a. Agricultural drought
- b. Meteorological drought
- c. Hydrological drought
- d. None of the above

**Answer: a. Agricultural drought**

112.Hydrological drought condition is caused by \_\_\_\_

- a. Evapotranspiration
- b. Negative anomalies in surface and subsurface water



- c. Increase in the depth to water
- d. None of the above

**Answer: b. Negative anomalies in surface and subsurface water**

113. What are the causes of drought?

- a. Deforestation
- b. Global warming
- c. Climate change
- d. All of the above

**Answer: d. All of the above**

114. Meteorological drought is caused by \_\_\_\_

- a. Storms
- b. Hailstorms
- c. Lack of precipitation
- d. Lower ground water table

**Answer: c. Lack of precipitation**

115. The shaking of the surface of the Earth, with sudden release of energy is called \_\_\_\_

- a. Volcanoes
- b. Hailstorms
- c. Hurricane
- d. Earthquakes

**Answer: d. Earthquakes**

116. The earthquake is the sudden release of energy in form of \_\_\_\_ on the surface of earth

- a. Tsunami
- b. Seismic energy
- c. Platonic wave
- d. Nuclear wave

**Answer: b. Seismic energy**

117. When earthquakes occur under sea it causes \_\_\_\_.

- a. Hurricane
- b. Storms
- c. Tsunami
- d. Soil liquefaction

**Answer: c. Tsunami**

118. Earthquake with magnitude 7.5 or more causes \_\_\_\_

- a. Serious damage
- b. Can totally destroy communities near epicenter
- c. Slight damage
- d. Less damage

**Answer: b. Can totally destroy communities near epicenter**

119. When earthquake occurs under the sea it causes \_\_\_\_

- a. Floods
- b. Tsunami
- c. Fires
- d. Volcanoes

**Answer: b. Tsunami**

120. The ruptures in the crust of earth's surface that allow hot gases and molten lava is called \_\_\_\_

- a. Earthquake
- b. Floods
- c. Drought
- d. Volcanoes

**Answer: d. Volcanoes**

121. Ocean acidification directly depends on the level of \_\_\_\_\_ absorbed by the ocean

- a. Carbon
- b. Carbon dioxide
- c. Water
- d. Methane

**Answer: b. Carbon dioxide**

122. The carbon dioxide absorbed by the ocean reacts with the water to produce \_\_\_\_

- a. Bicarbonate ions
- b.  $H^+$  ions
- c. Carbonic acid
- d. Water

**Answer: c. Carbonic acid**

123. The increase of the  $CO_2$  in the atmosphere is majorly caused by \_\_\_\_

- a. Burning of fossil fuels
- b. Increase in flora and fauna
- c. High temperature
- d. Increased rainfall

**Answer: a. Burning of fossil fuels**

124. The effect of ocean acidification is \_\_\_\_

- a. Loss of marine biodiversity and coral reefs
- b. Increase in the fish biodiversity
- c. Loss of genetic diversity
- d. None of above

**Answer: a. Loss of marine biodiversity and coral reefs**

125. The negative impacts of mining are \_\_\_\_

- a. Soil erosion
- b. contamination of soil and groundwater
- c. Sinkholes
- d. All of the above

**Answer: d. All of the above**

126. \_\_\_\_ is the a significant environmental issues, refers to the loss of soil quality due to incorrect usage generally for industrial, agricultural etc.

- a. Increase in biodiversity
- b. Sinholes
- c. Soil degradation
- d. Critical resources

**Answer: c. Soil degradation**

127. The chemical factors may contribute to soil degradation is \_\_\_\_

- a. Water clogging
- b. Erosion of top soil
- c. Loss of microbial activity
- d. None of the above

**Answer: a. Water clogging**

128. The physical factors may contribute to soil degradation is \_\_\_\_

- a. Water clogging
- b. Erosion of top soil
- c. Loss of microbial activity
- d. None of the above

**Answer: b. Erosion of top soil**

129. The biological factors may contribute to soil degradation is \_\_\_\_

- a. Water clogging
- b. Erosion of top soil
- c. Loss of microbial activity and microflora
- d. None of the above

**Answer: c. Loss of microbial activity and microflora**

130. A important method of controlling soil erosion is \_\_\_\_

- a. Contour farming
- b. Deforestation
- c. Heavy winds
- d. None of the above

**Answer: a. Contour farming**

131. Important methods of controlling soil erosion are \_\_\_\_

- a. Contour farming
- b. Rotation of crops
- c. Using wind brakes
- d. All of the above

**Answer: d. All of the above**

132. Causes of soil erosion are \_\_\_\_

- a. Farming
- b. Grazing

- c. Mining and construction
- d. All of the above

**Answer: d. All of the above**

133. The degraded lands lose the water holding capacity resulting in \_\_\_\_

- a. Droughts
- b. Floods
- c. Dry weather
- d. Emissions

**Answer: b. Floods**

134. The single most important gas which account for 55% of the change in intensity of greenhouse effect is \_\_\_\_

- a.  $H_2O$
- b.  $CO_2$
- c.  $HCO_3$
- d.  $SO_2$

**Answer: b.  $CO_2$**

135. Name the type of plastic found in human blood, placenta, foods and drinks etc

- a. Macro plastics
- b. Polylin bags
- c. Micro plastics
- d. None of these

**Answer: c. Micro plastics**

#### MODULE 4

136. Clonal multiplication can be achieved through techniques of \_\_\_\_

- a. Culture
- b. Tissue culture
- c. Micro culture
- d. None of the above

**Answer: b. Tissue culture**

137. Reforestation can be defined as

- a. Replanting the trees
- b. Cutting of trees
- c. Culture
- d. None of above

**Answer: a. Replanting the trees**

138. Use of renewable resources includes

- a. Reduced carbon emissions
- b. Lower energy costs

- c. Less global warming
- d. All of the above

**Answer: d. All of the above**

139. Physical treatment method of treatment of industrial effluent removes \_\_\_\_

- a. Bacteria
- b. Acids
- c. Alkalis
- d. Suspended solids

**Answer: d. Suspended solids**

140. Chemical treatment method of treatment of industrial effluent removes \_\_\_\_

- a. Neutralize acids and alkalis
- b. Suspended solids
- c. Organic matter
- d. Precipitation

**Answer: a. Neutralize acids and alkalis**

141. Biological treatment method includes \_\_\_\_

- a. Activated sludge and tricking filters
- b. Sedimentation
- c. Coagulation
- d. Screening

**Answer: a. Activated sludge and tricking filters**

142. Physical treatment methods are not very effective at removing \_\_\_\_

- a. Suspended solids
- b. Large particles
- c. Dissolved solids
- d. None of the above

**Answer: c. Dissolved solids**

143. Chemical treatment method remove specific pollutants namely \_\_\_\_

- a. Heavy metals
- b. Water
- c. SPM
- d. Sludge

**Answer: a. Heavy metals**

144. The effective method to remove organic matter from the effluent?

- a. Biological method
- b. Physical method
- c. advanced method
- d. None of the above

**Answer: a. Biological method**

145. The most expensive and require specialized expertise for operating of a process is \_\_\_\_

- a. Biological methods
- b. Physical methods
- c. Chemical methods
- d. Advanced methods

**Answer: d. Advanced methods**

146. In-situ conservation of biodiversity means \_\_\_\_

- a. On site
- b. Ex-situ
- c. Zoos
- d. None of the above

**Answer: a. On site**

147. Zoos, botanical gardens and seed banks are examples of \_\_\_\_

- a. Ex-situ conservation
- b. In-situ conservation
- c. Zoos
- d. None of the above

**Answer: a. Ex-situ conservation**

148. \_\_\_\_ implies complete protection and leaving the natural resources totally untouched

- a. Preservation
- b. Conservation
- c. Both preservation and conservation
- d. None of the above

**Answer: a. Preservation**

149. \_\_\_\_ implies the management of resources on a sustainable yield basis

- a. Preservation
- b. Conservation
- c. Both preservation and conservation
- d. None of the above

**Answer: b. Conservation**

150. Project tiger was launched to save \_\_\_\_ from brick of extinction.

- a. Tigers
- b. Elephant
- c. Lions
- d. Monkey

**Answer: a. Tigers**

151. Project tiger was launched in the year of \_\_\_\_

- a. 1960
- b. 1973
- c. 1991
- d. 1992

**Answer: b. 1973**

152. The government of India launched this project with the objective of saving the \_\_\_\_

- a. Tigers
- b. Asiatic elephant
- c. Birds
- d. None of the above

**Answer: b. Asiatic elephant**

153. The government of India launched this project elephant in \_\_\_\_

- a. 1991-92
- b. 1992-93

- c. 1994-95
- d. None of the above

**Answer: a. 1991-92**

154. \_\_\_\_ are engineered marshes that duplicate natural processes to cleanse water.

- a. Constructed wetlands
- b. Aquatic treatment systems
- c. Domestic Treatment system
- d. None of the above

**Answer: a. Constructed wetlands**

155. The basic type of constructed wetlands is \_\_\_\_

- a. Free Water Surface Wetlands
- b. Aquatic treatment systems
- c. Domestic Treatment system
- d. None of the above

**Answer: a. Free Water Surface**

156. The basic type of constructed wetlands is \_\_\_\_

- a. Subsurface Flow wetlands
- b. Aquatic treatment systems
- c. Domestic Treatment system
- d. None of the above

**Answer: a. Subsurface Flow wetlands**

157. Marine conservation is also known as \_\_\_\_

- a. Vermi composting
- b. Marine life
- c. Ocean conservation
- d. None of the above

**Answer: c. Ocean conservation**

158. Marine conservation issues includes \_\_\_\_

- a. Ocean acidification
- b. Climate change and global warming
- c. Sea level rise
- d. All of the above

**Answer: d. All of the above**

159. \_\_\_\_ can be defined as an agricultural process that uses biological fertilizers and pest control acquired from animal or plant waste.

- a. Pesticides
- b. Integrated farming
- c. Organic Farming
- d. None of the above

**Answer: c. Organic farming**

160. Advantages of the organic farming are \_\_\_\_

- a. Nutritional and eco-friendly
- b. Incompetent
- c. Uneconomical
- d. Shorter life-span

**Answer: a. Nutritional and eco-friendly**

161. Disadvantages of the organic farming is \_\_\_\_

- a. Environmental friendly
- b. Economical
- c. Less production
- d. All of the above

**Answer: c. Less production**

162. \_\_\_\_ farming means avoiding all unnatural chemicals.

- a. Integrated organic farming
- b. Pure organic farming
- c. Organic farming
- d. None of the above

**Answer: b. Pure organic farming**

163. \_\_\_\_ farming includes the integration of pest management and nutrients management.

- a. Integrated organic farming
- b. Pure organic farming
- c. Organic farming
- d. None of the above

**Answer: a. Integrated organic farming**

164. System of farming that uses organic inputs like green manures, cow dung, etc., for cultivation is called \_\_\_\_

- a. Conventional farming
- b. Integrated farming
- c. Organic farming
- d. None of the above

**Answer: c. Organic farming**

165. Limitation of the organic farming is \_\_\_\_

- a. Less price
- b. Less Output
- c. Environmental friendly
- d. Expensive process

**Answer: b. Less Output**

166. The relevance of organic farming is \_\_\_\_

- a. Low energy
- b. High nutritional value
- c. Higher price
- d. Shorter lifespan

**Answer: b. High nutritional value**

167. \_\_\_\_ is a process in which the earthworms convert the organic waste into manure rich in high nutritional content.

- a. Treatment of industrial effluents
- b. Worm-farming
- c. Vermi-composting



d. Varmicasts

**Answer: c. Vermi-composting**

168. Vermiculture means \_\_\_\_

- a. Worm-farming
- b. Varmicasts
- c. Cattle farming
- d. None of the above

**Answer: a. Worm-farming**

169. Earthworms feed on the organic waste materials and give out excreta in the form of

- 
- a. Vermicasts
  - b. Excreta
  - c. Worm-farming
  - d. None of the above

**Answer: a. Vermicasts**

170. \_\_\_\_ is the method in which the organic matter is collected in cemented pits.

- a. Bed method
- b. Pit method
- c. Landfills
- d. Constructed wetlands

**Answer: b. Pit method**

171. \_\_\_\_ increases the fertility and water-resistance of the soil.

- a. Fertilizers
- b. Rainwater
- c. Vermicompost
- d. All of the above

**Answer: c. Vermicompost**

172. \_\_\_\_ nurtures soil with plant growth hormones such as auxins, gibberellic acid, etc

- a. Pesticides
- b. Cattle feed
- c. Water
- d. Vermicompost

**Answer: d. Vermicompost**

173. Disadvantages of vermicomposting is \_\_\_\_

- a. Shortlife
- b. Economical
- c. Easy to handle
- d. Time-consuming

**Answer: d. Time-consuming**

174. \_\_\_\_ is an eco-friendly process that recycles organic waste into compost and produces valuable nutrients

- a. Cattle farming
- b. Vegetable farming
- c. Vermicomposting
- d. All of the above

**Answer: c. Vermi-composting**

175. \_\_\_\_ is the process of augmenting the natural filtration of rainwater into the underground formation by some artificial methods.

- a. Vegetable harvesting
- b. Rainwater harvesting
- c. Groundwater recharge
- d. None of the above

**Answer: b. Rainwater harvesting**

176. Conscious collection and storage of rainwater to cater to demands of water, for drinking, domestic purpose & irrigation is termed as \_\_\_\_.

- a. Rainwater harvesting
- b. Aquifer recharge
- c. Groundwater recharge
- d. Farming

**Answer: a. Rainwater Harvesting**

177. Why harvest rainwater?

- a. To conserve surface water runoff during monsoon
- b. To inculcate a culture of water conservation
- c. To arrest ground water decline and augment ground water table
- d. All of the above

**Answer: d. All of the above**

178. The system of catching rainwater where it falls is called \_\_\_\_

- a. Roof top rainwater harvesting
- b. Surface runoff harvesting
- c. Direct use of rainwater
- d. None of the above

**Answer: a. Roof top rainwater harvesting**

179. \_\_\_\_ water should not be used for recharging the ground water.

- a. Pure water
- b. Natural water
- c. Polluted water
- d. Unused water

**Answer: c. Polluted water**

180. The practice to be followed to ensure that the rainwater caught is free from pollutants

- a. Roof should not be painted
- b. Roof should be cleaned
- c. Filter media should be cleaned

d. All of the above

**Answer: d. All of the above**

## MODULE 5

181. \_\_\_ is the science and art of acquiring information (spectral, spatial, temporal) about material objects etc without coming into physical contact

- a. Satellite
- b. Remote sensing
- c. GSAT
- d. None of the above

**Answer: b. Remote sensing**

182. In remote sensing, information transfer is accomplished by use of \_\_\_

- a. Ultraviolet rays
- b. X-rays
- c. Gamma rays
- d. Electromagnetic radiation (EMR)

**Answer: d. Electromagnetic radiation (EMR)**

183. \_\_\_ have already successfully been applied to map the distribution of several plant and animal species, their ecosystems, landscapes, bio-climatic conditions etc

- a. Remote sensing and GIS
- b. EMR
- c. Radio waves and wavelength
- d. None of the above

**Answer: a. Remote sensing and GIS**

184. \_\_\_ is generally based on acquisition of image data of Earth's surface simultaneously in multiple wavelengths.

- a. EMR
- b. Multispectral remote sensing
- c. Remote Sensing
- d. GIS

**Answer: b. Multispectral remote sensing**

185. \_\_\_, one of the more common multispectral imagers, is widely used for monitoring a wide range of landscape scale properties.

- a. LANDSAT
- b. INSAT
- c. IRS
- d. HySIS

**Answer: a. LANDSAT**

186. \_\_\_ has significant advantages over the multispectral data, which has hundreds of contiguous spectral bands with narrow spectrum.

- a. Multispectral data

- b. Hyperspectral data
- c. Remote sensing
- d. GIS

**Answer: b. Hyperspectral data**

187. \_\_\_ are used to collect, store, analyse, disseminate, and manipulate information that can be referenced to a geographical location.

- a. Remote sensing
- b. LSAT images
- c. GIS
- d. None of the above

**Answer: c. GIS**

188. \_\_\_ is a powerful tool for understanding the processing and managing potential impacts of human activities on environment.

- a. GIS
- b. LSAT
- c. Multispectral data
- d. Land images

**Answer: a. GIS**

189. \_\_\_ (imaging spectrometry) is an excellent tool to study the environmental impacts due to mining activities.

- a. Camera images
- b. Wavelengths
- c. High-resolution multispectral satellite data
- d. Multispectral satellite data

**Answer: c. High-resolution multispectral satellite data**

190. The environment and flood linkage has been recognized, and many environmental programs could be implemented through \_\_\_

- a. RS and GIS
- b. LSAT
- c. Visible radiations
- d. High resolution images

**Answer: a. RS and GIS**

191. Digital Elevation Models (DEMs) are mainly used for \_\_\_

- a. Trees
- b. Water quality
- c. Buildings
- d. Topographic surface

**Answer: d. Topographic surface**

192. \_\_\_ provides an important source of data for urban land use/land cover mapping and environmental monitoring

- a. LSAT

- b. DEM images
- c. Remote sensing
- d. Land images

**Answer: c. Remote sensing**

193. \_\_\_ provides the identification and preparedness of oil spill incidents in offshore area through Digital Image processing and GIS.

- a. Environmental Sensitivity Index (ESI)
- b. Reach Sensitivity Index (RSI)
- c. ESI and RSI
- d. None of the above

**Answer: c. ESI and RSI**

194. \_\_\_ are common data type for wetland classification and its spatial-temporal dynamic change.

- a. Landsat MSS, TM, and SPOT
- b. SPOT
- c. ESI and RSI
- d. RS and GIS

**Answer: a. Landsat MSS, TM, and SPOT**

195. The effective tool used for analyzing the acquired data for the effective monitoring and mapping of temporal dynamics of glaciers is \_\_\_

- a. GIS
- b. RS
- c. GIS and GPS
- d. GPS

**Answer: c. GIS and GPS**

196. \_\_\_ is a systematic process of identifying future consequences of a current or proposed action

- a. EIA
- b. EIS
- c. RS and GIS
- d. None of the above

**Answer: a. EIA**

197. Environmental Impact Statement (EIS) should contain the information of \_\_\_

- a. Possibility of earthquakes and cyclones
- b. Economic and demographic factors
- c. Effects on vegetation, wildlife and endangered species
- d. All of the above

**Answer: d. All of the above**

198. The first step of the 5 R process is \_\_\_

- a. Reuse
- b. Refuse

- c. Reduce
- d. Recycle

**Answer: b. Refuse**

199. Printing a document, double-sided to slash your waste output in half is an example of \_\_\_\_.

- a. Recycle
- b. Refuse
- c. Reuse
- d. Reduce

**Answer: d. Reduce**

200. The green community often refers to this method \_\_\_\_ as 'upcycling'

- a. Recycle
- b. Reuse
- c. Repurpose
- d. Refuse

**Answer: c. Repurpose**

201. \_\_\_\_ measures the total greenhouse gas (GHG) emissions caused directly and indirectly by an individual, organization, event, or product.

- a. Carbon credit
- b. Carbon trading
- c. Carbon Footprint
- d. Carbon credit and trading

**Answer: c. Carbon Footprint**

202. Carbon footprint is typically measured in equivalent tons of \_\_\_\_, the most prevalent GHG.

- a. CO<sub>2</sub>
- b. Methane
- c. H<sub>2</sub>O
- d. H<sub>2</sub>S

**Answer: a. CO<sub>2</sub>**

203. Example of direct emissions (Carbon Footprint) is \_\_\_\_

- a. Supply chain
- b. Waste
- c. Industrial Processes
- d. None of these

**Answer: c. Industrial Processes**

204. Example of indirect emissions (Carbon Footprint) is \_\_\_\_

- a. Land use
- b. Energy use
- c. Industrial processes
- d. Carbon storage

**Answer: a. Land use**

205. Carbon offsetting can be achieved through

- a. Deforestation
- b. Renewable energy projects
- c. Burning of fossil fuels
- d. GHG's

**Answer: b. Renewable energy projects**

206. \_\_\_ are part of international and national policies to combat climate change.

- a. Carbon credit
- b. Carbon footprint
- c. Carbon credit and trading
- d. Carbon trading

**Answer: c. Carbon credit and trading**

207. One carbon credit equals one ton of \_\_\_

- a. H<sub>2</sub>O
- b. CH<sub>4</sub>
- c. CO<sub>2</sub>
- d. N<sub>2</sub>

**Answer: c. CO<sub>2</sub>**

208. Carbon credits are created through various method namely \_\_\_

- a. Reforestation
- b. Renewable energy projects
- c. Energy efficiency improvements
- d. All of the above

**Answer: d. All of the above**

209. Carbon trading, also known as \_\_\_ trading.

- a. Emission
- b. Stock
- c. Money exchange
- d. None of these

**Answer: a. Emission**

210. The largest and first major carbon market, which caps emissions from more than 11,000 heavy energy-using installations is called \_\_\_

- a. EU Emissions Trading System
- b. California Cap-and-Trade Program
- c. EU ETS and C CTP
- d. None of the above

**Answer: a. EU Emissions Trading System**

211. Sustainable buildings are also known as \_\_\_

- a. Commercial buildings
- b. Industries
- c. Green buildings
- d. Schools

**Answer: c. Green buildings**

212. Energy-efficient Lighting can be achieved through \_\_\_\_

- a. UV bulbs
- b. Light bulb
- c. LED bulbs
- d. Linear bulb

**Answer: c. LED bulbs**

213. Water Efficiency can be achieved through \_\_\_\_

- a. Sustainable transport
- b. Insulation
- c. Renewable energy resources
- d. Greywater recycling

**Answer: d. Greywater recycling**

214. \_\_\_\_ refers to materials that are environmentally friendly, sustainable, and have a low impact on the environment

- a. Bike and car
- b. Fossil fuels
- c. Green materials
- d. Water

**Answer: c. Green materials**

215. \_\_\_\_ refers to using less energy to perform the same task or produce the same outcome

- a. Energy efficiency
- b. Green Materials
- c. Recyclability
- d. Sustainability

**Answer: a. Energy efficiency**

216. Streamlining industrial processes to minimize energy waste is called \_\_\_\_

- a. Energy Recovery
- b. Green materials
- c. Efficient Motors and Drives
- d. Process Optimization

**Answer: d. Process Optimization**

217. Implementing systems to recover and reuse waste energy is called \_\_\_\_

- a. Process optimization
- b. Energy recovery
- c. Efficient drives
- d. Energy efficiency

**Answer: b. Energy recovery**

218. Urban development designed to maximize access to public transport is called \_\_\_\_

- a. Complete Streets
- b. Bike Lanes and Bike Sharing Programs
- c. Transit-Oriented Development (TOD)
- d. Public Transportation

**Answer: c. Transit-Oriented Development (TOD)**



219. \_\_\_ is a framework that helps an organization achieve its environmental goals through consistent control of its operations.
- a. Environmental Impact Assessment
  - b. Environmental Management System (EMS)
  - c. Environmental Audit
  - d. Environmental Sustainability
- Answer: b. Environmental Management System (EMS)**
220. \_\_\_ is a voluntary program set by a company to measure the company's environmental performance.
- a. Environmental management
  - b. Environmental audit
  - c. Environmental protection
  - d. Energy efficiency
- Answer: b. Environmental audit**
221. \_\_\_ is a set of standards created to help companies around the world reduce their adverse impact on the environment.
- a. ISO 9000
  - b. ISO 4000
  - c. ISO 14000
  - d. EMS
- Answer: c. ISO 14000**
222. \_\_\_ focuses on the best management practices for quality assurance.
- a. ISO 14000
  - b. ISO 9000
  - c. ISO 4000
  - d. None of the above
- Answer: b. ISO 9000**
223. The core of the ISO 14000 standards is contained in \_\_\_, which lays out the guidelines for putting an environmental management system (EMS) in place.
- a. ISO 14000
  - b. ISO 14001
  - c. ISO 14002
  - d. ISO 14016
- Answer: b. ISO 14001**
224. \_\_\_ which offers additional insight and specialized standards for implementing an EMS.
- a. ISO 14000
  - b. ISO 14001
  - c. ISO 14001 and ISO 14002
  - d. ISO 14004
- Answer: d. ISO 14004**
225. \_\_\_ refers to the responsible use and protection of the natural environment through conservation and sustainable practices.
- a. Environmental Management
  - b. Environmental Audit

c. Environmental stewardship

d. Environmental policy

**Answer: c. Environmental stewardship**

226. Promoting corporate transparency and accountability regarding environmental impacts is called \_\_\_\_

a. Environmental Education and Advocacy

b. Corporate Social Responsibility

c. Sustainable Practices

d. Conservation of Natural Resources

**Answer: b. Corporate Social Responsibility**

227. Environmental Performance Evaluation is performed under ISO \_\_\_\_ audit.

a. ISO 14001 and ISO 14002

b. ISO 14004

c. ISO 14015

d. ISO 14030 and ISO 14031

**Answer: d. ISO 14030 and ISO 14031**

228. Environmental Auditing and Related Activities is performed under ISO \_\_\_\_ audit

a. ISO 14001 and ISO 14002

b. ISO 14004

c. ISO 14020, ISO 14021, and ISO 14024

d. ISO 14015, ISO 14016, and ISO 14017

**Answer: d. ISO 14015, ISO 14016, and ISO 14017**

229. Habitat and Biodiversity Protection includes \_\_\_\_

a. Preserving natural habitats

b. Protecting endangered species

c. Restoring damaged ecosystems

d. All of the above

**Answer: d. All of the above**