

ABILITY-ENHANCEMENT COMPULSORY COURSE (AECC)
COURSE TITLE: ENVIRONMENTAL STUDIES
COURSE CODE: AECE101

MODEL MCQ QUESTIONS

Answer all of the following (choose the correct alternative): EACH QUESTION CARRIES 02 MARKS

1. Eutrophication means

- (a) Thermal change in water
- (b) Filling up of water body with aquatic due to extra nourishment
- (c) Solid waste
- (d) None of the above

Answer: b

2. Biochemical oxygen demand means

- (a) Industrial pollution
- (b) Air pollution
- (c) Polluting capacity of effluent
- (d) Dissolved O₂ needed by microbes to decompose organic waste

Answer: d

3. The main components of photochemical smog is

- (a) Water vapour
- (b) Sulphur dioxide
- (c) Oxides of nitrogen
- (d) All of the above

Answer: c

4. Deforestation generally decreases

- (a) Rainfall
- (b) Soil erosion
- (c) Drought
- (d) Global warming

Answer: a

5. The term Alpha diversity refers to

- (a) Genetic diversity
- (b) Community and ecosystem diversity
- (c) Species diversity
- (d) Diversity among the plant

Answer: b

6. _____ is defined as an ecological state of a species being unique to a specific geographic location.

- (a) Exotic species
- (b) Endemic species
- (c) Ecosystem
- (d) None of the above

Answer: b

7. 5th June is observed as

- (a) World forest day
- (b) World environment day
- (c) World wildlife day
- (d) World population day

Answer: b

8. The Ecological pyramid that is always upright

- (a) Pyramid of energy
- (b) Pyramid of biomass
- (c) Pyramid of number
- (d) None of these

Answer: a

9. Most stable ecosystem is

- (a) Forest
- (b) Desert
- (c) Ocean
- (d) Mountain

Answer: c

10. Atmospheric ozone layer which protect us from UV-B & C is getting depleted most by addition of

- (a) Chloro fluoro carbon
- (b) Carbon monooxide
- (c) Carbon dioxide
- (d) Sulphur dioxide

Answer: a

11. Which of the following are important biotic factors that can affect the structure and organization of biological communities?

- (a) Nutrient availability, soil pH, light intensity
- (b) Precipitation, wind, temperature
- (c) Predation, competition, disease
- (d) all of the above

Answer: d

12. All of the following statements about ecology are correct except:

- (a) Ecology is the study of the interactions between biotic and abiotic aspects of the environment
- (b) Ecology is a discipline that is independent from natural selection and evolutionary history
- (c) Ecologists may study populations and communities of organisms
- (d) Ecology spans increasingly comprehensive levels of organization, from individuals to ecosystems

Answer: d

13. Detritus food chain starts from

- (a) Green plants
- (b) Grass
- (c) Dead organic matter
- (d) Phytoplankton

Answer: c

14. Who coined the term acid rain?

- (a) Christ Ralph
- (b) Elmer Joseph Clark
- (c) Ernest Flower
- (d) Robert Angus Smith

Answer: d

15. The damage caused by acid rain is due to _____ nature of acid rain

- (a) balancing
- (b) protecting
- (c) withstanding
- (d) corrosive

Answer: d

16. Acid rain reacts with marble and limestone to form

- (a) calcium carbonate
- (b) calcium hydroxide
- (c) calcium sulphate
- (d) None of the above

Answer: c

17. The ecological pyramid always starts with the following at the base

- (a) Decomposer
- (b) Producer
- (c) Consumer
- (d) None of these

Answer: b

18. Which of the following is a non-renewable resource?

- (a) Coal
- (b) Forest
- (c) Water
- (d) Wildlife

Answer: a

19. Chipko movement was started to conserve

- (a) Forests
- (b) Grasslands
- (c) Deserts
- (d) Soil

Answer: a

20. What is common to the techniques (i) *in vitro* fertilization, (ii) Cryo preservation and (iii) tissue culture? (a) All are in situ conservation methods

- (b) All are ex situ conservation methods
- (c) All require ultra-modern equipment and large space
- (d) All are methods of conservation of extinct organisms

Answer: b

21. 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

Answer: a

22. Biosphere reserve has following zone except one

- (a) Core zone
- (b) Command zone
- (c) Buffer zone
- (d) Spherical zone

Answer: d

23. Conservation of biodiversity outside the natural habitat is called as

- (a) *Ex-situ*
- (b) *In-situ*
- (c) Conservation
- (d) *In-vivo*

Answer: a

24. Which out of the following are the causes of soil erosion?

- (a) Unrestricted grazing
- (b) Over cultivation
- (c) Deforestation
- (d) All of the above

Answer: d

25. Red data book contains data of

- (a) All plant species
- (b) All animal species
- (c) Threatened species
- (d) Economically important species

Answer: c

26. Which of the following regions has the maximum diversity?

- (a) Mangroves
- (b) Temperate forest
- (c) Taiga
- (d) Coral reefs

Answer: d

27. Which one of the following is not included under in situ conservation?

- (a) Zoo
- (b) National Park
- (c) Wild life Sanctuary
- (d) Biosphere Reserve

Answer: a

28. Hotspots are regions of high

- (a) Rareism
- (b) Endemism
- (c) Diversity
- (d) Critically endangered population

Answer: b

29. A poisonous gas given out of vehicles exhaust is

- (a) Carbon monoxide
- (b) Ethane
- (c) Methane
- (d) Carbon dioxide

Answer: a

30. Yellowing of Taj Mahal is an effect of

- (a) Acid rain
- (b) Global warming
- (c) Ozone depletion
- (d) All of the above

Answer: a

31. Pollutants that are easily manageable and decomposable in nature are called

- (a) Biodegradable pollutants
- (b) Non-biodegradable pollutants
- (c) Renewable pollutants
- (d) None of these

Answer: a

32. BOD stands for

- (a) Biotic oxidation demand
- (b) Biological oxygen demand
- (c) Biological oxidation demand
- (d) Biochemical oxygen demand

Answer: b

33. What is Kyoto Protocol?

- (a) It is an agreement among countries to take steps for reducing global warming
- (b) It is an agreement among countries to take steps for reducing acid rain
- (c) It is an agreement among countries to take steps for planting trees to control pollution
- (d) It is an agreement among countries to start using nuclear energy

Answer: a

34. Which of the following is a greenhouse gas?

- (a) Methane
- (b) Water vapor
- (c) Carbon dioxide
- (d) All of the above

Answer: d

35. Ozone day is observed on

- (a) 3rd January
- (b) 16th September
- (c) 10th November
- (d) 26th March

Answer: b

36. A population is a group of

- (a) Individual in a family
- (b) Individuals in a species
- (c) Communities in an ecosystem
- (d) Species in a community

Answer: b

37. Sustainable development means

- (a) meeting present needs without compromising on future needs
- (b) progress of human beings
- (c) balance between human needs and the ability of earth to provide the resources
- (d) all of the above

Answer: d

38. Energy flow in an ecosystem is

- (a) Bidirectional
- (b) Unidirectional
- (c) Multidirectional
- (d) All rounds

Answer: b

39. The upright pyramid of numbers is absent in

- (a) Lake
- (b) Pond
- (c) Grasslands
- (d) Forests

Answer: d

40. The final stable community in ecological succession is

- (a) Climax
- (b) Pioneer
- (c) Sere
- (d) Carnivores

Answer: a

41. Which of the following is not an inexhaustible form of energy?

- (a) Water
- (b) Wind
- (c) Solar
- (d) Fossil

Answer: c

42. The burning of fossil fuels releases a large amount of

- (a) Nitrogen into air
- (b) Sulphur into air
- (c) Carbon dioxide into air
- (d) Oxygen into air

Answer: c

43. Which is a list of renewable resources?

- (a) Petroleum, geothermal, wind
- (b) Biomass, geothermal, hydropower
- (c) Natural gas, wind, biomass
- (d) Hydropower, solar, wind energy

Answer: d

44. In ecological succession, the intermediate developmental phase is known as

- (a) Ecesis
- (b) Climax
- (c) Nudation
- (d) Sere

Answer: d

45. Order of basic processes involved in succession is

- (a) Invasion -> stabilization -> completion and coaction -> reaction -> nudation
- (b) Nudation -> stabilization -> completion and coaction -> invasion -> reaction
- (c) Invasion -> nudation -> completion and coaction -> reaction -> stabilization
- (d) Nudation -> invasion -> completion and coaction -> reaction -> stabilization

Answer: d

46. The organic material of the solid waste will decompose

- (a) By the flow of water
- (b) By the soil particles
- (c) By the action of microorganisms
- (d) By oxidation

Answer: c

47. In which year, the Indian Wildlife (Protection) Act was implemented?

- (a) 1970
- (b) 1971
- (c) 1972
- (d) 1974

Answer: a

48. Which of the following convention aimed to bring conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing?

- (a) Convention on Biological Diversity (CBD)
- (b) Consultative group for International Agriculture Research (CGIAR)
- (c) Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- (d) All of the above

Answer: a

49. Which of the following was started in 1973 to save the evergreen tropical forest in the Palakkad district of Kerala, India from being flooded by a hydroelectric project?

- (a) Chipko Movement
- (b) Silent Valley Movement
- (c) Appiko Movement
- (d) Jungle Bachao Andola

Answer: b

50. The protection of Human Rights Act in India was enacted in the year

- (a) 1993
- (b) 1994
- (c) 1995
- (d) 1996

Answer: a

51. The tigers are found in which of the following biosphere reserve

- (a) Thar desert biosphere reserve
- (b) Neelgiri biosphere reserve
- (c) Namdhapa biosphere reserve
- (d) Sunderbans biosphere reserve

Answer: d

52. Lions are found in

- (a) Gir Forest
- (b) Western Ghat
- (c) Sundarban
- (d) Buxa Forest

Answer: a

53. National Park associated with conservation of one-horned rhinoceros

- (a) Kaziranga
- (b) Ranthambore
- (c) Corbette
- (d) Valley of flowers

Answer: a

54. Algal bloom results in

- (a) Global Warming
- (b) Eutrophication
- (c) Salinization
- (d) Biomagnification

Answer: b

55. _____ is used in measuring the magnitude of earthquake

- (a) Barometer
- (b) Seismometer
- (c) Anemometer
- (d) Thermometer

Answer: b

56. Who publish Red-list?

- a) WWF
- b) IUCN
- c) MAB
- d) IBWL

Answer: b

57. Covering the soil surface by straw, leaves or grasses is known as

- (a) Leaching
- (b) Mulching
- (c) Terracing
- (d) Crop rotation

Answer: b

58. A disease not caused by water pollution is

- (a) Jaundice
- (b) Cholera
- (c) AIDS
- (d) Dysentery

Answer: c

59. COD stands for

- (a) Chemical Oxygen Demand
- (b) Carbon and Oxygen Demand
- (c) Climate of Deserts
- (d) None of the above

Answer: a

60. Red Panda, a highly endangered species is found in which part of India?

- (a) Coastal region
- (b) Trans Himalayan region
- (c) North-Eastern Himalayas
- (d) Terai region

Answer: c

61. Asian elephant is now endangered because it is being killed for

- (a) Skin
- (b) Musk
- (c) Ivory
- (d) Fur

Answer: c

62. Trophic levels are formed by

- (a) Only plants
- (b) Only animals
- (c) Only carnivals
- (d) Food chain linked organisms

Answer: d

63. Process of photosynthesis is found in

- (a) Decomposers
- (b) Producers
- (c) Consumers
- (d) Top consumers

Answer: b

64. The 3 R principle in waste management stand for

- (a) Reduce, Reuse and Recycle
- (b) Reduce, regain and reuse
- (c) Reduce, reset and reform
- (d) Reduce, retain and regain

Answer: a

65. Which of the following is not an air pollutant?

- (a) Smoke
- (b) CO₂
- (c) Nitrogen
- (d) Sulphur Dioxide

Answer: c

66. Who is associated with 'Chipko Movement'?

- (a) Salim Ali
- (b) Sundarlal Bahuguna
- (c) Rachel Carson
- (d) None of these

Answer: b

67. In which year Silent Valley was declared as National Park?

- (a) 1982
- (b) 1984
- (c) 1988
- (d) 1992

Answer: b

68. Ozone is formed in the upper atmosphere by a photochemical reaction with

- (a) Ultra violet solar radiation
- (b) Infra-red radiation
- (c) Visible light
- (d) All of the above

Answer: a

69. Minamata disease is caused due to pollution by

- (a) Lead
- (b) PAN
- (c) Mercury
- (d) SO₂

Answer: c

70. Sardar Sarovar Project is situated on the river

- (a) Ganga
- (b) Yamuna
- (c) Cauvery
- (d) Narmada

Answer: d

71. The biggest nuclear accident occurred in

- (a) New York
- (b) Bhopal
- (c) Chernobyl
- (d) Beijing

Answer: c

72. The lowest layer of atmosphere is

- (a) Mesosphere
- (b) Stratosphere
- (c) Troposphere
- (d) Ionosphere

Answer: c

73. The first National Park established in India in 1936 is

- (a) Dudhwa National Park
- (b) Rajaji National Park
- (c) Jim Corbett National Park
- (d) Kaziranga National Park

Answer: c

74. The Indian Environmental Protection Act. Came into force in

- (a) 1976
- (b) 1996
- (c) 1986
- (d) 1988

Answer: c

75. An aquarium is an ----- ecosystem

- (a) Aquatic
- (b) Self-regulating
- (c) Artificial
- (d) Both a & c

Answer: d

76. Plants that can grow in dry places are called

- (a) Hydrophytes
- (b) Mesophytes
- (c) Halophytes
- (d) Xerophytes

Answer: d

77. The process that causes wearing away and transportation of particles of rock or soil is called

- (a) Salinization
- (b) Soil formation
- (c) Erosion
- (d) Landslide

Answer: c

78. All consumers are

- (a) Autotrophs
- (b) Carnivores
- (c) Heterotrophs
- (d) All of these

Answer: c

79. The conversion of ammonia to nitrates is known as

- (a) Denitrification
- (b) Nitrification
- (c) Ammonification
- (d) Nitrogen-fixation

Answer: b

80. Matter must be recycled again and again by an ecological process called

- (a) Ecological pyramid
- (b) Ecological Succession
- (c) Biogeochemical cycle
- (d) Energy flow

Answer: c

81. ----- is conserved in Jaldapara Sanctuary

- (a) Rhino
- (b) Nilgai
- (c) Hangul
- (d) Crocodile

Answer: a

82. The ----- biosphere reserve lies in Western Ghats

- (a) Nanda Devi
- (b) Nilgiri
- (c) Nokrek
- (d) Sunderbans

Answer: b

83. The phenomenon of accumulation of non-biodegradable pesticides in human beings

- (a) Bio-magnification
- (b) Bio-degradation
- (c) Bio-remediation
- (d) Bio-accumulation

Answer: d

84. The study that deals with the interaction of organisms with their environment

- (a) Etiology
- (b) Botany
- (c) Ecology
- (d) Biology

Answer: c

85. ----- is the phenomenon in which the earth retains heat

- (a) Air pollution
- (b) Green House effect
- (c) Global effect
- (d) Land pollution

Answer: b

86. Leader of "Narmada Bachao Andolan"

- (a) Vandana Siva
- (b) Medha Patkar
- (c) Maneka Gandhi
- (d) None of the above

Answer: b

87. The cause of Bhopal Gas Tragedy is

- (a) Methyl alcohol
- (b) Methyl carbonate
- (c) Methyl iso-cyanate
- (d) Methyl sulphate

Answer: c

88. On which date was the Stockholm Conference on Human Environment held?

- (a) July 6th 1974
- (b) August 8th 1976
- (c) June 5th 1972
- (d) Dec 12th 1990

Answer: c

89. The cutting down of trees and setting them on fire and raising crops on the resulting ash is called

- (a) Jhum cultivation
- (b) Crop rotation
- (c) Terrace farming
- (d) Taungya system

Answer: a

90. The first International Conference on Environment was held in

- (a) Rio de Janeiro
- (b) Johannesburg
- (c) Stockholm
- (d) New Delhi

Answer: c

91. First International Conference on "Wetland Conservation" was held in

- (a) Ramsagar
- (b) Ramsar
- (c) Ramsahar
- (d) Stockholm

Answer: b

92. Forest helps in mitigating global warming through

- (a) Heat radiation
- (b) Heat absorption
- (c) Transpiration
- (d) Photosynthesis

Answer: d

93. Both power and manure are provided by

- (a) Thermal plant
- (b) Nuclear plant
- (c) Biogas plant
- (d) Hydroelectric plant

Answer: c

94. Main source of noise pollution

- (a) Urbanization
- (b) Industrialization
- (c) Photochemical smog
- (d) Both a & b

Answer: d

95. A recent technique for the study of vegetation

- (a) Photography
- (b) Remote sensing
- (c) Genetic Information analysis
- (d) Observation

Answer: b

96. The primary producer of a pond ecosystem is

- (a) Zooplankton
- (b) Red algae
- (c) Phytoplankton
- (d) Floating plants

Answer: c

97. The zone in which two ecosystems are united is known as

- (a) Niche
- (b) Habitat
- (c) Ecotype
- (d) Ecotone

Answer: d

98. Which rock can be eroded by solution process?

- (a) Granite
- (b) Pegmatite
- (c) Lime stone
- (d) Ophiolite

Answer: c

99. Which will not cause any atmospheric pollution?

- (a) H₂
- (b) SO₂
- (c) CO₂
- (d) CO

Answer: a

100. A food web consists of

- (a) A single food chain
- (b) Many independent food chain
- (c) Many interconnected food chains
- (d) All of these

Answer: c

101. The efficiency of energy flow in the ecosystem is about

- (a) 1%
- (b) 10%
- (c) 50%
- (d) 100%

Answer: b

102. The most harmful environmental pollution from nuclear reactor is

- (a) radioactivity
- (b) particulate formation
- (c) thermal pollution
- (d) noise pollution

Answer: c

103. The term sustainable development was first used by

- (a) World Development Report
- (b) Brundtland Report
- (c) World Environment Report
- (d) None of the above.

Answer: c

104. The term biodiversity is coined by

- (a) W.G.Rosen
- (b) Ronald Coarse
- (c) Rachel Carson
- (d) None of the above.

Answer: a

105. The conversion of ammonia to nitrate is known as

- (a) Ammonification
- (b) Nitrification
- (c) Denitrification
- (d) All of these

Answer: b

106. Which of the following enhances soil fertility?

- (a) Crop rotation
- (b) Improved methods of agriculture
- (c) Using new seed varieties
- (d) Irrigation

Answer: a

107. Energy is returned to the atmosphere in the form of

- (a) Potential energy
- (b) Metabolic energy
- (c) Heat
- (d) Vapors

Answer: c

108. The presence of Ozone layer in the atmosphere was first observed by

- (a) W.G.Rosen
- (b) Ronald Coarse
- (c) Chapman
- (d) None of the above

Answer: c

109. The term Green House Effect was coined by

- (a) Ronald Coarse
- (b) Garret Hardin
- (c) J.Fourier
- (d) None of these

Answer: c

110. The species which are likely to become extinct in the near future is called

- a) Rare species
- b) Vulnerable species
- c) Endangered species
- d) Indeterminate species

Answer: b

111. Threatened species include

- (a) Rare species
- (b) Vulnerable species
- (c) Endangered species
- (d) All the above

Answer: d

112. Global warming is a consequence of-----

- (a) Acid rain
- (b) Greenhouse effect
- (c) Depletion of ozone layer
- (d) Radioactive fall out

Answer: b

113. The study of individual organism is known as

- (a) Syn ecology
- (b) Population ecology
- (c) Autecology
- (d) Human ecology

Answer: c

114. Phagotropic mode of nutrition is found in -----

- (a) Products
- (b) Consumers
- (c) Decomposers
- (d) All of these

Answer: b

115. An example of e-waste is

- (a) Paper
- (b) Plastic
- (c) Industrial effluent
- (d) Mobile phone

Answer: d

116. Which of the following is not a waterborne disease?

- (a) Measles
- (b) Typhoid
- (c) Cholera
- (d) Hepatitis

Answer: a

117. _____ is an organism used to gauge the quality of an ecosystem.

- (a) Decomposers
- (b) Predator
- (c) Bio-remediator
- (d) Bioindicator

Answer: d

118. Which of the following facts are incorrect?

- (a) Global warming is the rise in the average temperature of the earth's climate system
- (b) Eutrophication is observed in water bodies
- (c) The greenhouse effect is a natural phenomenon
- (d) Ozone is harmless to breathe

Answer: d

119. Which of the following is called the secondary air pollutant?

- (a) PANs
- (b) Ozone
- (c) Carbon monoxide
- (d) Nitrogen Dioxide

Answer: b

120. Which of the following statements is true about smog?

- (a) Smog is derived from the fog
- (b) Smog is derived from smoke
- (c) Smog is derived from water vapor
- (d) Smog is derived from both fog and smoke

Answer: d

121. Which of the following diseases are caused by smog?

- (a) Rickets
- (b) Bronchitis
- (c) Breathing Problems
- (d) All of the above

Answer: d

122. The protocol which decided to completely phase out CFC is

- (a) Cartagena protocol
- (b) Stockholm Convention
- (c) Montreal protocol
- (d) Kyoto protocol

Answer: c

123. Which of the following is said to be a biodegradable waste?

- (a) Plastics
- (b) Glasses
- (c) Eggshell
- (d) Polythene

Answer: c

124. The uses of CFCs are

- (a) Insulators
- (b) Aerosol propellants
- (c) Refrigerants
- (d) All of the above

Answer: d

125. The ozone layer is present in -

- (a) Mesosphere
- (b) Thermosphere
- (c) Stratosphere
- (d) None of the above

Answer: c

126. Which of the following are the negative health effects of noise pollution?

- (a) Hypertension
- (b) Hearing loss
- (c) Stress and headache
- (d) All of the above

Answer: d

127. Wildlife week is celebrated from

- (a) 2nd October to 8th October
- (b) 15th October to 21st October
- (c) 14th June to 20th June
- (d) None of the above

Answer: a

128. CNG stands for
- (a) Common Natural gas
 - (b) Compressed National gas
 - (c) Compressed Natural gas
 - (d) Certified National gas

Answer: c

129. Animals whose primary source of food is based on plants are known as

- (a) Carnivores
- (b) Herbivores
- (c) Omnivores
- (d) None of the above

Answer: b

130. Which of the following device is used to measure the atmospheric humidity?

- (a) Photometer
- (b) Auxanometer
- (c) Hygrometer
- (d) None of the above

Answer: c

131. The year declared as the "water year" by the Indian Government is

- (a) 2010
- (b) 2005
- (c) 2006
- (d) 2007

Answer: d

132. What kind of Eco-system is known as sustainable?

- (a) The one in which all species are in balance
- (b) The one in which there are no animals
- (c) The one in which animals feed on each other
- (d) All of these

Answer: a

133. Which of the following statement is TRUE?

- (a) Eco-Systems may vary in size
- (b) Eco-Systems are always very large
- (c) Eco-Systems are always very small.
- (d) None of these is true.

Answer: a

134. Plants growing under direct sunlight are known as

- (a) Heliophytes
- (b) Sciophytes
- (c) Psamophytes
- (d) Dicots

Answer: a

135. What type of food chain is it?

Dead animals → blowfly maggot → maggots → frog → snake

- (a) Detrital food chain
- (b) Decomposer food chain
- (c) Predator food chain
- (d) Grazing food chain

Answer: a

136. "The pyramid of energy is always upright" states that

- (a) The energy conversion efficiency of herbivores is better than carnivores
- (b) The energy conversion efficiency of carnivores is better than herbivores
- (c) Producers have the lowest energy conversion efficiency
- (d) Energy conversion efficiency is the same in all trophic levels

Answer: a

137. Plant species with a wide range of genetic distribution evolve into a local population known as

- (a) Ecotype
- (b) Population
- (c) Ecosystem
- (d) Biome

Answer: a

138. Edaphic factor refers to

- (a) Water
- (b) Soil
- (c) Relative humidity
- (d) Altitude

Answer: b

139. The following is an example of Terrestrial Biome

- (a) Tropical rain forest
- (b) Rivers
- (c) Streams
- (d) All of the above

Answer: a

140. Terrestrial biomes has a rapid exchange of

- (a) Carbon dioxide
- (b) Oxygen
- (c) Water
- (d) All of the above

Answer: d

141. Ecosystem is smallest unit of

- (a) Ionosphere
- (b) Lithosphere
- (c) Biosphere
- (d) Mesosphere

Answer: c

142. This is true about secondary succession

- (a) Follows primary succession
- (b) Takes place on a deforested site
- (c) is similar to primary succession except that it has a relatively slower pace
- (d) Begins on a bare rock

Answer: b

143. This about ecological succession is incorrect

- (a) Food chain relationships become more complex
- (b) Species diversity increases as succession proceeds
- (c) Role of decomposers becomes all the more important
- (d) is a random process

Answer: d

144. Process of the successful establishment of species in a new area is known as

- (a) Climax
- (b) Sere
- (c) Ecesis
- (d) Invasion

Answer: c

145. Ecological Succession is an important function of an Eco-system. Which of the following statement/s about Ecological succession is/are correct?

- (1) Succession refers to the changes in population or community structures that occur at the boundary of two habitats.
- (2) It is a universal process of directional change in vegetation and animal life on an ecological time scale.

Select the correct code

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 nor 2

Answer: b

146. In context of types of ecological successions, consider the following statements and identify the correct one/s

- (1) Autogenic Succession is brought about by living inhabitants of the community itself.
- (2) Allogenic Succession is brought about by the external forces.

Select the correct code

- (a) 1 only
- (b) 2 only
- (c) Both 1 and 2
- (d) Neither 1 or 2

Answer: c

147. Which of the following is an anti-forest conservation activity?

- (a) Preservation of wild animals
- (b) Preservation of fires
- (c) Clear felling
- (d) Economy in lumbering

Answer: c

148. The energy produced by the hydel-power plant is

- (a) Non-polluting and non-renewable
- (b) Polluting and non-renewable
- (c) Non-polluting and renewable
- (d) Polluting and renewable

Answer: c

149. Which one represents the regulative function of forests?

- (a) Storage and release of gases
- (b) Production of essential oils
- (c) Production of wood
- (d) Conservation of water and soil

Answer: a

150. 'Ozone-hole' means

- (a) A large sized hole in the ozone layer
- (b) Thinning of the ozone layer
- (c) Small holes scattered in the ozone layer
- (d) Thickening of ozone in the ozone layer

Answer: b

151. Biotic component of biosphere is not constituted by

- (a) Producers
- (b) Consumers
- (c) Decomposer
- (d) Air

Answer: d

152. Soil erosion can be prevented by

- (a) Raising forests
- (b) Deforestation
- (c) Excessive use of fertilizer
- (d) Overgrazing by animals

Answer: a

153. What would happen, if all the oxygen present in the environment is converted to ozone?

- (a) We will be protected more
- (b) It will become poisonous and kill living forms
- (c) Ozone is not stable, hence it will be toxic
- (d) It will help harmful sun radiations to reach earth and damage many life forms.

Answer: b

154. The functional aspects of the ecosystem are

- (a) Energy cycles
- (b) Nutrient cycles
- (c) Food chains
- (d) All of the above

Answer: d

155. Which of the following is also called Detrivores?

- (a) Herbivores
- (b) Decomposers
- (c) Carnivores
- (d) None of the above

Answer: b

156. Which of the following activity is incorrect about the impact of human activities on the ecosystem?

- (a) Depletion of ground water
- (b) Extinction of species
- (c) Decrease of forest area
- (d) None of the above

Answer: d

157. The type of forests grown in the Himalayan mountain region is called

- (a) Broad-leaved forests
- (b) Coniferous forests
- (c) Deciduous forests
- (d) None of the above

Answer: b

158. Which of the following is not a Biogeographic zone of India?

- (a) Thar Desert of Rajasthan
- (b) The Brahmaputra Plains
- (c) South-east zone
- (d) North-east zone

Answer: c

159. What are the numbers of biodiversity hotspots in the world?

- (a) 18
- (b) 28
- (c) 32
- (d) 36

Answer: d

160. Which of the following element is responsible for groundwater pollution in various states?

- (a) Chlorine
- (b) Fluoride
- (c) Chemicals
- (d) None of the above

Answer: b

161. Which element present in the drinking water can lead to various fatal diseases?

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

Answer: b

162. Forest Conservation act was amended in which of the following year?

- (a) 1952
- (b) 1963
- (c) 1988
- (d) 1978

Answer: c

163. Environmental studies is defined as the branch that deals with the

- (a) Design, study, and discovery of new materials
- (b) The study of humanities, social, biological, and physical sciences
- (c) Incorporate the information and physical sciences
- (d) Approach about the natural world and the impact of humans on its integrity

Answer: d

164. Which of the following is not a measure of sustainable water management?

- (a) Preventing leakage from dams and canals
- (b) Reducing the rate of surface run-off water.
- (c) Preventing loss in the municipal pipes.
- (d) Building small reservoirs in place of a few mega projects.

Answer: b

165. What is the world's largest potential source of biomass energy?

- (a) Animal waste
- (b) Industrial waste
- (c) Fibrous waste of the paper industry
- (d) Fibrous waste of the sugar industry

Answer: d

166. In an ecotone, the species which become abundant are called

- (a) Edge species
- (b) Keystone species
- (c) Endemic species
- (d) Foster species

Answer: a

167. Which of the following is management option for air pollution?

- (a) Regulations and standards
- (b) Transport planning
- (c) Using CNG as fuel
- (d) All of these

Answer: d

168. The term 'Environment' has been derived from the French word which means to encircle or surround

- (a) Environ
- (b) Oikos
- (c) Geo
- (d) Aqua

Answer: a

169. Which among the following is a climatic factor?

- (a) Pressure
- (b) Humidity
- (c) Temperature
- (d) All of the above

Answer: d

170. Which of the following are major environmental issues involved in mining?

- (a) Air pollution
- (b) Water pollution
- (c) Soil degradation
- (d) All of the above

Answer: d

171. Water logging is a phenomenon in which

- (a) Crop patterns are rotated
- (b) Soil root zone becomes saturated due to over irrigation
- (c) Erosion of soil
- (d) None of the above

Answer: b

172. Environmental impact assessment

- (a) is the study of feasibility of a project
- (b) is a study of bio-physical characteristics of the environment that may result from a human action
- (c) Both a and b
- (d) None of the above

Answer: b

173. A herbivore is also known as a

- (a) Producer
- (b) First order consumer
- (c) Second order consumer.
- (d) Third order consumer

Answer: b

174. The true end of any food chain is the

- (a) Decomposer
- (b) Predator
- (c) Consumer
- (d) Human

Answer: a

175. Which of the following can act as a pioneer species in a xerach succession?

- (a) Lichens
- (b) Humans
- (c) Herbs
- (d) Animals

Answer: a

176. In a pyramid of numbers in grassland ecosystems, the largest population is that of

- (a) Herbivores
- (b) Primary consumers
- (c) Secondary consumer
- (d) Producers

Answer: a

177. Which of these belong to the category of primary consumers in grazing food chain?

- (a) Snakes and frogs
- (b) Insects and cattle
- (c) Eagle and snakes
- (d) Cow and rabbit

Answer: d

178. Which one of the following is not a gaseous biogeochemical cycle?

- (a) Nitrogen cycle
- (b) Carbon cycle
- (c) Sulphur cycle
- (d) Phosphorus cycle

Answer: d

179. July 11 is

- (a) World Environment Day
- (b) World Population Day
- (c) World AIDS Day
- (d) World Education Day

Answer: b

180. Group of interbreeding organisms found in a particular area is

- (a) Population
- (b) Community
- (c) Tribe
- (d) Density

Answer: a

181. In the breakdown of the ozone layer, the ozone (O₃) directly reacts with

- (a) Ultraviolet light
- (b) Chlorine atoms
- (c) Oxygen atoms
- (d) CFC molecules

Answer: b

182. Thickness of ozone layer is measured in

- (a) Decibels
- (b) Dobson unit
- (c) Meter
- (d) Armstrong unit

Answer: b

183. Which of the following statements about ozone is true?

- (a) Ozone is a major constituent of photochemical smog
- (b) Ozone is highly reactive
- (c) It protects us from harmful UV radiations of sun
- (d) All of the above

Answer: c

184. Formation of hole in Ozone is maximum over

- (a) India
- (b) Europe
- (c) Antarctica
- (d) Africa

Answer: c

185. Which of the following is not a potential adverse effect of global warming?

- (a) More extreme weather patterns
- (b) Retreat of glaciers
- (c) Sea level rise
- (d) An increase of UV-B radiation

Answer: d

186. Excess atmospheric carbon dioxide increases greenhouse effect as carbon dioxide

- (a) Precipitates dust in the atmosphere
- (b) Is opaque to infrared rays
- (c) Reduces atmospheric pressure
- (d) Is heavier than other gases

Answer: b

187. The solar radiation that bounces off the earth back towards the atmosphere is mostly

- (a) Gamma radiation
- (b) X-ray radiation
- (c) Ultraviolet radiation
- (d) Infrared radiation

Answer: d

188. The two major impacts expected as a result of rising global temperatures are

- (a) Higher water levels in lakes and streams but more consistent flooding patterns
- (b) Regional climatic changes and a rise in sea level
- (c) Longer summers and drier winters
- (d) Low water levels in lakes and streams and larger floodplains.

Answer: b

189. 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) Sri Lanka
- (c) Fiji
- (d) Indonesia

Answer: a

190. A river with high BOD value means

- (a) Highly polluted
- (b) Highly clean
- (c) Highly productive
- (d) None of the above

Answer: a

191. Which of the following is the best indicator of SO₂ POLLUTION?

- (a) Bryophytes
- (b) Pteridophytes
- (c) Lichens
- (d) Algae

Answer: c

192. The supersonic jets cause air pollution by the thinning of

- (a) Carbon dioxide layer
- (b) Sulphur dioxide layer
- (c) Ozone layer
- (d) Oxygen layer

Answer: c

193. Increase in concentration of toxic level in each trophic level is referred to as

- (a) Eutrophication
- (b) Biomagnification
- (c) Bioaccumulation
- (d) Bioconcentration

Answer: b

194. Which one of the following regions in India is a hotspot of biodiversity?

- (a) Sundarbans
- (b) Western Ghats
- (c) Eastern Ghats
- (d) Gangetic plains

Answer: b

195. Development activities on the hydrosphere cause

- (a) Air pollution
- (b) Soil pollution
- (c) Water pollution
- (d) Soil erosion

Answer: c

196. Common energy source in Indian villages is

- (a) Electricity
- (b) Coal
- (c) Sun
- (d) Wood and animal dung

Answer: d

197. The one thing that is common to all fossil fuels is that they

- (a) Were originally formed in marine environment
- (b) Contain carbon
- (c) Have undergone the same set of geological processes during their formation
- (d) Represent the remains of one living organisms

Answer: b

198. Which of the below theory is related to non-renewable resources?

- (a) Game Theory
- (b) Phlogiston Theory
- (c) Big Bang Theory
- (d) Hotelling's Theory

Answer: d

199. Bill Gates, Chairman of the Board for Terra Power Company is associated in which of the following non-renewable resources?

- (a) Earth minerals
- (b) Fossil fuels
- (c) Nuclear energy
- (d) Metal ores

Answer: c

200. Which of the following nonrenewable energy is not classified under a fossil fuel?

- (a) Nuclear
- (b) Petroleum
- (c) Oil
- (d) Natural gas

Answer: a

201. The major non-renewable energy usage in India is _____

- (a) Coal
- (b) Petroleum and other liquids
- (c) Natural gas
- (d) Nuclear

Answer: a

202. One of the following is the first major environmental protection act to be promulgated in India?

- (a) Environmental Act
- (b) Air Act
- (c) Water Act
- (d) Noise Pollution Rule

Answer: c

203. The first Forest Act was introduced in the _____ year

- (a) 1989
- (b) 1980
- (c) 1972
- (d) 1979

Answer: b

204. Plague is caused by

- (a) *Leishmania donovani*
- (b) *Yersinia pestis*
- (c) *Salmonella typhimuium*
- (d) *Trichinella spiralis*

Answer: b

205. Which of the following is not a vector-borne disease?

- (a) Yellow fever
- (b) Dengue fever
- (c) Viral fever
- (d) Malaria

Answer: c

206. Kala-azar is transmitted by

- (a) Dragon fly
- (b) Housefly
- (c) Tse-tse fly
- (d) Sand fly

Answer: d

207. Yellow fever is transmitted by

- (a) *Anopheles*
- (b) *Aedes*
- (c) Housefly
- (d) Tse-tse fly

Answer: b

208. Which of the following is not the mosquito-borne viral disease?

- (a) Dengue
- (b) Lassa fever
- (c) Yellow fever
- (d) Japanese B encephalitis

Answer: b

209. The mosquito-borne Zika virus outbreak was declared an epidemic mainly in which of the following regions?

- (a) Europe
- (b) China and India
- (c) Brazil and North America
- (d) South Africa and Ghana

Answer: c

210. Biodiversity

- (a) increases towards the equator
- (b) decreases towards the equator
- (c) remains same throughout the planet
- (d) has no effect on change in latitude

Answer: a

211. The most important reason for decrease in biodiversity is

- (a) habitat pollution
- (b) introduction of exotic species
- (c) over-exploitation
- (d) habitat destruction

Answer: c

212. List prepared by International Union for Conservation of Nature and Natural Resources for endangered species is classified as

- (a) Brown List
- (b) White List
- (c) Black List
- (d) Red List

Answer: c

213. How many biosphere reserves are present in India?

- (a) 41
- (b) 34
- (c) 14
- (d) 43

Answer: a

214. Which is the correct option the Amazon rain forest?

- I. In this rain forest there might be at least two million insects species waiting to be discovered and named.
- II. This forest is known as lungs of the planet.
- III. In this forest digging of mine is performed by dynamine.
- IV. This forest are destroyed for the cultivation of soyabeans.
- V. This forest contains world famous Biodiversity

- (a) i, ii, iv, v
- (b) i, ii, iii, iv
- (c) ii, iii, iv, v
- (d) iii, v, iv

Answer: c

215. -1°C to 13°C annual variations in the intensity and duration of temperature and 50 to 250 cm annual variation in precipitation, account for the formation of major biome as

- (a) Tropical forest
- (b) Coniferous forest
- (c) Temperate forest
- (d) Grassland

Answer: b

216. Which one of the following is not observed in biodiversity hotspots?

- (a) Species richness
- (b) Endemism
- (c) Accelerated species loss
- (d) Lesser inter-specific competition

Answer: c

217. 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

Answer: b

218. Select the correct statement about biodiversity

- (a) The desert areas of Rajasthan and Gujarat have a very high level of desert animal species as well as numerous rare animals
- (b) Large scale planting of BT cotton has no adverse effect on biodiversity
- (c) Western Ghats have a very high degree of species richness and endemism
- (d) Conservation of biodiversity in just a fad pursued by the developed countries

Answer: c

219. Biodiversity of a geographical region represents

- (a) Genetic diversity present in the dominant species of the region
- (b) Species endemic to the region
- (c) Endangered species found in the region
- (d) The diversity in the organisms living in the region

Answer: d

220. Global warming can be controlled by

- (a) Reducing deforestation, cutting down use of fossil fuel
- (b) Reducing reforestation, increasing the use of fossil fuel
- (c) Increasing deforestation, slowing down the growth of human population
- (d) Increasing deforestation, reducing efficiency of energy usage

Answer: a

221. Which one of the following is not used for ex situ plant conservation?

- (a) Field gene banks
- (b) Seed banks
- (c) Shifting cultivation
- (d) Botanical Gardens

Answer: c

222. Which of the following represent maximum number of species among global biodiversity?

- (a) Algae
- (b) Lichens
- (c) Fungi
- (d) Mosses and Ferns

Answer: c

223. The greatest problem of water conservation is to reduce the amount of

- (a) Precipitation
- (b) Runoff water
- (c) Groundwater
- (d) Evaporation

Answer: c

224. Which one of the following expanded forms of the followings acronyms is correct?

- (a) IUCN = International Union for Conservation of Nature and Natural Resources
- (b) IPCC = International Panel for Climate Change
- (c) UNEP = United Nations Environmental Policy
- (d) EPA = Environmental Pollution Agency

Answer: a

225. Sacred groves are especially useful in

- (a) Generating environmental awareness
- (b) Preventing soil erosion
- (c) Year-round flow of water in rivers
- (d) Conserving rare and threatened species

Answer: a

226. Which is the correct option?

- (a) There is chance in Natural selection in evolution process due to alpha biodiversity
- (b) There is chance in Natural selection in process of evolution due to genetic diversity
- (c) There is chance in Natural selection in process of evolution due to Ecosystem biodiversity
- (d) There is chance in Natural selection in process of due to bio community diversity

Answer: c

227. In a marine food chain, small fish eat plankton, big fish eat small fish, and sharks eat big fish. Which organism has the smallest population?

- (a) The sharks
- (b) The small fish
- (c) The big fish
- (d) The plankton

Answer: a

228. Which of the following statements best describes a food web?

- (a) Many individual organisms of the same species that live in the same space and that share resources
- (b) A black bear eats fruit and then spreads the fruit seeds through its excretions
- (c) A system that is made up of a community of organisms and their environment
- (d) All life is connected by the transfer of energy among organisms and their environment

Answer: d

229. Grass that gains energy from the sun is an example of a

- (a) Consumer
- (b) Decomposer
- (c) Parasite
- (d) Producer.

Answer: d

230. Which of the following options is not incorporated as sustainable development parameters?

- (a) Gender disparity and diversity
- (b) Inter and intra-generational equity
- (c) Carrying capacity
- (d) None of the above

Answer: d

231. Mercury and lead are toxic elements that cause _____

- (a) Noise pollution
- (b) Air pollution
- (c) Water pollution
- (d) Land contamination

Answer: d

232. In which year did the word 'sustainable development' come into existence?

- (a) 1992
- (b) 1978
- (c) 1980
- (d) 1987

Answer: c

233. Which of the following options is correct when we only accomplish two out of three pillars of sustainable development?

- (a) Economic + Environmental sustainability = Viable
- (b) Social + Environmental sustainability = Bearable
- (c) Social + Economic sustainability = Equitable
- (d) All of the above

Answer: d

234. Sustainable energy

- (a) is clean
- (b) can be used over a long period of time
- (c) both (a) and (b)
- (d) none of the above

Answer: c

235. The United Nations Conference on Sustainable Development (UNCSD) is also known as

- (a) Rio 2010
- (b) Rio 2011
- (c) Rio 2012
- (d) Rio 2013

Answer: c

236. Which of the following statements is true about the Air Quality Index?

- (a) It indicates the colour of the air.
- (b) It predicts ozone levels in your area.
- (c) It determines the intensity of sound and sound pollution.
- (d) It estimates air pollution mainly sulphur content in the air.

Answer: b

237. What is the total percentage of nitrogen gas in the air?

- (a) 12 per cent
- (b) 21 per cent
- (c) 78 per cent
- (d) 87 per cent

Answer: c

238. Increased levels of air pollution results in _____

- (a) Soil erosion
- (b) Global warming
- (c) Respiratory problems
- (d) All of the above

Answer: c

239. Increased levels of air pollution results in _____.

- (a) Soil erosion
- (b) Global warming
- (c) Respiratory problems
- (d) All of the above

Answer: c

240. Smoke, fumes, ash, dust, nitric oxide and sulphur dioxide are the main sources of _____

- (a) Primary Pollutants
- (b) Secondary pollutants
- (c) Bio-Degradable Pollutants
- (d) None of the above

Answer: a

241. DDT and Aluminium cans are examples of _____

- (a) Primary Pollutants
- (b) Secondary pollutants
- (c) Biodegradable Pollutants
- (d) Non-Biodegradable Pollutants

Answer: d

242. Which of the following diseases are caused by smog?

- (a) Rickets
- (b) Bronchitis
- (c) Breathing Problems
- (d) All of the above

Answer: d

243. Select non-denitrifying bacteria

- (a) *Pseudomonas aeruginosa*
- (b) *Thiobacillus*
- (c) *Thiobacillus denitrificans*
- (d) *Bacillus ramosus*

Answer: d

244. dB is the abbreviation used for the quantitative expression of

- (a) Density of bacteria in a medium
- (b) A Particular Pollutant
- (c) Dominant Bacillus in a culture
- (d) A pesticide

Answer: b

245. Identify the mismatched pair

- (a) Tundra – Permafrost
- (b) Savanna – Acacia trees
- (c) Prairie – Epiphytes
- (d) Coniferous forest – Evergreen trees

Answer: c

246. All species of Lemur are endemic to which area?

- (a) Madagascar
- (b) Seychelles Island
- (c) Galapagos Island
- (d) New Caledonia

Answer: a

247. The ability of a population to increase under ideal environmental conditions is called

- (a) Natality
- (b) Carrying capacity
- (c) Biotic potential
- (d) Absolute natality

Answer: c

248. Lincoln index measures

- (a) Population mortality rate
- (b) Population natality rate
- (c) Population size
- (d) Population density

Answer: c

249. Which is not the characteristic of a population?

- (a) Natality
- (b) Mortality
- (c) Stratification
- (d) Sex ratio

Answer: c

250. The bottom area where production is less than respiration in a pond ecosystem is termed as

- (a) Profundal zone
- (b) Tidal zone
- (c) Benthic zone
- (d) Limnetic zone

Answer: a