## The Bodwad Sarvajanik Co-Op.Education Society Ltd., Bodwad

## Arts, Commerce and Science College, Bodawd

## **Ouestion Bank**

Class:-S.Y.B.Sc SEM:- IV

Subject: - BOTANY- 402 Plant Ecology

- 1. The science which deals with relationship between organisms and their environment is called
  - a) Morphology
  - b) Palynology
  - c) Taxonomy
  - d) Ecology
- 2. The meaning of Greek word Oikas
  - a) Nature
  - b) Environment
  - c) House
  - d) Temple
- 3. The term ecology coined by
  - a) Odum
  - b) Tansley
  - c) Haeckel
  - d) None
- 4. Autecology deals with the study of
  - a) Ecology of individual species
  - b) Ecology of many species
  - c) Ecology of community
  - d) All of these
- 5. Synecology deals with the study of
  - a) Ecology of individual species
  - b) Ecology of many species
  - c) Ecology of community
  - d) All of these
- 6. The branch of ecology which deals with the study of the organisms and geological environments of past is called
  - a) Cytoecology
  - b) Palecology
  - c) Synecology
  - d) Autoecology
- 7. Ecology deals with the study of
  - a) Living beings
  - b) Living and non living components
  - c) Reciprocal relationship between living and non living components

## d) Biotic and Abiotic components

- 8. Phylloclade is modified
  - a) Root
  - b) Leaf
  - c) Stem
  - d) Bud
- 9. Cuscuta is
  - a) Parasite
  - b) Epiphyte
  - c) Symbiont
  - d) Lichen
- 10. Mycorrhiza is example of
  - a) Symbiotic relationship
  - b) Parasitic relationship
  - c) Saprophytic relationship
  - d) Negative interaction
- 11. Edaphic ecological factors are concerned with
  - a) Rainfall
  - b) Light
  - c) Competition
  - d) Soil
- 12. The soil is said to be physiologically dry when
  - a) Temperature band light available to plants is insufficient
  - b) There is abundance of water in soil
  - c) Soil water is with high concentration of salts
  - d) Both b and c
- 13. How many horizons are present in mature soil profile
  - a) One
  - b) Three
  - c) Five
  - d) Seven
- 14. Aerenchyma is present in which of the following
  - a) Hydrilla
  - b) Epiphytes
  - c) Opuntia
  - d) Nerium
- 15. Sunken stomata and multiple epidermis is found in
  - a) Nerium
  - b) Hydrilla
  - c) Eicchornia
  - d) Lichen
- 16. Which type of soil water is used by plant
  - a) Gravitational water
  - b) Hygroscopic water
  - c) Combined water
  - d) Capillary water

- 17. Biotic factors are
  - a) Atmospheric factors that affect life
  - b) Chemical factors in soil that affect life
  - c) Physical factors in soil that affect life
  - d) Interactions among living organism
- 18. Abiotic ecological factors are
  - a) Climatic
  - b) Topographic
  - c) Edaphic
  - d) All of these
- 19. Rhizobium is found in
  - a) Root nodules of leguminous plants
  - b) Lichen
  - c) Water
  - d) Coralloid root
- 20. Metabolic activities of organism are at maximum level at
  - a) Minimum temperature
  - b) Optimum temperature
  - c) Maximum temperature
  - d) 0° c temperature
- 21. Weathering is assisted by
  - a) Lichen
  - b) Mosses
  - c) Bacteria
  - d) All of these
- 22. Weathering is brought by
  - a) Hydrolysis
  - b) Oxidation
  - c) Carbonation
  - d) All of these
- 23. A living components of the Ecosystem is called
  - a) Abiotic factors
  - b) Biotic factors
  - c) Organism
  - d) All the above
- 24. A non living components of the Ecosystem is called
  - a) Abiotic factors
  - b) Biotic factors
  - c) Organism
  - d) All the above
- 25. Biotic factors in an Ecosystem may include
  - a) Bacteria, soil and water
  - b) Plants, animals and bacteria
  - c) Temperature ,water and soil
  - d) Animals, fungi and temperature
- 26. An example of abiotic component is

- a) Plants
- b) Soil
- c) Bacteria
- d) Animals
- 27. An example of biotic component is
  - a) Temperature
  - b) Soil
  - c) Light
  - d) Bacteria
- 28. Parasites that lives inside host body to get shelter and food are called
  - a) Digestion parasites
  - b) Synthetic parasites
  - c) Endoparasites
  - d) Ectoparasites
- 29. A kind of symbiosis in which only one partner is benefited and other is not harmed and benefited is called
  - a) Temporary parasitism
  - b) Temporary mutualism
  - c) Permanent mutualism
  - d) Commensalism
- 30. Which of the following does not describe commensalism
  - a) Epiphyte growing on a tree
  - b) Bird nesting on a tree
  - c) Small fish surviving on the excreta of the bigger fish
  - d) E.coli residing in the blood stream of human
- 31. The components of soil are
  - a) Inorganic and organic
  - b) Water and air
  - c) Living
  - d) All the above
- 32. Humus and the smallest particles of rock form the
  - a) Horizon A
  - b) Horizon B
  - c) Horizon C
  - d) Bedrock
- 33. Water percolating into the soil collects over
  - a) Horizon A
  - b) Horizon B
  - c) Horizon C
  - d) None of these
- 34. Plants adapted for aquatic habitats are
  - a) Sciophytes
  - b) Hydrophytes
  - c) Mesophytes
  - d) Epiphytes
- 35. Plants adapted for xeric habitats are

- a) Sciophytes
- b) Hydrophytes
- c) Mesophytes
- d) Epiphytes
- 36. The region of earth where life exists is known as
  - a. Atmosphere
  - b. Biosphere
  - c. Lithosphere
  - d. Hydrosphere
- 37. The diversity in a given nation where different communities exists at different latitudes is called
  - a. Species diversity
  - b. Local diversity
  - c. Biodiversity
  - d. None of these
- 38. Diversity of whole nation or parts of continents within which many different communities exists is
  - a. Local diversity
  - b. Species diversity
  - c. Optional regional diversity
  - d. Biodiversity
- 39. The plants having a height over a 30 meters high are called as
  - a. Megaphanerophytes
  - b. Mesophanerophytes
  - c. Microphanerophytes
  - d. Nanophanerophytes
- 40. Nanophanerophytes shows the height
  - a. 2-8 meters
  - b. 8-30 meters
  - c. Under 2 meters
  - d. 30 meters
- 41. Microphanerophytes have a height
  - a. 8-30 meters
  - b. 30 meters
  - c. 2-8 meters
  - d. 100 meters
- 42. Mesophanerophytes have a height
  - a. 8-30 meters
  - b. 50 meters
  - c. 30 meters
  - d. Less than 30 meters
- 43. The pioneers in Xerach succession is the
  - a. Crustose lichen
  - b. Mosses
  - c. Foliose lichen
  - d. Shrubs

- 44. The final stable community in an ecological succession is called the
  - a. Final community
  - b. Ultimate community
  - c. Climax community
  - d. Seral community
- 45. The development of bare area without any life forms is called
  - a. Nudation
  - b. Ecesis
  - c. Sere
  - d. Reaction
- 46. The conversion of a pond to a climax forest community is an example of
  - a. Xerach succession
  - b. Mesarch succession
  - c. Hydrach succession
  - d. None of these
- 47. The process of successful establishment of a species in a new area is called
  - a. Sere
  - b. Climax
  - c. Invasion
  - d. Ecesis
- 48. The intermediate developmental stages in the ecological succession is called
  - a. Sere
  - b. Ecesis
  - c. Climax
  - d. Nudation
- 49. The climax community is recognized by
  - a. Grasses, herbs and shrubs
  - b. Trees
  - c. Crustose lichens
  - d. None
- 50. Lichens and mosses occur in
  - a. Hydrosere
  - b. Xerosere
  - c. Both in Hydrosere and Xerosere
  - d. Hydrosere only
- 51. When within a region all land surfaces eventually tend to occupy a single kind of community is known is
  - a. Monoclimax
  - b. Polyclimax
  - c. Multiclimax
  - d. None of these
- 52. Community is aggregation of
  - a. Individuals of the same kind
  - b. Individuals of different kind
  - c. Population of different species
  - d. Individuals of population

- 53. External appearance of a biological community is called
  - a. Physiognomy
  - b. Stratification
  - c. Pattern
  - d. Phonology
- 54. The rhythmic phenomena related to seasonal changes is called
  - a. Periodicity
  - b. Stratification
  - c. Floristic
  - d. Vitality
- 55. The number of individuals of species in a unit area is called
  - a. Abundance
  - b. Density
  - c. Frequency
  - d. Cover
- 56. The degree of occurrence of individuals of a species within an area is called
  - a. Frequency
  - b. Cover
  - c. Abundance
  - d. Density
- 57. Occurrence of vertical layers in a forest is called
  - a. Pattern
  - b. Stratification
  - c. Zonation
  - d. Ecotone
- 58. Species of a biological community that has higher abundance, height, cover and biomass is called
  - a. Keytone species
  - b. Link species
  - c. Dominant species
  - d. Network species
- 59. Series of changes on previously barren area is
  - a. Sere
  - b. Climatic climax
  - c. Primary succession
  - d. Secondary succession
- 60. The first species to inhabit an area after a disturbance is a
  - a. Pioneer species
  - b. Secondary succession
  - c. Climax community
  - d. Primary succession
- 61. An example of a pioneer species in primary succession is
  - a. Grass
  - b. Lichen
  - c. Insects
  - d. Shrub

- 62. Plant succession occurring in a aquatic habitat is
  - a. Xerosere
  - b. Halosere
  - c. Psamosere
  - d. Hydrosere
- 63. The type of succession that occurs after a wildfire is
  - a. Quaternary
  - b. Tertiary
  - c. Primary
  - d. Secondary
- 64. The succession initiated on rock/sand dunes/ deserts is called
  - a. Psamosere
  - b. Xerosere
  - c. Hydrosere
  - d. Oxylosere
- 65. A climax community is recognized by
  - a. Grases, herbs and shrubs
  - b. Trees
  - c. High biomass
  - d. Uniform composition
- 66. The final stable community in ecological succession is called
  - a. Climax community
  - b. Final community
  - c. Seral community
  - d. Ultimate community
- 67. Food chain begins with-----that make their own food
  - a. Decomposer
  - b. Producer
  - c. Consumers
  - d. Animals
- 68. The pyramid of number is inverted in case of
  - a. Parasitic food chain
  - b. Grassland ecosystem
  - c. Forest ecosystem
  - d. Lake ecosystem
- 69. The pyramid of biomass is inverted in
  - a. Forest ecosystem
  - b. Grassland ecosystem
  - c. Freshwater ecosystem
  - d. None
- 70. The cyclic path of movement of elements from the abiotic system to biotic system and return back to the environment are called
  - a. Nitrogen cycle
  - b. O2 cycle
  - c. CO2 cycle
  - d. Biogeochemical cycle

- 71. Which of the following is nitrogen fixing bacteria
  - a. Azospirrilum
  - b. Rhizobium
  - c. Clostridium
  - d. None
- 72. The conversion of Ammonia to nitric and then to nitrates is called
  - a. Nitrification
  - b. Ammonification
  - c. Assimilation
  - d. Denitrification
- 73. The process of conversion of Nitrates back to Nitrogen gas is called
  - a. Nitrification
  - b. Denitrification
  - c. Deamination
  - d. Nitrogen fixation
- 74. The main nitrogen reservoir in the atmosphere is
  - a. Rock
  - b. Organism
  - c. Atmosphere
  - d. None
- 75. Nitrogen fixing blue green algae is
  - a. Clostridium
  - b. Nitrosomonas
  - c. Salmonella
  - d. Nostoc
- 76. Phytoplankton are producer in
  - a. Forest
  - b. Air
  - c. Ocean
  - d. Soil
- 77. Organism which depends on producer for nutrition are
  - a. Autotrophs
  - b. Consumer
  - c. Saprophytes
  - d. None
- 78. An ecosystem is made up of
  - a. Biotic only
  - b. Abiotic only
  - c. Biotic and Abiotic factors
  - d. None of these
- 79. Example of natural ecosystem is
  - a. Cropland ecosystem
  - b. Forest
  - c. Grassland ecosystem
  - d. Garden
- 80. Example of decomposer are

- a. Fungi
- b. Algae and marine animals
- c. Pteridophytes
- d. None of these
- 81. The bacteria involved in denitrification are
  - a. Pseudomonas
  - b. Rhizobium
  - c. Nitromonas
  - d. Clostridium
- 82. The bacteria involved in symbiotic nitrogen fixation are
  - a. Pseudomonas
  - b. Rhizobium
  - c. Nitromonas
  - d. Clostridium
- 83. Where is carbon stored in the largest amount on earth
  - a. Ice caps
  - b. Oceans
  - c. Atmosphere
  - d. Lithosphere
- 84. The branch of Botany that deals with the geographical distribution of plants is known as
  - a. Phytogeography
  - b. Geography
  - c. Demography
  - d. Ecology
- 85. The number of botanical regions present in India
  - a. 7
  - b. 6
  - c. 9
  - d. 11
- 86. The endemic species are
  - a. Always rare
  - b. Becomes endangered
  - c. Species localized in a specific region
  - d. Cosmopolitian
- 87. The plants restricted in small geographical area are called as
  - a. Cosmopolitans
  - b. Endemic
  - c. Omnipresent
  - d. None
- 88. A very large ecosystem on land having distinct type of vegetation and wild life is called
  - a. Ecology
  - b. Biome
  - c. Biodiversity
  - d. Biosphere reserve
- 89. The endemic taxa still restricted to a very localized spot and this are known as
  - a. Neoendemic

- b. Cosmopolitan
- c. Local endemic
- d. Microendemic
- 90. Some taxa are distributed and occupy fairly large geographical areas are called as
  - a. Neoendemic
  - b. Cosmopolitan
  - c. Local endemic
  - d. None
- 91. Through which process do living organism release carbon into the Atmosphere
  - a. Photosynthesis
  - **b.** Cellular respiration
  - c. Transpiration
  - d. Combustion
- 92. Nitrosomonas and Nitrobacter are
  - a. Ammonifying bacteria
  - b. Denitrifying bacteria
  - c. Nitrogen fixing bacteria
  - d. Nitrifying bacteria
- 93. Nitrosomonas converts
  - a. Nitrate to Ntrite
  - **b.** Nitrite to Nitrate
  - c. Ammonia to Nitrites
  - d. Nitrites to Ammonia
- 94. Secondary productivity is the rate of formation of new organic matter by
  - a. Producer
  - b. Consumer
  - c. Parasitic
  - d. Decomposer
- 95. Ecosystem is smallest unit of
  - a. Ionosphere
  - b. Lithosphere
  - c. Biosphere
  - d. Mesosphere
- 96. The example of artificial ecosystem is
  - a. Cropland ecosystem
  - b. Forest
  - c. Grassland
  - d. All of the above
- 97. A detritus food chain starts with
  - a. Producers
  - b. Herbivores
  - c. Decomposers
  - d. Carnivores
- 98. The network formed by interlinking food chains is called
  - a. Food link
  - b. Food web

- c. Ecosystem
- d. Trophic system

  99. An animal that eats only plants are
  - a. Primary consumer
  - b. Secondary consumer
  - c. Tertiary consumer
  - d. Primary producer
- Both producers and consumers are a source of food for 100.
  - a. Scavengers
  - b. Decomposers
  - c. Carnivores
  - d. Herbivores