Comprehension -2024-2025

BASICS OF BOTANY – U23BOFC1

1. Who proposed the Five Kingdom system of classification?
   a) Linnaeus
   b) Haeckel
   c) Aristotle
   d) **Whittaker**
2. Which of the following is not a characteristic of fungi?
   a) Presence of chitin in the cell wall
   b) Reproduction by spores
   c) **Autotrophic mode of nutrition**
   d) Absorptive mode of nutrition
3. Which kingdom includes unicellular eukaryotic organisms?
   a) Monera
   b) **Protista**
   c) Plantae
   d) Fungi
4. Viruses are considered non-living because they:
   a) Have DNA or RNA
   b) **Cannot reproduce outside a host**
   c) Can mutate
   d) Cause diseases
5. Bacteria reproduce mainly by:
   a) **Binary fission**
   b) Conjugation
   c) Spore formation
   d) Budding

6. The powerhouse of the cell is:
   a) Nucleus
   b) Golgi apparatus
   c) **Mitochondria**
   d) Lysosomes
7. Which structure is present in a plant cell but absent in an animal cell?
   a) Mitochondria
   b) **Chloroplast**
   c) Ribosomes
   d) Nucleus
8. The primary function of the nucleus is to:
   a) Store waste materials
   b) **Control cell activities**
   c) Transport proteins
   d) Provide energy

9. The site of protein synthesis in the cell is:
    a) Mitochondria
    b) **Ribosomes**
    c) Golgi apparatus
    d) Endoplasmic reticulum
10. Which microscope provides the highest magnification and resolution?
    a) Light microscope
    b) Compound microscope
    c) **Electron microscope**
    d) Phase contrast microscope

11. The underground modification of the stem in ginger is called:
    a) Bulb
    b) **Rhizome**
    c) Tuber
    d) Corm
12. Which part of the plant absorbs water and minerals?
    a) Stem
    b) **Root**
    c) Leaf
    d) Flower
13. An example of a simple inflorescence is:
    a) Cyathium
    b) **Spike**
    c) Compound umbel
    d) Hypanthodium
14. Which of the following is a dry fruit?
    a) Berry
    b) Drupe
    c) **Capsule**
    d) Pome
15. The edible part of a mango is:
    a) Seed
    b) **Mesocarp**
    c) Endosperm
    d) Pericarp

16. Mendel's law of segregation states that:
    a) Genes blend together
    b) **Alleles separate during gamete formation**
    c) Traits are inherited randomly
    d) The environment affects inheritance
17. What is the phenotypic ratio of a monohybrid cross?
    a) **3:1**
    b) 9:3:3:1

c) 1:2:1
d) 2:2

18. Which term refers to the genetic makeup of an organism?
    a) Phenotype
    b) **Genotype**
    c) Allele
    d) Trait
19. A dihybrid cross results in which phenotypic ratio?
    a) **9:3:3:1**
    b) 3:1
    c) 1:1
    d) 2:1
20. Which of the following is an example of incomplete dominance?
    a) Blood group inheritance
    b) **Red and white flower producing pink offspring**
    c) Tall and short plants producing all tall
    d) Male pattern baldness

21. Diffusion is the movement of molecules from:
    a) Low to high concentration
    b) One cell to another
    c) **High to low concentration**
    d) Root to leaf
22. Plasmolysis occurs when a cell is placed in a:
    a) Hypotonic solution
    b) **Hypertonic solution**
    c) Isotonic solution
    d) Neutral solution
23. The process of water movement through a plant is called:
    a) Absorption
    b) Respiration
    c) Diffusion
    d) **Transpiration**
24. Water potential is highest in:
    a) **Pure water**
    b) Saltwater
    c) Soil
    d) Leaf cells
25. Which plant structure regulates transpiration?
    a) Xylem
    b) Phloem
    c) **Stomata**
    d) Cortex

26. The largest algae group is:
    a) Green algae

b) Red algae
c) **Brown algae**
d) Blue-green algae

27. The non-living part of a plant cell is:
    a) Nucleus
    b) Mitochondria
    c) **Cell wall**
    d) Cytoplasm
28. DNA is made of:
    a) Proteins
    b) Lipids
    c) **Nucleotides**
    d) Carbohydrates
29. The dominant trait in pea plants is:
    a) **Tallness**
    b) Shortness
    c) Wrinkled seed
    d) Green pod
30. The movement of water across a semi-permeable membrane is called:
    a) Diffusion
    b) **Osmosis**
    c) Transpiration
    d) Photosynthesis
31. The father of genetics is:
    a) **Gregor Mendel**
    b) Darwin
    c) Lamarck
    d) Linnaeus
32. Stomata open during:
    a) **Daytime**
    b) Nighttime
    c) Evening
    d) Any time
33. Water is lost from leaves through:
    a) Absorption
    b) **Transpiration**
    c) Germination
    d) Diffusion
34. Xylem transports:
    a) **Water**
    b) Sugars
    c) Hormones
    d) Proteins
35. Phloem transports:
    a) **Sugars**
    b) Water

c) Minerals
d) Gases

36. Which of the following is an example of Bryophytes?
    a) **Marchantia**
    b) Cycas
    c) Nephrolepis
    d) Volvox
37. Bacteria reproduce sexually by:
    a) **Conjugation**
    b) Binary fission
    c) Spore formation
    d) Budding
38. Gymnosperms are characterized by:
    a) **Naked seeds**
    b) Presence of flowers
    c) Double fertilization
    d) Fruits
39. The site of cellular respiration is:
    a) **Mitochondria**
    b) Ribosome
    c) Golgi complex
    d) Lysosome
40. The fluid content inside a chloroplast is called:
    a) Cytoplasm
    b) **Stroma**
    c) Matrix
    d) Nucleoplasm
41. The function of lysosomes is:
    a) Protein synthesis
    b) **Intracellular digestion**
    c) Energy production
    d) Photosynthesis
42. The edible part of an onion is:
    a) Root
    b) **Modified stem**
    c) Leaf
    d) Flower
43. Which of the following is a modified root?
    a) **Carrot**
    b) Potato
    c) Ginger
    d) Onion
44. The floral whorl that produces pollen is called:
    a) **Androecium**
    b) Gynoecium

c) Calyx
d) Corolla

45. In a dihybrid cross, independent assortment occurs during:
    a) **Meiosis**
    b) Mitosis
    c) DNA replication
    d) Cytokinesis
46. A heterozygous tall plant (Tt) is crossed with a dwarf plant (tt). What is the probability of getting a tall plant?
    a) **50%**
    b) 100%
    c) 75%
    d) 25%
47. A test cross is used to determine:
    a) Phenotype
    b) Genotype
    c) Mutation
    d) Chromosome number
48. The loss of water in liquid form from a plant is called:
    a) Transpiration
    b) Guttation
    c) Diffusion
    d) Osmosis
49. The pressure that develops in guard cells to open stomata is:
    a) **Turgor pressure**
    b) Osmotic pressure
    c) Capillary pressure
    d) Hydrostatic pressure
50. The movement of molecules through the xylem occurs due to:
    a) **Cohesion and adhesion forces**
    b) Photosynthesis
    c) Phloem pressure
    d) Starch hydrolysis

51. Which of the following is the red algae

a. Rhodophyceae b. Chlorophyceae c. . Liverwort d. Phaeophyceae

52. Which class of algae is commonly known as brown algae

a. Rhodophyceae **b. Phaeophyceae** c. Chlorophyceae d. Chrysophyceae

53. "Nostoc' is a type of

a. Blue green algae b. Green algae c. Brown algae d. Red algae

54. Kelps are which of the following type of algae

a. Red algae b. yellow algae **c. Brown algae** d. Green algae

55. Which of the following is a colonial green alga

a. Chlamydomonas b. Chlorella **c. Volvox** d. Spirogyra

56. Which of the following is rich in protein
a. Ulothrix b. Spirogyra c. Nostoc **d. Chlorella**
57. Amylum stars are found in

a. Ectocarpus b. Zygnema **c) Chara** d. Polysiphonia

58. Fucoxanthin is found in

a. Blue-green algae b. Green algae **c. Brown algae** d. Red algae

59. Which of the following has floridian starch as reserve food material

a. Nostoc b. Volvox **c. Polysiphonia** d. Sargassum

60. Stone wart is common name of

a. Chara b. Oedogonium c. Spirulina d. Diatoms

61. Which is the vegetative body of algae

a. Mycelium b. Pseudoplasmodium c. Is scattered the least by smoke or fog
d. Thallus

62. "Agar-agar" is obtained from

a. Green Algae b. Red Algae **c. Brown Algae** d. Yellow green Algae

63**.** What is the primary characteristic of the siphonous thallus in Caulerpa

A) It is composed of distinct cells **B) It is multinucleate and lacks septa**. C) It has a rigid structure similar to vascular plants D) It consists of multiple layers of tissue.

64. In which type of environment is Caulerpa commonly found
A) Terrestrial ecosystems B) Freshwater lakes **C) Marine environments** D) High-altitude regions

65. Which of the following is a method of vegetative reproduction in algae
A) Fragmentation B) Binary fission C) Gamete fusion D) Spore formation

66. In sexual reproduction of algae, what is the term for the fusion of gametes
A) Syngamy B) Mitosis C) Sporulation D) Budding

67. What is the dominant stage in the life cycle of Oedogonium
A) Diploid stage **B) Haplontic stage** C) Sporophyte stage D) Gametophyte stage

68. In Oedogonium, what type of cells are produced during asexual reproduction
A) Zygotes B) Spores C) Gametes **D) Zoospores**

69.What is a primary advantage of using photobioreactors for algal cultivation

A) Low cost

B) Higher productivity

C) Simplicity of design

D) Minimal energy requirements

70. Which nutrient is essential for algal growth and is often a limiting factor in culture media

A) Carbon

B) Nitrogen

C) Phosphorus

D) All of the above

71. In which cultivation method is CO2 often bubbled through the culture to enhance growth

A) Open ponds

B) Batch culture

C) Continuous culture

D) Photobioreactors

72.What is a disadvantage of open pond systems for algal cultivation

A) Low yield

B) High operational costs

C) Susceptibility to contamination

D) Complex technology

73. Which type of algae is primarily cultivated for biofuel production

A) Green algae

B) Red algae

C) Brown algae

D) All types

74. What is a common method for preventing contamination in algal cultures

A) Sterilization of media

B) Using open ponds

C) Increasing temperature

D) Reducing light exposure

75. Which of the following types of algae is primarily used for biofuel production

A) Red algae

B) Brown algae

C) Green algae

D) Blue-green algae

76. What is alginic acid commonly used for in the food industry

A) A sweetener

B) A thickening agent

C) A preservative

D) A flavor enhancer

77. In agriculture, how can algae benefit soil health

A) By depleting nutrients

B) By promoting soil erosion

C) By improving nutrient availability

D)Byreducingbiodiversity

78.Which algae product is widely used in microbiology for culturing bacteria

A) Alginic acid

B) Agar-agar

C) Chlorella

D) Spirulina

79.What role do algae play in phytoremediation

A) They decompose organic matter.

B) They absorb and accumulate pollutants.

C) They provide energy for soil organisms.

D) They prevent erosion.

80 Which of the following algae is often used as a food supplement due to its high protein content

A) Spirulina

B) Laminaria

C) Porphyra

D)Chlorella

81.What is a common use of algae in the pharmaceutical industry

A) Production of antibiotics

B) Synthesis of vitamins

C) Development of anti-inflammatory drugs

D)Alloftheabove

82. Which of the following is an indicator of water pollution that can be assessed by studying algal populations

A) Heavy metal concentration

B) Nitrate levels

C) Phytoplankton diversity

D)Alloftheabove

83. What is one of the primary benefits of using algae in aquaculture

A) They compete with fish for nutrients.

B) They provide a source of oxygen.

C) They produce toxins harmful to fish.

D) They increase water acidity.

84. In which application is agar-agar derived from algae most commonly used

A) Biofuel production

B) Food thickening and gelling

C) Nutrient supplements

D) Water purification

85.What is the primary chemical involved in bioluminescence in many organisms

A) Chlorophyll

B) Hemoglobin

C) Lucifern

D) Myoglobin

86.Which of the following organisms is known for its bioluminescent capabilities

A) Sunflower

B) Firefly

C) Goldfish

D)Cactus

87. Nostoc is a type of

A) Blue green algae

B)Green algae

C)Brown algae

D)Red algae

88. Which of the following Alga is a source of Agar (D)

A) Ectocarpus

B) Volvox

C) Ulva

D) Gelidium

89. Amongst the following, an example of algae is

A) Amoeba

B) Funaria

C) Diatoms

D) Rhizopus

80.Which of the following flagellum length

A) 5 to 20 micrometer

B) 4 to 6 micrometer

C)7 to 8micrometer

D) 6 to 60micrometer

81. The filaments of bacteria have special cells called

A) centroplasm

B) phycocyanin

C)phycosome

D) heterocysts

82. The algae Sargassum is a

A) Blue green algae

B) Red algae

C) Brown algae

D) Green algae

83. 'Sargasso Sea' is found in the centre of

A) the Pacific Ocean

B) the Atlantic Ocean

C) the Indian Ocean

D) None of the above

84. Mannitol is the stored food in

A) Porphyra

B) Fugus

C) Gracillaria

D) Chara

85. Algin is the cell wall coating

A)Green algae

B) Red algae

C) Brown algae

D)All algae

86. which one of the colonial algae

A)Ulothrix

B) Spirogyra

C) Volvox

D) Chlorella

87. which of the following has non- flagellated isogamous gametes

A) Spirogyra

B) Chlamydomonas

C) Volvox

D) Fucus

88.which of the following is rich in protein

A) Ulothrix

B) Spirogyra

C) Nostoc

D) Chlorella

89. What is the mode of sexual reproduction in chlorophyceae

A) Oogamous

B) Anisogamous

C) Isogamous

D) All of the above

90. Which of the following modes are used by spirogyra to reproduce

A) Fragmentation

B) Multiple fission

C) Spore formation

D) Binary fission

91. During unfavourable conditions, the outer layer that is formed in chlamydomonas is called as

A) Cyst

B) Nuclear membrane

C) Cell wall

D) Cellular membrane

92. The male gamete in sexual reproduction of algae is called as

A) Antherozoid

B) Egg

C) Basidiogamete

D) Zoosperm

93. *Gelidium* and *Gracilaria* is used in the formation of

A) Agar

B) Vinegar

C) Yoghurt

D) Beer

94. A leaf like photosynthetic organ in Phaecophyceae is called as

A) Frond

B) Stipe

C) Holdfast

D) Algin

95. Holdfast, stipe, and frond constitute the plant body in the case of

A) Rhodophyceae

B) Chlorophyceae

C) Phaeophyceae

D) None of the above

96. Coenobium refers to

A) A group of filaments

B) Palmelloid form

C) A Hollow spherical colony

D) None of the above

97. The chlorophyll pigment present in *Volvox* are

A) Chlorophyll a

B) Chlorophyll b

C) Chlorophyll e

D) both (a) and (b)

98.What is the storage product of most algae

A) Cellulose

B) Glycogen

C) Starch and oil

D) Fat

99.The ---------- is the vegetative body of algae

(A) Mycelium

B) Pseudoplasmodium

C) is scattered the least by smoke or fog

D) Thallus

100. Sea lettuce is the common name for

A) Lamitiaria

B) Sargassum

C) Ulva

D)Ulothrix

101.Agar agar is derived from

A) Fungi

B) Algae

C) Bryophytes

D)Gymnosperms

102.Ability to fix atmospheric nitrogen is found in

A) Leaves of some crop plants

B) Chlorella

C) Some red marine algae

D) Some blue green algae

103.Fucoxanthin pigment is present in

(A) Rhodophycophyta

B) Xanthophycophyta

C) phaeophycophyta

D) Chlorophycophyta

104. Chrysamoeba exists in which of the following forms

(A) Non motile Coccoid

B) Filamentous

C) Amoeboid

D) Motile Amoeboid

105.Carpogonia is the female sex organ in which of the algae

(A) Rhodophycophyta

B) chrysophycophyta

C) Chlorophycophyta

D) Xanthophycophyta

106. The xanthophyte walls are typically of

(A) Chitin

B) Cellulose

C) Cellulose and pectin

D) Starch

107.The male gamete in sexual reproduction of algae is called as

A) Antherozoid

B) Egg

C) Basidiogamete

D)Zoosperm

108. Zygotic meiosis is a characteristic feature of

A) Algae

B) Bryophytes

C) Pteridophytes

D) Gymnosperms

109. In Ectocarpus, gametangia are sexual bodies which are

A) Plurilocular

B) Unilocular

C) Monosporangia

D) Nucule

110. What is the primary use of algae in industrial production

A) Pharmaceuticals
B) Biofuels
C) Food flavoring
D) Carbon dioxide sequestration

111. Which of the following is the most common method for cultivating algae for commercial purposes

A) Open ponds
B) Vertical farming

C) Hydroponics
D) Terrestrial farming

112. In which of the following systems are algae grown in a controlled, enclosed environment (A)

A) Photobioreactors
B) Open ponds
C) Artificial lagoons
D) Greenhouses

113. What role do photobioreactors play in algal production

A) They filter the algae from the water
B) They provide controlled conditions for optimal growth
C) They convert algal biomass into biofuels
D) They store algae after harvesting

114. What is the main advantage of using raceway ponds for large-scale algae cultivation

A) Reduced water consumption
B) Continuous mixing of culture medium
C) Easier harvesting of algae
D) More efficient CO2 uptake

115. Which of the following is the most common method for harvesting algae

A) Centrifugation
B) Filtration
C) Sedimentation
D) Flotation

116. Which of the following harvesting methods is most suitable for high-value algae products

A) Sedimentation
B) Flocculation
C) Centrifugation
D) Boiling

117. Algal cultivation does not require which of the following minerals and growth-promoting nutrients

A) Phosphorus
B) Carbon
C) Minerals
D) Uranium

118. Which of following foreign substances are chemical in nature and naturally found within an organism

A) Xenobiotics
B) Bio-leaching
C) Bio-remediation
D) Bio-fortification

119. Which of the nutrient mixture is most suitable for almost all algae

a) Membrane permeability rate
b) Walne medium
c) MacConkey agar
d) M9 medium

120. How does the oil from the algal biomass is removed

a) Solvent extraction
b) Water extraction
c) Gel extraction
d) Sieving

121. Which of the following is not a result of the transformed primary productivity of water bodies

a) Algal blooms
b) Adverse health effects
c) Reduction in water quality
d) Increase in water quality

122**.** Which of the following is the main source of agar-agar

A) Spirulina
B) Chlorella
C) Red algae
D) Green algae

123**.** Which of the following is a plant that is commonly used in phytoremediation of heavy metals

A)Sunflower
b) Rice
c) Wheat
d) Apple tree

124. Which type of soil is most commonly used in phytoremediation

a)Sandy soil

b) Loamy soil
c) Clay soil
d) Saline soil

125. What is the primary limitation of phytoremediation

a) It is a very slow process
b) It is only applicable to organic contaminants
c) It requires large quantities of water
d) It requires expensive technology

126. Which of the following is an example of a contaminant that can be treated using phytoremediation

a) Carbon dioxide
b) Heavy metals
c) Oxygen
d) Nitrogen

127. Which algae species is commonly used to produce alginic acid

A) *Chlorella vulgaris*
B) *Laminaria* (a type of brown algae)
C) *Porphyra*
D) *Spirulina*

128. Which type of algae is most commonly used in the production of biodiesel

A) Green algae
B) Red algae
C) Brown algae
D) Microalgae

129. Algae can be used as a resource for which of the following

A) Animal feed
B) Pharmaceuticals
C) Biofuels
D) All of the above

130. Which of the following algae is commonly used to indicate water pollution

A) *Chlorella vulgaris*
B) *Sargassum*
C) *Euglena*
D) *Spirogyra*

131. Which type of algae is particularly used for monitoring eutrophication in water bodies

A) Green algae
B) Brown algae
C) Red algae
D) Diatoms

132. What does the rapid growth of algae in water typically signal

A) High oxygen levels
B) Excessive levels of organic pollutants or nutrients
C) Clean and unpolluted water
D) Balanced ecosystem

133**.** Which algae species is often associated with harmful algal blooms that indicate water pollution

A) *Anabaena*
B) *Chlorella*
C) *Oscillatoria*
D) *Euglena*

134. What are algal bio-inoculants primarily used for

A) Enhancing plant growth
B) Improving water quality
C) Producing biofuels
D) Providing color to food

135. What is the chemical substance responsible for bioluminescence in organisms

A) Chlorophyll
B) Hemoglobin
C) Luciferin
D) Glucose

136. Which of the following marine organisms is known for producing bioluminescence

A) Octopus
B) Lanternfish
C) Seahorse
D) Whale

137. Which of the following organisms are known to exhibit bioluminescence

A) Jellyfish
B) Fireflies
C) Some fungi
D) All of the above

138. What is carrageenan primarily derived from

A) Seaweed
B) Bacteria
C) Fungi
D) Algae

139. What is the primary component of diatomite

A) Calcium carbonate
B) Silica
C) Nitrogen
D) Phosphorus

140. Mycology is related to the study of

c) Bacteria a) Virus b) Human cells **d) Fungi**

141. Which class of fungi among the following have motile cells with two laterally inserted flagella, one tinsel and the other whiplash

a) Chytridiomycetes b) Zygomycetes c) Deuteromycetes **d) Oomycetes**

142. Fruiting bodies of slime moulds are called

a) Acervulus **b) Sori** c) Apothecium d) Perithecium

143. Which class of fungi among the following have motile cells with two laterally inserted flagella, one tinsel and the other whiplash
a) Chytridiomycetes b) Zygomycetes
c) Deuteromycetes **d) Oomycetes**

144. The common yeast Schizosaccharomyces follows which of the following asexual reproduction methods
a) Binary fission b) Budding
c) Fragmentation d) Spore formation

145. What is the name of the special hyphal tips through which parasitic fungi absorb nutrients directly from the cytoplasm of the living host
a) Haustoria b) Mildew
c) Constricting ring d) All of the above

146. The fungi which derive their food directly from dead organic matter are known as
a) Predators **b)Decomposers**
c) Mutualists d)Parasitic fungi

147. Asexual spores in Ascomycetes are called as
a) Ascospores **b) Conidia**
c) Sporangiospores d) Aeciospores

148. Scientific name of common mushroom is
a) Albugo **b) Agaricus bisporus**

c) Stolonifer d) Muccidae

149. Which of the following provides the most economic help to the wine industry
a) Yeast b) Mold
c) Micorrhiza d) Mushrooms

150. Yeast is used in the production of
a) Ethyl alcohol b) Acetic acid
c) Curd d) Cheese

151. Edible fungi are known as
a) Mushrooms b) Toad stools
c) Fungi d) Smut

152. Production of ethanol (C_2H_5OH) occurs in one of the life processes of
a) Bread mold **b) Yeast**
c) Mushroom d) Penicillium

153. The scientific name of white button mushroom
a) Volvariella b) Aspergillus
c) Pleurotus **d) Agaricus bisporus**

154. Mycotoxin are produced by
a) Bacteria **b)Fungus**
c) Mushroom d)Yeast

155. The main products produced by microorganisms during fermentation are
a) Ethanol or Lactic acid b) Ethanol or Uric acid
c) Amino acid and Lactic acid d) Ethanol

156. VAM is important for
a) Breaking of dormancy **b) Phosphate nutrition**
c) Water uptake d) Decrease in yield

157. What is a cluster of polar flagella called
a) Petritrichous b) Monotrichous
c) Amphitrichous **d) Lophotrichous**

158. Which of these is a cocci occurring in single or pairs
a) Diplocooci b) Streptococci
c) Tetra cocci d)None of these

159. Fungal hyphae are present on root surface as individual thread
a) Endomycorrhizae b) Ectomicorrhizae
c) Ecdendomicorrhizae d) None of these

160. Cluster of polar flagella are termed as
a) Peritrichous b) Amphitrichous
c) Lophotrichous d) Monotrichous

161. Bacteria with helically curved rods are known as
a)Cooci b) Bacillus
c) Spirilla d)Pleomorphic

162. Mycoplasma is
a) Eukaryotic and unicellular **b) Prokaryotic and unicellular**
c) Prokaryotic and multicellular d) Eukaryotic and multicellular

163. What is the protein shell that envelops the viral genome called
a) Capsid b) Outer envelope
c) Capsomere d) Nucleic

164. A virus is made up of
a) Protein coat and Nucleic acid b) Protein coat and mitochondria
c) Nucleic acid and cell membrane d) Nucleic acid and cell wall

165. The disease-causing microorganism among these is

a) Pathogens b) Bacteria
c) Archaea d) Protozoa

166. Which of the given diseases is related to Groundnut
a) Tikka b) Phomopsis blight
c) Leaf rust d) Alternaria blight

167. Leaf curl of papaya' disease is caused by
a) Fungus **b) Virus**
c) Bacteria d) Mycoplasma

168. What forms the genome of a virus
a) DNA b)RNA
c) Either DNA or RNA d)Both DNA and RNA

169. Which of the following is a helical virus
a) TMV (Tobacco Mosaic Virus) b) T4 bacteriophage
c) Poxvirus d) Herpesvirus

170. Blast of rice is caused by
a) Plasmodiophora brassicae **b) Pyricularia oryzae**
c) Agrobacterium tumefaciens d) Phytophthora infestans

171. Which of the following is not a bacterial disease
a) Citrus canker b) Cholera
c) Plague d) Mumps

172. The disease "citrus stubborn"is caused by
a) Spiroplasma b) Phytoplasma
c) Mycoplasma d) None of these

173. Which of the following is a crutose lichen
a) Usnea b) Peltigera
c) Rhizocorpan d) None of the above

174. Lichen reproduce vegetatively by
a) Fragmentation b) Soredia
c) Isidia **d)All of these**

175. Lichens growing on rocks are called
a) Corticoles **b) Saxicoles**
c) Lignicoles d) Terricoles

176. Majority lichens are pollution indicator of
a) Co b)Mercury
c) SO_2 d) NO_2

177. A common Phycobiont in lichens are
a) Cetraria **b) Microcystis**
c) Trebouxia d)Oedogonium

178. Lichens are the best indicator of
a) Air pollution b) Water pollution
c) Soil pollution d) Noise pollution

179. The symbiotic association of algae and fungi is known as
a) Mycorrhiza **b) lichen**
c) Mycoplasma d) all of these

180. In the studies on the atmospheric pollution, lichens are important as they
a) can readily multiply in polluted atmosphere **b) are very sensitive to pollutants**
c) efficiently purify the atmosphere d) can also be grown in greatly polluted atmosphere

181. Which of the following is NOT a basic component of a garden?
a) Lawn
b) Walk-paths
c) Greenhouse
d) Tableware

182. What is the primary function of a greenhouse in gardening?
a) To decorate the garden
b) To protect plants from pests
c) To maintain a controlled environment for plant growth
d) To store gardening tools

183. Which of the following is essential for designing a rockery?
a) Turf management
b) Proper drainage and selection of rocks
c) Watering systems
d) Flowerpots

184. Which type of garden is designed to have water features such as ponds or fountains?
a) Rockery garden
b) Water garden
c) Herb garden
d) Tropical garden

185. What is the purpose of walk-paths in garden design?
a) To enhance the aesthetic appeal
b) To prevent soil erosion
c) To separate different garden sections
d) All of the above

186. Which of the following plants are typically used for landscaping purposes due to their decorative nature?
a) Palms and ferns
b) Weeds
c) Seasonal vegetables
d) Tree stumps

187.Which of the following best describes the term 'propagation' in gardening?

a) The process of designing a garden layout
b) The method of growing new plants from seeds, cuttings, or divisions
c) The arrangement of garden furniture
d) The practice of adding fertilizers to the soil

188.Which plant type is known for its ability to grow vertically and spread along fences or trellises?
a) Shrubs
b) Climbers and creepers
c) Palms
d) Grasses

189.What is the key characteristic of succulent plants like cacti?
a) They require very high amounts of water.
b) They store water in their leaves or stems.
c) They are mainly used for medicinal purposes.
d) They grow best in cold environments.

190.What is the primary purpose of trees in landscaping?
a) To provide shade and aesthetic appeal
b) To act as a fence
c) To protect plants from pests
d) To grow fruits

191. Which of the following is a key component of a garden?
a) Walk-paths
b) Furniture
c) Kitchen
d) Television

192.Which type of garden is specifically designed with water features?
a) Desert garden
b) Water garden
c) Herb garden
d) Rockery garden

193. What is the main purpose of walk-paths in a garden?
a) To create privacy
b) To help in plant propagation
c) To provide access and aesthetic appeal
d) To enhance soil fertility

194.Which of the following trees are commonly used in landscaping?
a) Mango trees
b) Pine trees
c) Oak trees
d) All of the above

195.What is the primary function of a greenhouse in gardening?
a) To store gardening tools
b) To maintain a controlled environment for plant growth
c) To provide shade to plants
d) To display ornamental plants

196. Which of the following is essential for designing a rockery?
a) Proper drainage
b) Fertilizers
c) Artificial grass
d) Vertical garden system

197. Which of the following plant types is known for climbing along structures like fences or trellises?
a) Shrubs
b) Palms
c) Climbers and creepers
d) Trees

198. What is the process of creating new plants from seeds, cuttings, or divisions called?
a) Planting
b) Pruning
c) Propagation
d) Fertilization

199. Which of the following is a feature often found in a special type of garden?
a) Artificial grass
b) Water features like fountains or ponds
c) High walls
d) Heavy use of furniture

200.Which type of garden focuses on plants that require minimal water and care?
a) Water garden
b) Rockery garden

c) Succulent garden
d) Herb garden

201.What is the primary purpose of flower arrangement in urban planning?
a) To reduce air pollution
b) To enhance aesthetic appeal
c) To attract insects
d) To increase flower variety

202. Which of the following is a key consideration in postharvest practices for flowers?
a) Proper watering
b) Inadequate lighting
c) Excessive sunlight exposure
d) Planting flowers in cold soil

203.What is bioaesthetic planning concerned with?
a) Soil conservation
b) Designing aesthetically pleasing green spaces
c) Pest control
d) Flower production techniques

165. Which of the following is important for the success of flower production?
a) Proper spacing
b) Large flowerpots
c) Frequent pruning
d) Low-quality soil

204. What is a typical application of flower arrangement in rural areas?
a) Beautifying urban streets
b) Designing flower beds in playgrounds
c) Planting for commercial use
d) Planting flowers for medicinal purposes

205. Why are flowers used to beautify railway stations?
a) To prevent overcrowding
b) **To create a welcoming environment for travellers**
c) To block out noise from trains
d) To provide shelter from rain

206. What should be a key consideration when planting flowers along riverbanks?
a) Avoiding plant competition
b) Preventing soil erosion and beautifying the environment
c) Using only perennial plants
d) Planting native species only

207. What is typically used as planting material for playgrounds?
a) Tall trees
b) Shrubs and grass
c) Exotic flowering plants
d) Edible plants

208. What does the term "round country planning" refer to in flower arrangement?
a) Designing gardens for agricultural purposes
b) Comprehensive design of national landscaping
c) Creating circular flower beds
d) Selecting flowers based on climate conditions

209.Why is urban planning important for flower arrangement?
a) It helps provide space for food gardens
b) It ensures aesthetic integration of flowers with the environment
c) It limits the types of flowers planted
d) It prioritizes trees over flowers

210. Which of the following is a challenge in flower production for arrangements?
a) Adequate sunlight exposure
b) Pest management and plant diseases
c) Fertilizer use
d) Planting seasonal flowers only

211. Which practice helps prolong the life of cut flowers in postharvest care?
a) Storing them in a dry area
b) Storing flowers in cool temperatures
c) Exposing them to sunlight
d) Cutting them every week

212. What is the goal of planting flowers at hydroelectric stations?
a) To block water flow
b) To enhance the environment's aesthetic appeal

c) To increase plant production for local use
d) To provide food for wildlife

213. What type of material is most suitable for playground plantings?
a) Vine plants
b) Shrubs and grass
c) Flowering trees
d) Fruit-bearing plants

214. Which of the following is NOT a component of bioaesthetic planning?
a) Designing aesthetically pleasing gardens
b) Ensuring public safety in parks
c) Focusing on low-maintenance flowers
d) Using only native plants

215. Why are trees often planted along avenues in urban areas?
a) To reduce wind speed
b) To create shaded areas and improve aesthetics*
c) To block sunlight from buildings
d) To encourage outdoor activities

216. What is one of the constraints in the cultural operations of flower production?
a) Inconsistent weather conditions
b) High market demand
c) Availability of flowerpots
d) Lack of sunlight

217. What is the role of flower arrangements in school environments?
a) To increase the school's revenue
b) To foster a positive and stimulating environment for students
c) To control noise levels
d) To block the view of the outside

218. What is an example of bio-aesthetic planning in villages?
a) Creating flower arrangements for city streets
b) Designing flower beds in rural playgrounds
c) Planting crops for commercial sale
d) Creating ponds in the community

219. What is a major benefit of planting flowers at dam sites?
a) To enhance aesthetic value and prevent erosion

b) To provide a habitat for wildlife
c) To reduce the need for landscaping maintenance
d) To attract tourists

220. What is the main feature of vertical gardens?
a) Flowers that grow in the ground
b) Plants grown on walls or vertical surfaces
c) Plants that are grown on rooftops
d) Large trees planted along walkways

221. What is the primary benefit of roof gardens
a) To grow food for local markets
b) To create a relaxing space on rooftops and reduce heat
c) To block wind from buildings
d) To grow plants for medicinal purposes

222. Which of the following is true about the culture of bonsai?
a) It is an ancient Japanese art of growing miniature trees
b) It is a type of flower arrangement
c) It involves planting flowers in pots
d) It is used only for commercial purposes

223. What is involved in the art of making bonsai?
a) Pruning and shaping trees to maintain a miniature form
b) Growing large trees in small pots
c) Planting flowers in unusual shapes
d) Creating bonsai only for commercial purposes

224. What is the purpose of public parks and gardens?
a) To provide recreational spaces for the community
b) To grow food for local markets
c) To provide space for private events
d) To control urban pests

225. Which of the following is a feature of landscape design in gardens?
a) Focus on decorative flower arrangements
b) Integration of natural elements with aesthetic planning
c) Creating artificial environments for wildlife
d) The use of only native plants

226. Which of the following is an example of a formal style garden?
a) Gardens with symmetrical layouts and straight pathways

b) Gardens with wildflower planting and meandering paths
c) Gardens that use only tropical plants
d) Gardens with freeform designs and irregular shapes

227. Which type of garden is characterized by irregular or natural shapes and plantings?
a) Formal gardens
b) Informal gardens
c) Bonsai gardens
d) Rooftop gardens

228. What is the defining feature of free-style gardens?
a) Highly structured and geometric layouts
b) A mixture of various plant types with no clear pattern
c) Only the use of native plants
d) Extensive use of sculptures and statues

229. What is urban landscaping primarily focused on?
a) Creating green spaces within city environments
b) Growing crops for the city's population
c) Developing wildlife sanctuaries
d) Managing the water supply in urban areas

230. Which of the following locations benefits from landscaping for specific situations?
a) Hospitals
b) National forests
c) Large farms
d) Coastal areas

231. Why is landscaping important for institutions and industries?
a) To increase the number of workers
b) To enhance the aesthetics and environment of the workplace
c) To create wildlife habitats
d) To improve traffic flow

232. What type of garden is commonly found in residential areas?
a) Zen gardens
b) Private gardens with informal or formal layouts
c) Bonsai gardens only
d) Public parks

233. What is the role of landscaping around roadsides and traffic islands?
a) To create barriers for noise pollution
b) To beautify the space and enhance traffic flow
c) To grow edible plants
d) To create private green spaces

234. What is a dam site garden typically designed to do?
a) Provide space for recreation and tourism
b) Create a habitat for aquatic life
c) Serve as a floodplain for rainwater
d) Block access to the water

235. How does landscaping for IT parks differ from other types of landscaping?
a) It uses plants that require low maintenance and high aesthetic value
b) It focuses only on water features
c) It aims to maximize the use of edible plants
d) It limits the number of decorative plants used

235. Which of the following is a key characteristic of corporate landscaping?
a) Focus on colourful flowerbeds
b) Utilization of green spaces to enhance work productivity and the environment
c) Planting only tropical trees
d) Creating large flower arrangements for show

236. What is the main aim of formal garden design?
a) To create naturalistic environments
b) To create symmetrical and structured layouts
c) To grow edible plants
d) To provide wildlife corridors

237. Why are parks and public gardens essential in urban areas?
a) They provide an open space for activities and relaxation
b) They are only used for growing food
c) They help reduce urban pollution by blocking roads
d) They are mainly used for industrial purposes

238. Which of the following gardens is often characterized by a combination of various plant styles and informal layouts?
a) Formal gardens
b) Informal gardens
c) Bonsai gardens

d) Roof gardens

239. What is the primary goal of bio-aesthetic planning in garden design?
a) To focus on food production
b) To create aesthetically pleasing and functional green spaces
c) To reduce water usage in gardens
d) To promote the growth of ornamental trees

240. Which of the following is true about ecotourism?
a) It involves large-scale industrial tourism
b) It encourages environmentally responsible travel to natural areas
c) It focuses on agricultural development
d) It discourages the use of nature reserves

241. What is the purpose of theme parks in terms of landscaping?
a) To showcase rare plants from around the world
b) To create themed environments for entertainment and education
c) To provide space for wildlife conservation
d) To serve as agricultural demonstration sites

242. What is indoor gardening mainly focused on?
a) Growing plants outdoors in open spaces
b) Cultivating plants inside homes or buildings
c) Planting crops for market sale
d) Creating large public gardens

243. How does therapeutic gardening benefit individuals?
a) It focuses on aesthetic appeal alone
b) It helps in reducing stress and promoting mental well-being
c) It is used to grow rare and exotic plants
d) It encourages the use of water-intensive plants

244. Which of the following is an example of a non-plant component in garden design?
a) Grass
b) Shrubs
c) Water features and sculptures
d) Trees
245. What does water scaping involve in landscaping?
a) Creating land-based sculptures
b) Designing and incorporating water features such as ponds, fountains, and waterfalls

c) Using only dry, desert plants
d) Planting aquatic crops for food production
246. What is xeriscaping focused on?
a) Creating water-intensive gardens
b) Using plants that require little water and are drought-tolerant
c) Growing crops for commercial use
d) Designing water-themed gardens

247. What is hardscaping in garden design?
a) The use of non-plant elements like stones, pathways, and walls in landscaping
b) The growing of hard-to-care-for plants
c) The placement of trees and flowers in the garden
d) The cultivation of cacti and succulents

248. Which of the following is an essential factor in the establishment of a special type of garden?
a) Limited use of plants
b) Planning for the specific needs and themes of the garden
c) Focusing solely on flower arrangement
d) Limiting the use of water features

249. What does theme park landscaping aim to create?
a) A natural and untamed garden
b) A space that integrates elements of culture and entertainment
c) A focused garden for plant propagation
d) A simple, rustic environment

250. What is one key advantage of therapeutic gardening?
a) It reduces maintenance requirements
b) It helps in promoting mental health and physical recovery
c) It encourages wildlife conservation
d) It requires minimal investment

251. How can indoor gardening help in urban settings?
a) It requires a lot of sunlight and outdoor space
b) It helps people grow plants in small or indoor spaces, improving air quality
c) It focuses on producing large crops for local markets
d) It relies on artificial lighting and does not support natural plant growth

252. Which of the following is a feature of xeriscaping?

a) Using a wide variety of exotic, water-guzzling plants
b) Utilizing drought-tolerant plants that require minimal water
c) Constantly irrigating the garden with sprinklers
d) Growing aquatic plants in ponds

253. What is an important aspect of establishing a theme park?
a) Focusing solely on traditional garden styles
b) Integrating gardens and landscapes with entertainment elements for a cohesive theme
c) Focusing only on plant health and soil preparation
d) Avoiding the use of sculptures and water features

254. What role does hardscaping play in landscaping?
a) It focuses on using only organic materials
b) It incorporates non-living elements like paths, patios, and rocks to enhance garden structure
c) It focuses on growing water plants
d) It is primarily concerned with growing ornamental plants

255. How can water scaping enhance a garden's design?
a) By adding only green plants
b) By introducing water elements such as fountains, ponds, and waterfalls to create visual interest
c) By limiting the use of flowers
d) By planting cacti and succulents around a water feature

256. What is the focus of ecotourism in relation to gardens and landscaping?
a) Creating gardens that require excessive water use
b) Designing gardens that promote environmentally responsible travel to natural areas
c) Focusing only on producing edible plants for tourists
d) Reducing access to natural spaces

257. Which of the following best describes the establishment of a therapeutic garden?
a) Creating a space for wildlife and plant propagation
b) Designing a peaceful environment that fosters healing and mental well-being
c) Growing only food crops
d) Focusing on aesthetic beauty alone

258. Which of the following is NOT part of hardscaping in landscaping?

a) Patios
b) Stone pathways
c) Ornamental grasses
d) Fences
259. What does CAD stand for in landscaping design?
a) Computer Aided Development
b) Computer Aided Designing
c) Creative Architectural Design
d) Constructive Artistic Design

260. What is the primary benefit of using Computer Aided Designing (CAD) for outdoor landscaping?
a) It allows for the use of traditional tools like sketchpads
b) It provides accurate and detailed designs for both aesthetics and function
c) It eliminates the need for plants in landscaping
d) It reduces the need for a professional designer

261. What is one of the main functions of CAD in interior landscaping?
a) To choose the plants and flowers for the garden
b) To design precise layouts of indoor plant arrangements and spaces
c) To determine the watering schedule for plants
d) To create landscaping only for public parks

262. What does CAD allow landscape designers to do in terms of design?
a) Sketch freehand designs on paper
b) Visualize and simulate the layout of the outdoor or indoor space before construction
c) Use only low-maintenance plant species
d) Limit the scope of plant selection

263. Which of the following is a major advantage of using CAD for outdoor landscaping?
a) It reduces the need for professional consultation
b) It creates highly detailed, scaled models that can be easily modified
c) It eliminates the need for plants in the design process
d) It requires minimal technical expertise

264. In CAD for landscaping, what is meant by 'indoor scaping'?
a) Designing the exterior of a building
b) Planning and designing indoor green spaces, like office plants or interior gardens

c) Creating open spaces for outdoor public parks
d) Designing irrigation systems for gardens

265. What feature of CAD is most useful for designing detailed garden layouts?
a) The ability to change plant species instantly
b) The use of three-dimensional visualizations for accurate spatial planning
c) The ability to work without technical expertise
d) The capacity to design purely aesthetic spaces

266. How does CAD help with the maintenance of a landscape design?
a) It tracks the growth rate of plants
b) It allows for the easy updating and modification of designs as the landscape changes over time
c) It automatically replaces dead plants with new ones
d) It helps in budgeting for garden designs

267. What is the role of CAD in designing water features for outdoor spaces?
a) It creates realistic animations of water features
b) It helps to plan and visualize the placement of water elements like ponds or fountains with accurate dimensions
c) It determines the water source for the garden
d) It automates the creation of water feature blueprints

268. Which of the following is a key feature of using CAD for indoor spaces?
a) Designing weather-resistant plants for indoor use
b) Simulating plant growth patterns over time
c) Incorporating interior elements like furniture and walls in conjunction with plant arrangements
d) Designing only the outdoor landscaping of the home

269. Which type of software would you typically use for CAD in landscaping?
a) Text-based document editors
b) Specialized design software like AutoCAD or SketchUp
c) Spreadsheet programs
d) Image editing software

270. How does CAD assist in planning the irrigation system of a landscape?
a) It automatically plants the irrigation system
b) It allows the designer to model and plan the layout of irrigation pipes, sprinklers, and drains with accuracy

c) It calculates the water required by each plant
d) It only focuses on the aesthetic elements of the design

271. Which of the following can be achieved through CAD in the design of public parks?
a) Only selecting the types of trees to plant
b) Creating layouts for walking paths, seating areas, and recreational spaces
c) Determining soil health and texture
d) Eliminating the need for physical landscape construction

272. What is one of the advantages of using CAD for both outdoor and indoor landscaping?
a) It saves time by eliminating the need for designers
b) It allows for precise planning and visualization of designs
c) It requires minimal creativity
d) It focuses only on plant selection

273. What role does CAD play in creating virtual tours of landscape designs?
a) It helps to simulate virtual tours of the designed space before actual implementation
b) It replaces the need for physical construction of gardens
c) It automatically adjusts plant selection based on visitor preferences
d) It determines the budget for the project

274. Which of the following can be visualized using CAD for outdoor designs?
a) Plant roots under the ground
b) The placement of trees, bushes, pathways, and other features with accurate dimensions
c) The growth cycle of plants
d) The blooming period of flowers

275. How does CAD help in the development of an indoor garden layout?
a) By selecting the best plant species for the room's temperature
b) By creating designs that incorporate the arrangement of furniture with plant placements
c) By determining the ideal temperature for each plant
d) By managing soil conditions for indoor plants

276. What is the benefit of exposure to CAD for aspiring landscape designers?
a) It allows for the development of their freehand drawing skills

b) It helps them to create detailed, practical designs that can be easily communicated and modified
c) It limits their ability to experiment with new designs
d) It reduces the need for understanding plant biology

277. What is the importance of CAD in designing sustainable landscapes?
a) It ensures only low-maintenance plants are used
b) It helps in planning water-efficient designs and minimizing waste in garden construction
c) It limits the use of renewable materials
d) It allows for the incorporation of artificial plants

278. How does CAD improve collaboration between landscape designers and clients?
a) By creating a digital version of the design that can be modified and shared easily
b) By allowing the client to bypass the designer's input
c) By automatically choosing plants based on client preferences
d) By simplifying the financial aspects of the project