

# Quiz: Botany set 23

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**Q1101: Which taxonomic category includes closely related species?**

- A) Family
- B) Order
- C) Genus
- D) Class

**Q1102: Which algal group has reserve food material as laminarin and mannitol?**

- A) Chlorophyceae
- B) Rhodophyceae
- C) Phaeophyceae
- D) Cyanophyceae

**Q1103: Which plant group shows dominant gametophytic phase?**

- A) Pteridophytes
- B) Bryophytes
- C) Gymnosperms
- D) Angiosperms

**Q1104: The edible part of rice grain is:**

- A) Embryo
- B) Endosperm
- C) Aleurone layer
- D) Testa

**Q1105: Which tissue forms periderm during secondary growth?**

- A) Vascular cambium
- B) Cork cambium
- C) Apical meristem
- D) Intercalary meristem

**Q1106: Which substance is responsible for impermeability of cork cells?**

- A) Cellulose
- B) Lignin
- C) Suberin
- D) Pectin

**Q1107: Which organelle is involved in synthesis of proteins for secretion?**

- A) Smooth ER
- B) Rough ER
- C) Golgi apparatus
- D) Lysosome

**Q1108: Which biomolecule is composed of amino acids?**

- A) Carbohydrates
- B) Lipids
- C) Proteins

D) Nucleic acids

**Q1109: Which phase of cell cycle shows DNA replication?**

- A) G1
- B) S
- C) G2
- D) M

**Q1110: Movement of water through cell walls is known as:**

- A) Symplast pathway
- B) Apoplast pathway
- C) Osmosis
- D) Diffusion

**Q1111: Which mineral nutrient is required for opening and closing of stomata?**

- A) Calcium
- B) Magnesium
- C) Potassium
- D) Iron

**Q1112: Which pigment is the primary pigment of photosynthesis?**

- A) Chlorophyll a
- B) Chlorophyll b
- C) Carotene
- D) Xanthophyll

**Q1113: Which compound is the first stable product of Calvin cycle?**

- A) RuBP
- B) OAA
- C) 3-phosphoglyceric acid
- D) Malic acid

**Q1114: Which respiratory pathway occurs in absence of oxygen?**

- A) Krebs cycle
- B) Electron transport chain
- C) Glycolysis
- D) Fermentation

**Q1115: Which plant hormone promotes leaf senescence?**

- A) Auxin
- B) Cytokinin
- C) Ethylene
- D) Gibberellin

**Q1116: Which structure guides pollen tube towards egg apparatus?**

- A) Micropyle
- B) Synergids
- C) Antipodals
- D) Central cell

**Q1117: Which breeding method is suitable for self-pollinated crops?**

- A) Mass selection
- B) Pureline selection
- C) Hybridisation
- D) Backcrossing

**Q1118: Which microorganism is used in production of penicillin?**

- A) Aspergillus
- B) Penicillium
- C) Rhizobium
- D) Saccharomyces

**Q1119: Which enzyme is used to cut DNA at specific sites?**

- A) DNA ligase
- B) DNA polymerase
- C) Restriction endonuclease
- D) Helicase

**Q1120: Which population parameter refers to birth rate?**

- A) Natality
- B) Mortality
- C) Immigration
- D) Emigration

**Q1121: Which trophic level has maximum biomass in terrestrial ecosystem?**

- A) Producers
- B) Primary consumers
- C) Secondary consumers
- D) Top carnivores

**Q1122: Which biodiversity level compares diversity between two habitats?**

- A) Alpha diversity
- B) Beta diversity
- C) Gamma diversity
- D) Genetic diversity

**Q1123: Which pollutant is responsible for Itai-itai disease?**

- A) Mercury
- B) Cadmium
- C) Lead
- D) Arsenic

**Q1124: Which taxonomic aid provides identification keys and descriptions of plants of a region?**

- A) Catalogue
- B) Monograph
- C) Flora
- D) Herbarium

**Q1125: Which algae shows haplodiplontic life cycle?**

- A) Ulothrix
- B) Spirogyra
- C) Ectocarpus
- D) Fucus

**Q1126: Which tissue consists of living cells with unevenly thickened corners?**

- A) Parenchyma
- B) Collenchyma
- C) Sclerenchyma
- D) Xylem

**Q1127: Which plastid is colourless and stores starch?**

- A) Chloroplast
- B) Chromoplast
- C) Amyloplast
- D) Elaioplast

**Q1128: Which nitrogenous base is absent in DNA?**

- A) Adenine
- B) Guanine
- C) Cytosine
- D) Uracil

**Q1129: Which stage of meiosis shows synapsis?**

- A) Leptotene
- B) Zygotene
- C) Pachytene
- D) Diplotene

**Q1130: Which force plays the major role in ascent of sap?**

- A) Root pressure
- B) Capillarity
- C) Transpiration pull
- D) Diffusion

**Q1131: Which micronutrient is required for nitrogen fixation?**

- A) Iron
- B) Molybdenum
- C) Zinc
- D) Copper

**Q1132: Which pathway reduces photorespiration by spatial separation?**

- A) C3 pathway
- B) C4 pathway
- C) CAM pathway
- D) Calvin cycle

**Q1133: Which respiratory substrate gives RQ less than 1?**

- A) Carbohydrates
- B) Proteins
- C) Fats
- D) Organic acids

**Q1134: Which hormone causes stomatal closure during water stress?**

- A) Auxin
- B) Cytokinin
- C) Gibberellin
- D) Abscissic acid

**Q1135: Which part of ovule becomes seed coat?**

- A) Nucellus
- B) Integuments
- C) Funiculus
- D) Chalaza

**Q1136: Which breeding method is used to exploit heterosis?**

- A) Pureline selection
- B) Mass selection
- C) Hybridisation
- D) Mutation breeding

**Q1137: Which microorganism is used in production of vinegar?**

- A) Saccharomyces
- B) Lactobacillus
- C) Acetobacter
- D) Clostridium

**Q1138: Which technique separates DNA fragments based on size?**

- A) PCR
- B) ELISA
- C) Gel electrophoresis
- D) Blotting

**Q1139: Which dispersion pattern shows individuals evenly spaced?**

- A) Random
- B) Uniform
- C) Clumped
- D) Aggregated

**Q1140: Which ecological pyramid is always upright?**

- A) Pyramid of numbers
- B) Pyramid of biomass
- C) Pyramid of energy
- D) All pyramids

**Q1141: Which biome is characterised by coniferous forests?**

- A) Savanna
- B) Taiga
- C) Tundra
- D) Desert

**Q1142: Which gas is a major contributor to greenhouse effect?**

- A) Oxygen
- B) Nitrogen
- C) Carbon dioxide
- D) Helium

**Q1143: Which system of classification is based on evolutionary relationships?**

- A) Artificial
- B) Natural
- C) Phylogenetic
- D) Numerical

**Q1144: Which algae is used as a source of agar?**

- A) Ulothrix
- B) Gelidium
- C) Sargassum
- D) Chlorella

**Q1145: Which tissue lies just inside endodermis in root?**

- A) Cortex
- B) Pericycle
- C) Cambium
- D) Pith

**Q1146: Which plastid imparts colour to ripe fruits?**

- A) Chloroplast
- B) Chromoplast
- C) Leucoplast
- D) Amyloplast

**Q1147: Which nitrogenous base pairs with adenine in RNA?**

- A) Thymine
- B) Cytosine
- C) Guanine
- D) Uracil

**Q1148: Which stage of mitosis shows separation of sister chromatids?**

- A) Prophase
- B) Metaphase
- C) Anaphase
- D) Telophase

**Q1149: Which force explains ascent of sap according to cohesion-tension theory?**

- A) Root pressure
- B) Capillarity
- C) Transpiration pull
- D) Diffusion

**Q1150: Which international agreement focuses on conservation of wetlands?**

- A) Montreal Protocol
- B) Kyoto Protocol
- C) Ramsar Convention
- D) Convention on Biological Diversity