

Quiz: Botany set 23

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) Zygote
- 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) Abscisic 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