

## **Quiz: Botany set 25**

---

**Q1201: Which taxonomic category includes organisms with maximum similarities?**

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

**Q1202: Which algal group lacks flagellated reproductive cells?**

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

**Q1203: Which plant group shows vascular tissues but lacks seeds?**

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

**Q1204: The edible part of pea seed is:**

- A) Endosperm
- B) Embryo
- C) Cotyledons
- D) Testa

**Q1205: Which tissue is responsible for secondary growth in dicot stem?**

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

**Q1206: Which cell wall component is deposited in secondary walls?**

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

**Q1207: Which organelle is called the suicidal bag of the cell?**

- A) Lysosome
- B) Peroxisome
- C) Golgi apparatus
- D) Ribosome

**Q1208: Which biomolecule acts as genetic material in some viruses?**

- A) DNA
- B) RNA
- C) Protein

D) Lipid

**Q1209: Which phase of cell cycle shows chromosome condensation?**

- A) G1 phase
- B) S phase
- C) G2 phase
- D) Prophase

**Q1210: Movement of water across semipermeable membrane due to concentration gradient is called:**

- A) Diffusion
- B) Osmosis
- C) Mass flow
- D) Active transport

**Q1211: Which mineral nutrient is required for synthesis of chlorophyll?**

- A) Nitrogen
- B) Magnesium
- C) Potassium
- D) Sulphur

**Q1212: Which pigment absorbs light and transfers energy to chlorophyll a?**

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

**Q1213: Which compound is the first stable product of C4 pathway?**

- A) RuBP
- B) 3-PGA
- C) Oxaloacetic acid
- D) Malic acid

**Q1214: Which respiratory step connects glycolysis and Krebs cycle?**

- A) Fermentation
- B) Link reaction
- C) Electron transport chain
- D) Oxidative phosphorylation

**Q1215: Which plant hormone promotes lateral bud growth?**

- A) Auxin
- B) Cytokinin
- C) Ethylene
- D) Abscisic acid

**Q1216: Which part of flower develops into fruit after fertilisation?**

- A) Ovule
- B) Ovary
- C) Thalamus

D) Style

**Q1217: Which breeding method is based on selection of superior individuals from a mixed population?**

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

**Q1218: Which microorganism is used in production of bread?**

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

**Q1219: Which enzyme cuts DNA at specific recognition sites?**

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

**Q1220: Which population attribute represents number of individuals per unit area?**

- A) Natality
- B) Density
- C) Mortality
- D) Dispersion

**Q1221: Which trophic level has maximum energy in an ecosystem?**

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

**Q1222: Which biodiversity level refers to diversity within a habitat?**

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

**Q1223: Which pollutant is responsible for photochemical smog?**

- A) Carbon monoxide
- B) Sulphur dioxide
- C) Nitrogen oxides
- D) Ammonia

**Q1224: Which taxonomic aid provides description of plants of a region with keys?**

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

D) Herbarium

**Q1225: Which algae shows diplontic life cycle?**

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

**Q1226: Which plant tissue is living and involved in photosynthesis?**

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

**Q1227: Which plastid stores proteins?**

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

**Q1228: Which nitrogenous base pairs with cytosine?**

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

**Q1229: Which stage of meiosis shows crossing over?**

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

**Q1230: Which force explains ascent of sap according to cohesion-tension theory?**

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

**Q1231: Which micronutrient is required for nitrogen fixation?**

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

**Q1232: Which pathway reduces photorespiration by spatial separation?**

- A) C<sub>3</sub> pathway
- B) C<sub>4</sub> pathway
- C) CAM pathway
- D) Calvin cycle

**Q1233: Which respiratory substrate gives respiratory quotient less than 1?**

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

**Q1234: Which hormone promotes seed dormancy?**

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

**Q1235: Which part of ovule develops into seed?**

- A) Ovary
- B) Ovule
- C) Nucellus
- D) Integument

**Q1236: Which breeding method involves use of radiation to induce variation?**

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

**Q1237: Which microorganism is used in sewage treatment?**

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

**Q1238: Which technique is used to separate DNA fragments by size?**

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

**Q1239: Which dispersion pattern shows patchy distribution of individuals?**

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

**Q1240: Which ecological pyramid is always upright?**

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

**Q1241: Which biome is characterised by permanently frozen subsoil?**

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

**Q1242: Which gas is a major greenhouse gas?**

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

**Q1243: Which classification system is based on evolutionary relationships?**

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

**Q1244: Which algae is used as a source of agar?**

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

**Q1245: Which tissue lies just inside endodermis in root?**

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

**Q1246: Which plastid imparts colour to fruits?**

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

**Q1247: Which nitrogenous base pairs with adenine in RNA?**

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

**Q1248: Which stage of mitosis shows alignment of chromosomes at equatorial plate?**

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

**Q1249: Which force contributes least to ascent of sap in tall trees?**

- A) Transpiration pull
- B) Cohesion
- C) Adhesion
- D) Root pressure

**Q1250: Which international agreement focuses on protection of biodiversity?**

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