

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) Abscissic 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) Zygotene
- 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) C₃ pathway
- B) C₄ 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) Absciscic 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