

# Quiz: Botany set 28

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**Q1351: Which taxonomic category is considered the basic unit of classification?**

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

**Q1352: Which algal group has cell wall made of cellulose and pectose?**

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

**Q1353: Which plant group shows dominant sporophytic generation?**

- A) Bryophytes
- B) Pteridophytes
- C) Algae
- D) Fungi

**Q1354: The edible part of wheat grain is:**

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

**Q1355: Which tissue gives rise to cork cells?**

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

**Q1356: Which cell wall component is responsible for impermeability to gases in cork?**

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

**Q1357: Which organelle is involved in detoxification of drugs and poisons?**

- A) Rough endoplasmic reticulum
- B) Smooth endoplasmic reticulum
- C) Golgi apparatus
- D) Ribosome

**Q1358: Which biomolecule acts as primary messenger in signal transduction?**

- A) Proteins
- B) Hormones
- C) Lipids

D) Carbohydrates

**Q1359: Which phase of cell cycle is longest in duration?**

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

**Q1360: Bulk movement of water driven by pressure gradient is called:**

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

**Q1361: Which mineral nutrient is a constituent of cytochrome oxidase?**

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

**Q1362: Which pigment protects chlorophyll from photooxidation?**

- A) Chlorophyll b
- B) Carotenoids
- C) Xanthophylls
- D) Phycobilins

**Q1363: Which compound acts as CO<sub>2</sub> acceptor in CAM plants at night?**

- A) RuBP
- B) PEP
- C) OAA
- D) Malate

**Q1364: Which respiratory step yields maximum ATP?**

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

**Q1365: Which plant hormone delays senescence of leaves?**

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

**Q1366: Which part of flower develops into seed after fertilisation?**

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

**Q1367: Which breeding method exploits hybrid vigour?**

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

**Q1368: Which microorganism is used in production of cheese?**

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

**Q1369: Which enzyme synthesises RNA primer during DNA replication?**

- A) DNA polymerase
- B) Primase
- C) Ligase
- D) Helicase

**Q1370: Which population attribute indicates number of individuals per unit area?**

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

**Q1371: Which trophic level contains maximum biomass in terrestrial ecosystem?**

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

**Q1372: Which biodiversity level measures species richness within a habitat?**

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

**Q1373: Which pollutant causes biomagnification in food chains?**

- A) Carbon monoxide
- B) Sulphur dioxide
- C) DDT
- D) Ammonia

**Q1374: Which taxonomic aid provides identification keys and plant descriptions of a region?**

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

**Q1375: Which algae shows diplontic life cycle?**

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

**Q1376: Which plant tissue provides mechanical support and is dead at maturity?**

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

**Q1377: Which plastid stores oils and fats?**

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

**Q1378: Which nitrogenous base is absent in DNA?**

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

**Q1379: Which stage of meiosis shows synapsis of homologous chromosomes?**

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

**Q1380: Which force plays the major role in ascent of sap?**

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

**Q1381: Which micronutrient is required for nitrogen fixation?**

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

**Q1382: 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

**Q1383: Which respiratory substrate gives respiratory quotient less than 1?**

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

**Q1384: Which plant hormone promotes seed dormancy?**

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

**Q1385: Which part of ovule persists as micropyle in seed?**

- A) Hilum
- B) Chalaza
- C) Micropyle
- D) Funiculus

**Q1386: Which breeding method involves inducing mutations using chemicals or radiation?**

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

**Q1387: Which microorganism is used in production of vinegar?**

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

**Q1388: Which technique is used to amplify DNA segments?**

- A) ELISA
- B) PCR
- C) Southern blotting
- D) Chromatography

**Q1389: Which dispersion pattern shows clumping of individuals?**

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

**Q1390: Which ecological pyramid is always upright?**

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

**Q1391: Which biome is characterised by coniferous forests?**

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

**Q1392: Which gas contributes most to global warming?**

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

**Q1393: Which classification system is based on evolutionary relationships?**

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

**Q1394: Which algae is used as a source of agar?**

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

**Q1395: Which tissue lies just inside the endodermis in root?**

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

**Q1396: Which plastid imparts colour to fruits and flowers?**

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

**Q1397: Which nitrogenous base pairs with adenine in RNA?**

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

**Q1398: Which stage of mitosis shows reformation of nuclear membrane?**

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

**Q1399: Which force contributes least to ascent of sap in tall trees?**

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

**Q1400: Which international agreement focuses on reduction of greenhouse gas emissions?**

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