

Quiz: Botany set 28

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 CO₂ 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) Abscisic 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) Zygote
- 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) C₃ pathway
- B) C₄ 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) Abscisic 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