

Quiz: Botany set 30

Q1451: Which taxonomic category represents the highest level of similarity among organisms?

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

Q1452: Which algal group stores food in the form of laminarin?

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

Q1453: Which plant group is called amphibians of the plant kingdom?

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

Q1454: The edible part of groundnut seed is:

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

Q1455: Which tissue forms secondary xylem and phloem?

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

Q1456: Which cell wall component is mainly responsible for flexibility of growing cells?

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

Q1457: Which organelle is involved in intracellular digestion?

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

Q1458: Which biomolecule forms the backbone of nucleic acids?

- A) Nitrogenous bases
- B) Sugars
- C) Phosphate groups

D) Nucleotides

Q1459: Which phase of cell cycle is characterised by DNA replication?

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

Q1460: Movement of water through xylem vessels is an example of:

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

Q1461: Which mineral nutrient is required for opening and closing of stomata?

- A) Calcium
- B) Magnesium
- C) Potassium
- D) Iron

Q1462: Which pigment absorbs maximum light in blue region?

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

Q1463: Which compound is regenerated in Calvin cycle?

- A) 3-PGA
- B) OAA
- C) RuBP
- D) PEP

Q1464: Which respiratory pathway yields CO₂ as a by-product?

- A) Glycolysis
- B) Krebs cycle
- C) ETC
- D) Fermentation

Q1465: Which plant hormone is responsible for apical dominance?

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

Q1466: Which part of flower develops into fruit?

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

Q1467: Which breeding method involves selection from mixed population?

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

Q1468: Which microorganism is used in production of antibiotics?

- A) Rhizobium
- B) Nitrosomonas
- C) Streptomyces
- D) Azotobacter

Q1469: Which enzyme synthesises DNA strand during replication?

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

Q1470: Which population parameter indicates number of births per unit time?

- A) Natality
- B) Mortality
- C) Immigration
- D) Emigration

Q1471: Which trophic level has maximum energy content?

- A) Producers
- B) Primary consumers
- C) Secondary consumers
- D) Tertiary consumers

Q1472: Which biodiversity level measures variation within a species?

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

Q1473: Which pollutant is responsible for acid rain?

- A) CO₂
- B) SO₂
- C) CH₄
- D) O₂

Q1474: Which taxonomic aid includes description of plants of a region?

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

Q1475: Which algae shows diplontic life cycle?

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

Q1476: Which plant tissue is dead at maturity and provides mechanical support?

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

Q1477: Which plastid stores proteins?

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

Q1478: Which nitrogenous base is present only in RNA?

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

Q1479: Which stage of meiosis shows separation of homologous chromosomes?

- A) Anaphase I
- B) Anaphase II
- C) Metaphase I
- D) Telophase II

Q1480: Which force is the main cause of ascent of sap in tall trees?

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

Q1481: Which micronutrient is involved in photolysis of water?

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

Q1482: Which pathway reduces photorespiration by spatial separation?

- A) C3
- B) C4
- C) CAM
- D) Calvin cycle

Q1483: Which respiratory substrate gives respiratory quotient equal to 1?

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

Q1484: Which hormone induces dormancy and inhibits growth?

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

Q1485: Which part of ovule persists as micropyle in seed?

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

Q1486: Which breeding method is used to introduce a specific gene into an elite variety?

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

Q1487: Which microorganism is used in sewage treatment?

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

Q1488: Which technique is used to separate DNA fragments by size?

- A) PCR
- B) ELISA
- C) Gel electrophoresis
- D) Southern blotting

Q1489: Which dispersion pattern shows uniform spacing of individuals?

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

Q1490: Which ecological pyramid is always upright?

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

Q1491: Which biome is characterised by permanently frozen subsoil?

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

Q1492: Which gas is mainly responsible for greenhouse effect?

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

Q1493: Which classification system is based on evolutionary relationships?

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

Q1494: Which algae is a source of agar?

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

Q1495: Which tissue lies just inside endodermis in root?

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

Q1496: Which plastid imparts colour to fruits and flowers?

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

Q1497: Which nitrogenous base pairs with adenine in RNA?

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

Q1498: Which stage of mitosis shows alignment of chromosomes at equatorial plate?

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

Q1499: Which force contributes least to ascent of sap in tall trees?

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

Q1500: Which international agreement focuses on conservation of wetlands?

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