

Quiz: Botany set 18

Q851: Which taxonomic category is a group of related orders?

- A) Family
- B) Genus
- C) Class
- D) Division

Q852: Which algal group possesses chlorophyll a and d?

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

Q853: Which plant group shows seed habit for the first time?

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

Q854: The edible part of coconut is:

- A) Embryo
- B) Endosperm
- C) Cotyledon
- D) Perisperm

Q855: Which tissue is responsible for increase in girth of roots?

- A) Apical meristem
- B) Intercalary meristem
- C) Lateral meristem
- D) Protoderm

Q856: Which substance makes cork cells impermeable to water and gases?

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

Q857: Which organelle contains digestive enzymes?

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

Q858: Which biomolecule forms the structural framework of membranes?

- A) Proteins
- B) Carbohydrates
- C) Lipids

D) Nucleic acids

Q859: Which phase of cell cycle includes preparation for mitosis?

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

Q860: Movement of solutes through cytoplasm via plasmodesmata is called:

- A) Apoplast pathway
- B) Symplast pathway
- C) Diffusion
- D) Mass flow

Q861: Which mineral nutrient is required for synthesis of ATP?

- A) Nitrogen
- B) Phosphorus
- C) Potassium
- D) Calcium

Q862: Which pigment is the reaction centre of photosystem II?

- A) P700
- B) P680
- C) Chlorophyll b
- D) Carotene

Q863: Which compound is the first stable product of C4 pathway?

- A) PEP
- B) RuBP
- C) Oxaloacetic acid
- D) Malic acid

Q864: Which respiratory process generates NADH and FADH₂?

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

Q865: Which plant hormone is associated with leaf abscission?

- A) Auxin
- B) Cytokinin
- C) Ethylene
- D) Gibberellin

Q866: Which part of ovule develops into seed coat?

- A) Nucellus
- B) Integuments
- C) Funiculus
- D) Chalaza

Q867: Which breeding method involves repeated crossing with recurrent parent?

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

Q868: Which microorganism is used for production of biogas?

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

Q869: Which enzyme seals nicks in DNA during replication?

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

Q870: Which population parameter refers to individuals entering a population?

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

Q871: Which trophic level has minimum energy availability?

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

Q872: Which biodiversity level refers to species diversity within a region?

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

Q873: Which pollutant is responsible for biomagnification in food chains?

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

Q874: Which taxonomic aid provides preserved plant specimens for reference?

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

Q875: Which algae shows haplontic life cycle?

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

Q876: Which tissue is composed of dead cells and provides mechanical strength?

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

Q877: Which plastid stores starch?

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

Q878: Which nitrogenous base is present only in RNA?

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

Q879: Which stage of meiosis shows separation of homologous chromosomes?

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

Q880: Which force mainly causes ascent of sap in tall trees?

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

Q881: Which micronutrient is required for photolysis of water?

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

Q882: Which pathway reduces photorespiration by spatial separation?

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

Q883: Which respiratory substrate gives respiratory quotient equal to 1?

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

Q884: Which hormone induces stomatal closure during water stress?

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

Q885: Which part of ovule persists as micropyle in seed?

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

Q886: Which breeding method induces variation using chemicals or radiation?

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

Q887: Which microorganism is used in production of vinegar?

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

Q888: Which technique is used to amplify DNA segments?

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

Q889: Which dispersion pattern shows individuals evenly spaced?

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

Q890: Which ecological pyramid is always upright?

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

Q891: Which biome is characterised by permanently frozen subsoil?

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

Q892: Which gas is responsible for depletion of ozone layer?

- A) Carbon dioxide
- B) Sulphur dioxide
- C) Chlorofluorocarbons
- D) Methane

Q893: Which classification system is based on evolutionary relationships?

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

Q894: Which algae is a source of agar?

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

Q895: Which tissue lies between epidermis and vascular bundles?

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

Q896: Which plastid imparts colour to fruits?

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

Q897: Which nitrogenous base pairs with adenine in DNA?

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

Q898: Which stage of mitosis shows alignment of chromosomes at equatorial plate?

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

Q899: Which force explains ascent of sap according to cohesion-tension theory?

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

Q900: Which international agreement aims to protect biological diversity?

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