

## **Quiz: Botany set 17**

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**Q801: Which taxonomic category includes organisms with maximum number of common characters?**

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

**Q802: Which algal group has chlorophyll a, b and stores starch as reserve food?**

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

**Q803: Which plant group shows heterosporous condition?**

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

**Q804: The edible part of wheat grain is:**

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

**Q805: Which tissue gives rise to lateral roots in dicot plants?**

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

**Q806: Which cell wall layer is lignified in sclerenchyma?**

- A) Primary wall
- B) Secondary wall
- C) Middle lamella
- D) Plasma membrane

**Q807: Which organelle modifies, sorts and packages proteins?**

- A) Rough ER
- B) Golgi apparatus
- C) Mitochondria
- D) Lysosome

**Q808: Which biomolecule is formed by ester linkage of fatty acids and glycerol?**

- A) Protein
- B) Carbohydrate
- C) Lipid
- D) Nucleic acid

**Q809: Which stage of cell cycle is also called synthesis phase?**

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

**Q810: Passive movement of ions across membrane down concentration gradient is:**

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

**Q811: Which mineral nutrient is a component of cytochrome oxidase?**

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

**Q812: Which pigment acts as reaction centre in photosystem II?**

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

**Q813: Which compound is regenerated during Calvin cycle?**

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

**Q814: Which respiratory step occurs in mitochondrial matrix?**

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

**Q815: Which plant hormone promotes stem elongation?**

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

**Q816: Which part of ovule develops into seed coat?**

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

**Q817: Which breeding method repeatedly crosses hybrid with one of its parents?**

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

**Q818: Which microorganism is used for production of streptokinase?**

- A) Penicillium
- B) Streptococcus
- C) Aspergillus
- D) Rhizobium

**Q819: Which enzyme synthesises DNA using RNA template?**

- A) DNA polymerase
- B) RNA polymerase
- C) Reverse transcriptase
- D) Ligase

**Q820: Which population parameter represents addition of individuals by birth?**

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

**Q821: Which trophic level has maximum energy?**

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

**Q822: Which biodiversity pattern shows species richness decreases from equator to poles?**

- A) Species-area relationship
- B) Latitudinal gradient
- C) Island biogeography
- D) Succession

**Q823: Which pollutant is responsible for Itai-itai disease?**

- A) Mercury
- B) Cadmium
- C) Lead
- D) Arsenic

**Q824: Which taxonomic aid lists plant species of a region along with identification keys?**

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

**Q825: Which algae shows diplontic life cycle?**

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

**Q826: Which tissue provides flexibility to growing plant parts?**

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

**Q827: Which plastid stores oils and fats?**

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

**Q828: Which nitrogenous base is absent in RNA?**

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

**Q829: Which stage of meiosis shows synapsis of homologous chromosomes?**

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

**Q830: Which force mainly causes ascent of sap in tall trees?**

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

**Q831: Which micronutrient is a component of plastocyanin?**

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

**Q832: Which pathway fixes CO<sub>2</sub> at night?**

- A) C<sub>3</sub> pathway
- B) C<sub>4</sub> pathway
- C) CAM pathway
- D) Calvin cycle

**Q833: Which respiratory substrate gives RQ greater than 1?**

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

**Q834: Which hormone is known as stress hormone in plants?**

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

**Q835: Which part of ovule persists as micropyle in seed?**

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

**Q836: Which breeding method uses irradiation to create variation?**

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

**Q837: Which microorganism is used for production of penicillin?**

- A) Aspergillus
- B) Penicillium
- C) Rhizobium
- D) Clostridium

**Q838: Which technique is used to detect specific DNA sequences?**

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

**Q839: Which dispersion pattern shows individuals grouped in patches?**

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

**Q840: Which ecological pyramid is always upright?**

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

**Q841: Which biome is characterised by tall grasses with scattered trees?**

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

**Q842: Which gas is mainly responsible for global warming?**

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

**Q843: Which system of classification considers evolutionary relationships?**

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

**Q844: Which algae is a source of agar?**

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

**Q845: Which tissue lies between epidermis and vascular bundles?**

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

**Q846: Which plastid imparts colour to fruits and flowers?**

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

**Q847: Which nitrogenous base pairs with adenine in DNA?**

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

**Q848: Which stage of mitosis involves separation of sister chromatids?**

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

**Q849: Which force explains ascent of sap according to cohesion-tension theory?**

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

**Q850: Which international agreement aims to reduce greenhouse gas emissions?**

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