

# Quiz: Botany set 6

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**Q251: Which taxonomic rank is the basic unit of classification?**

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

**Q252: Which algal class contains silica in the cell wall?**

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

**Q253: Antherozoids are motile gametes found in:**

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

**Q254: Which type of aestivation is found in Calotropis?**

- A) Valvate
- B) Twisted
- C) Imbricate
- D) Vexillary

**Q255: Which tissue in dicot root gives rise to lateral roots?**

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

**Q256: Which component of cell wall provides tensile strength?**

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

**Q257: Which organelle is involved in lipid synthesis?**

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

**Q258: Which polysaccharide is the reserve food in animals?**

- A) Starch
- B) Cellulose
- C) Glycogen

D) Chitin

**Q259: Which phase of mitosis involves disappearance of nuclear membrane?**

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

**Q260: Diffusion of gases in plants occurs through:**

- A) Xylem
- B) Phloem
- C) Stomata
- D) Cambium

**Q261: Which element is a component of chlorophyll molecule?**

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

**Q262: Which photosynthetic pigment absorbs maximum light at 680 nm?**

- A) Chlorophyll a
- B) Chlorophyll b
- C) Carotene
- D) Xanthophyll

**Q263: Which compound is regenerated in Calvin cycle?**

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

**Q264: Which respiratory step occurs in mitochondrial matrix?**

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

**Q265: Which hormone promotes cell division?**

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

**Q266: Which type of ovule is most common in angiosperms?**

- A) Orthotropous
- B) Anatropous
- C) Campylotropous
- D) Circinotropous

**Q267: Which breeding method increases homozygosity?**

- A) Outcrossing
- B) Hybridisation
- C) Inbreeding
- D) Clonal selection

**Q268: Which microorganism produces penicillin?**

- A) *Aspergillus niger*
- B) *Penicillium notatum*
- C) *Rhizobium*
- D) *Streptococcus*

**Q269: Which enzyme joins DNA fragments?**

- A) Restriction endonuclease
- B) Ligase
- C) Polymerase
- D) Reverse transcriptase

**Q270: Birth rate of a population is called:**

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

**Q271: Which trophic level has least energy?**

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

**Q272: Which biome has highest species diversity?**

- A) Desert
- B) Tundra
- C) Tropical rainforest
- D) Taiga

**Q273: Which pollutant causes Itai-itai disease?**

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

**Q274: Which taxonomic aid is used for identification based on morphological characters?**

- A) Key
- B) Monograph
- C) Manual
- D) Flora

**Q275: Which algae is used in manufacture of agar?**

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

**Q276: Which plant group shows heterospory?**

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

**Q277: Which tissue provides mechanical support in young stems?**

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

**Q278: Which plastid stores oils and fats?**

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

**Q279: Which nitrogenous base is present only in RNA?**

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

**Q280: Which stage of meiosis shows maximum condensation of chromosomes?**

- A) Pachytene
- B) Diplotene
- C) Diakinesis
- D) Metaphase I

**Q281: Upward movement of water in plants is called:**

- A) Translocation
- B) Diffusion
- C) Ascent of sap
- D) Osmosis

**Q282: Which element is involved in opening of stomata?**

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

**Q283: Which plant shows Kranz anatomy?**

- A) Wheat
- B) Rice
- C) Maize
- D) Potato

**Q284: Which step of respiration produces NADH?**

- A) Glycolysis
- B) Krebs cycle
- C) Electron transport
- D) Both glycolysis and Krebs cycle

**Q285: Which hormone induces dormancy in seeds?**

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

**Q286: Which part of ovule gives rise to seed coat?**

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

**Q287: Which breeding method is used to incorporate disease resistance?**

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

**Q288: Which microorganism is used in sewage treatment?**

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

**Q289: Which technique is used to detect specific DNA sequences?**

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

**Q290: Immigration increases population by:**

- A) Deaths
- B) Births
- C) Individuals entering population
- D) Individuals leaving population

**Q291: Which pyramid can be inverted?**

- A) Pyramid of energy
- B) Pyramid of numbers
- C) Pyramid of biomass
- D) Both pyramid of numbers and biomass

**Q292: Which biome has permafrost?**

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

**Q293: Which pollutant causes Blue baby syndrome?**

- A) Nitrates
- B) Sulphur dioxide
- C) Carbon monoxide
- D) Ozone

**Q294: Which publication deals with a single taxon?**

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

**Q295: Which algae shows haplontic life cycle?**

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

**Q296: Which tissue stores food in plants?**

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

**Q297: Which plastid develops from leucoplast during greening?**

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

**Q298: Which bond holds two DNA strands together?**

- A) Peptide bond
- B) Hydrogen bond
- C) Phosphodiester bond
- D) Glycosidic bond

**Q299: Which stage of meiosis shows terminalisation of chiasmata?**

- A) Diplotene
- B) Pachytene
- C) Diakinesis
- D) Metaphase I

**Q300: Which micronutrient is a component of plastocyanin?**

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