

## **Quiz: Botany set 12**

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**Q551: Which taxonomic category contains organisms with maximum number of similarities?**

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

**Q552: Which algal class has cell wall made of cellulose and pectin?**

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

**Q553: Which plant group is completely dependent on water for fertilisation?**

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

**Q554: The edible part of coconut is:**

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

**Q555: Which tissue forms lateral roots in dicot root?**

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

**Q556: Which wall layer is common between two adjacent plant cells?**

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

**Q557: Which organelle contains its own circular DNA and ribosomes?**

- A) Golgi apparatus
- B) Mitochondria
- C) Endoplasmic reticulum
- D) Lysosome

**Q558: Which biomolecule acts as enzymes in living systems?**

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

D) Nucleic acids

**Q559: Which phase of cell cycle is longest?**

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

**Q560: Movement of molecules from region of higher concentration to lower concentration is:**

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

**Q561: Which element is a constituent of chlorophyll molecule?**

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

**Q562: Which photosystem is associated with photolysis of water?**

- A) Photosystem I
- B) Photosystem II
- C) Both PS I and PS II
- D) Neither PS I nor PS II

**Q563: Which compound is the first stable product of Calvin cycle?**

- A) RuBP
- B) OAA
- C) 3-phosphoglyceric acid
- D) Malate

**Q564: Which respiratory process occurs in cytosol?**

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

**Q565: Which plant hormone promotes cell division?**

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

**Q566: Which structure of ovule allows entry of pollen tube?**

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

**Q567: Which breeding method is most suitable for vegetatively propagated crops?**

- A) Pureline selection
- B) Mass selection
- C) Clonal selection
- D) Backcrossing

**Q568: Which microorganism is used for production of biogas?**

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

**Q569: Which enzyme is used to join DNA fragments in recombinant DNA technology?**

- A) DNA polymerase
- B) Restriction endonuclease
- C) DNA ligase
- D) Reverse transcriptase

**Q570: Which parameter represents increase in population due to births?**

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

**Q571: Which trophic level occupies the highest position in food chain?**

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

**Q572: Which biodiversity refers to variation within species?**

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

**Q573: Which pollutant causes eutrophication of water bodies?**

- A) Carbon dioxide
- B) Nitrates and phosphates
- C) Sulphur dioxide
- D) Chlorofluorocarbons

**Q574: Which taxonomic aid provides information on plants of a region with keys?**

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

**Q575: Which algae shows diplontic life cycle?**

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

**Q576: Which tissue provides mechanical support and flexibility?**

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

**Q577: Which plastid stores starch grains?**

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

**Q578: Which nitrogenous base is present only in RNA?**

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

**Q579: Which stage of meiosis shows crossing over?**

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

**Q580: Which force is responsible for ascent of sap according to cohesion-tension theory?**

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

**Q581: Which micronutrient activates enzyme nitrate reductase?**

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

**Q582: Which pathway reduces photorespiration by spatial separation?**

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

**Q583: Which respiratory substrate gives RQ less than 1?**

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

**Q584: Which hormone promotes leaf senescence?**

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

**Q585: Which part of ovule develops into seed coat?**

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

**Q586: Which breeding method is used to transfer disease resistance gene?**

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

**Q587: Which microorganism is used in production of antibiotics?**

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

**Q588: Which technique is used to amplify specific DNA segment?**

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

**Q589: Which dispersion pattern shows individuals aggregated in groups?**

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

**Q590: Which ecological pyramid is always upright?**

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

**Q591: Which biome is characterised by permanently frozen subsoil?**

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

**Q592: Which gas is responsible for depletion of ozone layer?**

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

**Q593: Which classification system is based on evolutionary relationships?**

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

**Q594: Which algae is used as source of agar?**

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

**Q595: Which tissue lies between epidermis and vascular tissue?**

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

**Q596: Which plastid is responsible for colour of fruits?**

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

**Q597: Which nitrogenous base pairs with guanine?**

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

**Q598: Which stage of mitosis shows separation of sister chromatids?**

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

**Q599: Which force mainly causes upward movement of water in tall trees?**

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

**Q600: Which international agreement aims at conservation of wetlands?**

- A) Montreal Protocol
- B) Kyoto Protocol
- C) Ramsar Convention
- D) Stockholm Convention