

Quiz: Botany set 19

Q901: Which taxonomic category includes organisms sharing the least number of common characters?

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

Q902: Which algal group contains fucoxanthin as a major pigment?

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

Q903: Which plant group shows naked seeds?

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

Q904: The edible part of sunflower seed is:

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

Q905: Which tissue forms the vascular cambium in dicot stem?

- A) Procambium
- B) Ground meristem
- C) Protoderm
- D) Pericycle

Q906: Which substance is deposited in middle lamella?

- A) Cellulose
- B) Lignin
- C) Calcium pectate
- D) Suberin

Q907: Which organelle is the site of lipid synthesis?

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

Q908: Which biomolecule shows catalytic activity?

- A) Carbohydrates
- B) Lipids
- C) Proteins
- D) Nucleic acids

Q909: Which phase of cell cycle occupies maximum duration?

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

Q910: Bulk movement of water driven by pressure gradient is called:

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

Q911: Which mineral nutrient is a component of chlorophyll?

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

Q912: Which pigment protects chlorophyll from photo-oxidation?

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

Q913: Which compound acts as CO₂ acceptor in Calvin cycle?

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

Q914: Which respiratory step occurs in cytosol?

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

Q915: Which plant hormone promotes cell division?

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

Q916: Which structure in ovule functions as nutritive tissue for embryo sac?

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

Q917: Which breeding method involves selection from self-pollinated crops?

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

Q918: Which microorganism is used in production of antibiotics?

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

Q919: Which enzyme is responsible for synthesis of RNA from DNA?

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

Q920: Which population parameter refers to death rate?

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

Q921: Which trophic level shows maximum number of individuals?

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

Q922: Which biodiversity refers to species diversity within a habitat?

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

Q923: Which pollutant causes eutrophication of water bodies?

- A) Heavy metals
- B) Nitrates and phosphates
- C) Carbon monoxide
- D) CFCs

Q924: Which taxonomic aid gives detailed account of a single species or genus?

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

Q925: Which algae shows haplodiplontic life cycle?

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

Q926: Which tissue transports organic food in plants?

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

Q927: Which plastid stores proteins?

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

Q928: Which nitrogenous base pairs with guanine?

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

Q929: Which stage of meiosis shows chiasmata formation?

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

Q930: Which force contributes least to ascent of sap?

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

Q931: Which micronutrient is a component of nitrogenase enzyme?

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

Q932: Which pathway fixes CO₂ in mesophyll cells?

- A) C₃ pathway
- B) C₄ pathway
- C) CAM pathway
- D) Photorespiration

Q933: Which respiratory substrate gives RQ less than 1?

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

Q934: Which hormone accelerates fruit ripening?

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

Q935: Which part of ovule becomes seed coat?

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

Q936: Which breeding method exploits hybrid vigour?

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

Q937: Which microorganism is used in production of citric acid?

- A) Penicillium
- B) Aspergillus niger
- C) Saccharomyces
- D) Clostridium

Q938: Which technique separates DNA fragments by size?

- A) PCR
- B) ELISA
- C) Gel electrophoresis
- D) Blotting

Q939: Which dispersion pattern shows maximum competition?

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

Q940: Which ecological pyramid may be inverted in aquatic ecosystem?

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

Q941: Which biome is characterised by very low temperature and short growing season?

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

Q942: Which gas is a major contributor to acid rain?

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

Q943: Which classification system uses numerical taxonomy?

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

Q944: Which algae is a source of carrageenan?

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

Q945: Which tissue is present just inside endodermis?

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

Q946: Which plastid is involved in photosynthesis?

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

Q947: Which nitrogenous base pairs with adenine in RNA?

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

Q948: Which stage of mitosis is characterised by disappearance of nuclear membrane?

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

Q949: Which force is generated due to evaporation of water from leaves?

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

Q950: Which international agreement aims to protect wetlands?

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