

Quiz: Botany set 20

Q951: Which taxonomic category represents the basic unit of classification?

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

Q952: Which algal pigment is water soluble and found in red algae?

- A) Chlorophyll b
- B) Carotene
- C) Phycoerythrin
- D) Fucoxanthin

Q953: Which plant group shows well-developed vascular tissue and seeds?

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

Q954: The edible part of groundnut seed is:

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

Q955: Which tissue gives rise to cork cambium in dicot stem?

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

Q956: Which component of cell wall provides tensile strength?

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

Q957: Which organelle is the main site of ATP synthesis?

- A) Chloroplast
- B) Mitochondria
- C) Golgi apparatus
- D) Ribosome

Q958: Which biomolecule forms the genetic material in most organisms?

- A) Protein
- B) RNA
- C) DNA

D) Lipid

Q959: Which phase of cell cycle shows duplication of centrioles?

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

Q960: Movement of substances across membrane with expenditure of energy is called:

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

Q961: Which mineral nutrient is a component of chlorophyll molecule?

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

Q962: Which pigment is the reaction centre of photosystem I?

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

Q963: Which compound is regenerated in Calvin cycle after CO₂ fixation?

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

Q964: Which respiratory pathway yields maximum ATP?

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

Q965: Which plant hormone is responsible for apical dominance?

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

Q966: Which cell of embryo sac degenerates before fertilisation?

- A) Egg cell
- B) Synergids
- C) Antipodals
- D) Central cell

Q967: Which breeding method ensures development of homozygous lines?

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

Q968: Which microorganism is used in production of ethanol?

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

Q969: Which enzyme is used in PCR for DNA amplification?

- A) DNA ligase
- B) RNA polymerase
- C) Taq DNA polymerase
- D) Restriction endonuclease

Q970: Which population parameter represents movement of individuals out of a population?

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

Q971: Which trophic level has the least energy?

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

Q972: Which biodiversity level measures species diversity between communities?

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

Q973: Which pollutant is mainly responsible for biomagnification?

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

Q974: Which taxonomic aid gives information about plants of a particular area?

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

Q975: Which algae shows diplontic life cycle?

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

Q976: Which plant tissue is dead and provides mechanical support?

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

Q977: Which plastid stores starch?

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

Q978: Which nitrogenous base is absent in RNA?

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

Q979: Which stage of meiosis shows separation of homologous chromosomes?

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

Q980: Which force is mainly responsible for ascent of sap in tall trees?

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

Q981: Which micronutrient is involved in photolysis of water?

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

Q982: Which pathway reduces photorespiration by spatial separation of reactions?

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

Q983: Which respiratory substrate gives respiratory quotient equal to 1?

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

Q984: Which hormone induces stomatal closure during drought?

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

Q985: Which part of ovule persists as micropyle in seed?

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

Q986: Which breeding method induces variation artificially?

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

Q987: Which microorganism is used for production of vinegar?

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

Q988: Which technique is used to detect specific DNA fragments?

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

Q989: Which dispersion pattern indicates strong competition among individuals?

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

Q990: Which ecological pyramid is always upright?

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

Q991: Which biome has permanently frozen subsoil?

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

Q992: Which gas is responsible for ozone layer depletion?

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

Q993: Which classification system is based on evolutionary relationships?

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

Q994: Which algae is a source of agar?

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

Q995: Which tissue lies just inside the endodermis?

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

Q996: Which plastid is involved in photosynthesis?

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

Q997: Which nitrogenous base pairs with adenine in RNA?

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

Q998: Which stage of mitosis shows alignment of chromosomes at equatorial plate?

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

Q999: Which force explains ascent of sap according to cohesion-tension theory?

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

Q1000: Which international agreement aims to conserve biodiversity globally?

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