

Quiz: Botany set 4

Q151: Which taxonomic aid uses a contrasting pair of characters to identify organisms?

- A) Herbarium
- B) Museum
- C) Key
- D) Flora

Q152: Which class of algae has chlorophyll a, c and fucoxanthin?

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

Q153: Seeds are absent in:

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

Q154: Which part of flower is responsible for protection in bud stage?

- A) Petals
- B) Sepals
- C) Stamens
- D) Carpels

Q155: Endarch condition of xylem is found in:

- A) Root
- B) Stem
- C) Leaf
- D) Seed

Q156: Which plastid stores starch?

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

Q157: Which level of protein structure is stabilised by peptide bonds?

- A) Primary
- B) Secondary
- C) Tertiary
- D) Quaternary

Q158: DNA replication occurs during:

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

D) M phase

Q159: Movement of ions against concentration gradient requires:

- A) ATP
- B) Diffusion
- C) Osmosis
- D) Mass flow

Q160: Which nutrient is required for synthesis of ATP?

- A) Nitrogen
- B) Phosphorus
- C) Potassium
- D) Iron

Q161: Photolysis of water occurs at:

- A) Photosystem I
- B) Photosystem II
- C) Cytochrome complex
- D) ATP synthase

Q162: Which molecule is the first stable product of C3 cycle?

- A) RuBP
- B) Oxaloacetic acid
- C) 3-phosphoglyceric acid
- D) Malic acid

Q163: Which step of respiration releases maximum energy?

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

Q164: Which hormone inhibits plant growth?

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

Q165: Triple fusion results in formation of:

- A) Zygote
- B) Embryo
- C) Endosperm
- D) Synergids

Q166: Which breeding method exploits hybrid vigour?

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

Q167: Which microbe is used for production of antibiotics?

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

Q168: Which enzyme cuts DNA at specific sites?

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

Q169: Logistic growth curve is:

- A) J-shaped
- B) S-shaped
- C) Linear
- D) Exponential

Q170: Which ecosystem has lowest primary productivity?

- A) Coral reef
- B) Grassland
- C) Forest
- D) Desert

Q171: Ex situ conservation includes:

- A) National parks
- B) Wildlife sanctuaries
- C) Seed banks
- D) Biosphere reserves

Q172: Which gas causes greenhouse effect?

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

Q173: Five kingdom classification was proposed by:

- A) Linnaeus
- B) Whittaker
- C) Haeckel
- D) Mayr

Q174: Reserve food in red algae is:

- A) Starch
- B) Laminarin
- C) Floridean starch
- D) Glycogen

Q175: Which tissue is responsible for secondary growth in roots?

- A) Apical meristem
- B) Intercalary meristem
- C) Vascular cambium
- D) Protoderm

Q176: Which cell organelle modifies proteins?

- A) Ribosome
- B) Golgi apparatus
- C) Lysosome
- D) Peroxisome

Q177: Which lipid forms plasma membrane?

- A) Triglyceride
- B) Phospholipid
- C) Steroid
- D) Wax

Q178: Crossing over results in:

- A) Reduction in chromosome number
- B) Formation of chiasmata
- C) Increase in variability
- D) Synapsis

Q179: Transpiration occurs mainly through:

- A) Cuticle
- B) Lenticels
- C) Stomata
- D) Root hairs

Q180: Which deficiency causes necrosis of leaf margins?

- A) Nitrogen
- B) Phosphorus
- C) Potassium
- D) Magnesium

Q181: Which pigment participates directly in light reaction?

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

Q182: Which respiratory substrate gives RQ equal to 1?

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

Q183: Which hormone breaks seed dormancy?

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

Q184: Polyembryony refers to:

- A) Multiple embryos in one seed
- B) Multiple ovules in ovary
- C) Multiple pollen grains
- D) Multiple seeds in fruit

Q185: Which breeding method uses radiation?

- A) Hybridisation
- B) Mutation breeding
- C) Inbreeding
- D) Outbreeding

Q186: Which microbe is used in production of vinegar?

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

Q187: Which vector is commonly used in plants?

- A) pBR322
- B) Ti plasmid
- C) lambda phage
- D) Cosmid

Q188: Natality increases population by:

- A) Deaths
- B) Immigration
- C) Births
- D) Emigration

Q189: Energy flow in ecosystem is:

- A) Cyclic
- B) Bidirectional
- C) Unidirectional
- D) Random

Q190: IUCN Red List provides information about:

- A) Climate change
- B) Pollution
- C) Threatened species
- D) Ecosystem services

Q191: Which compound causes biomagnification?

- A) Biodegradable wastes
- B) Heavy metals
- C) Nitrates
- D) Carbon dioxide

Q192: System of classification based on overall similarities is:

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

Q193: Which algae is used in agar production?

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

Q194: Which tissue lies between xylem and phloem in dicot stem?

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

Q195: Which plastid stores oils?

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

Q196: Which nitrogenous base is absent in RNA?

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

Q197: Separation of homologous chromosomes occurs in:

- A) Meiosis I
- B) Meiosis II
- C) Mitosis
- D) Cytokinesis

Q198: Guttation occurs due to:

- A) Transpiration pull
- B) Root pressure
- C) Diffusion
- D) Active transport

Q199: Which element is part of nitrogenase enzyme?

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

Q200: Which protocol aims to reduce greenhouse gas emissions?

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