

Quiz: Botany set 22

Q1051: Which taxonomic category is a group of related genera?

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

Q1052: Which algal group shows presence of phycoerythrin pigment?

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

Q1053: Which plant group is heterosporous and shows seed habit precursor?

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

Q1054: The edible part of maize grain is:

- A) Embryo
- B) Endosperm
- C) Aleurone layer
- D) Testa

Q1055: Which tissue gives rise to lateral roots?

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

Q1056: Which cell wall component provides plasticity to growing cells?

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

Q1057: Which organelle is involved in formation of spindle fibres?

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

Q1058: Which biomolecule acts as enzyme in living systems?

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

D) Nucleic acids

Q1059: Which stage of cell cycle is called quiescent stage?

- A) G1
- B) S
- C) G2
- D) G0

Q1060: Movement of ions across membrane without energy expenditure is called:

- A) Active transport
- B) Facilitated diffusion
- C) Mass flow
- D) Osmosis

Q1061: Which mineral nutrient is a component of cytochrome?

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

Q1062: Which pigment absorbs maximum light in red region?

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

Q1063: Which compound is the primary CO₂ acceptor in C₃ plants?

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

Q1064: Which respiratory step produces ATP by substrate-level phosphorylation?

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

Q1065: Which plant hormone promotes cell elongation in stems?

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

Q1066: Which structure of pollen grain is responsible for resistance to enzymes?

- A) Intine
- B) Exine
- C) Germ pore
- D) Pollen tube

Q1067: Which breeding method is used to transfer a specific desirable gene?

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

Q1068: Which microorganism is used in production of antibiotics like erythromycin?

- A) Penicillium
- B) Streptomyces
- C) Rhizobium
- D) Lactobacillus

Q1069: Which enzyme synthesises RNA primer during DNA replication?

- A) DNA polymerase
- B) Primase
- C) Ligase
- D) Helicase

Q1070: Which population parameter represents deaths per unit time?

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

Q1071: Which trophic level occupies the base of ecological pyramid?

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

Q1072: Which biodiversity refers to diversity between ecosystems?

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

Q1073: Which pollutant is responsible for ozone layer depletion?

- A) CO₂
- B) SO₂
- C) CFCs
- D) NO₂

Q1074: Which taxonomic aid provides detailed information of plants of a region?

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

Q1075: Which algae shows diplontic life cycle?

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

Q1076: Which plant tissue provides mechanical strength and is dead at maturity?

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

Q1077: Which plastid stores proteins?

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

Q1078: Which nitrogenous base is absent in RNA?

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

Q1079: Which stage of meiosis involves crossing over?

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

Q1080: Which force is mainly responsible for ascent of sap?

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

Q1081: Which micronutrient is a component of plastocyanin?

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

Q1082: Which pathway fixes CO₂ at night?

- A) C₃ pathway
- B) C₄ pathway
- C) CAM pathway
- D) Calvin cycle

Q1083: Which respiratory substrate gives RQ greater than 1?

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

Q1084: Which hormone induces stomatal closure during stress?

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

Q1085: Which part of ovule persists as micropyle in seed?

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

Q1086: Which breeding method induces variation artificially?

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

Q1087: Which microorganism is used in production of curd?

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

Q1088: Which technique is used to amplify DNA segments?

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

Q1089: Which dispersion pattern indicates strong competition among individuals?

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

Q1090: Which ecological pyramid is always upright?

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

Q1091: Which biome is characterised by grasslands with scattered trees?

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

Q1092: Which gas mainly contributes to greenhouse effect?

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

Q1093: Which classification system is based on evolutionary relationships?

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

Q1094: Which algae is a source of agar?

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

Q1095: Which tissue lies just inside endodermis in root?

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

Q1096: Which plastid imparts colour to fruits and flowers?

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

Q1097: Which nitrogenous base pairs with adenine in DNA?

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

Q1098: Which stage of mitosis shows alignment of chromosomes at equatorial plate?

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

Q1099: Which force explains ascent of sap according to cohesion-tension theory?

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

Q1100: Which international agreement focuses on wetland conservation?

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