

1 Mark Questions

1. Which of the following proteins is a major component of cytoskeleton?

- (a) Tubulin (b) Fibrin
(c) Osmotin (d) Porin

2. The specialised tissue in the roots of epiphytic orchids is known as

- (a) haustoria (b) laticifer
(c) velamen (d) periderm

3. Lenticel originates from

- (a) guard cells
(b) subsidiary cells
(c) complimentary cells
(d) companion cells

4. Plant cell suspension culture is easily initiated from

- (a) shoot apex (b) root apex
(c) protoplast (d) friable callus

5. The process by which the pollen tube enters the ovule through micropyle is

- (a) chalazogamy (b) basigamy
(c) porogamy (d) mesogamy

6. Germplasm preservation through tissue culture is

- (a) *in situ* conservation
(b) *ex situ* conservation
(c) protected area conservation
(d) Both (a) and (b)

7. The taxa in danger of extinction is termed as

- (a) extinct (b) rare
(c) vulnerable (d) endangered

8. The best definition of biodiversity is variability

- (a) within species only
(b) between species only
(c) Both (a) and (b)
(d) within species, between species and of ecosystem

9. The diploid number of an organism is 12. How many chromosomes would be expected in its nullisomic?
(a) 10 (b) 11
(c) 13 (d) 14

10. The vascular bundle having xylem and phloem strands in alternate radii is known as
(a) collateral (b) bicollateral
(c) radial (d) concentric

11. The average number of chiasma in one pair of homologous chromosome is 1.4. The total length in map units for the linkage group is expected to be
(a) 90 (b) 70
(c) 50 (d) 30

12. A functional unit of gene which specifies the polypeptide is known as
(a) codon (b) muton
(c) cistron (d) recon

13. How many base pairs are present per complete nucleosome?
(a) 166 (b) 156
(c) 146 (d) 136

14. Which of the following plants is a member of evergreen coniferous forest?
(a) *Acacia* (b) *Shorea*
(c) *Cryptomeria* (d) *Rhizophora*

15. Choose the correct statement about phylogenetic system of classification.
(a) Proposed by John Hutchinson
(b) Evolutionary sequence is not considered
(c) One or a few superficial character(s) is/are considered
(d) Proposed by Linnaeus

16. Koch's postulates pertain to
(a) disease and causal organism
(b) bacterial metabolism
(c) viral replication
(d) fungal disease resistance

17. Aflatoxins are toxic chemicals produced by
(a) *Aspergillus flavus*
(b) *Alternaria alternata*
(c) *Fusarium oxysporum*
(d) *Clostridium tetani*
18. Late blight of potato is caused by
(a) Potato virus Y
(b) *Alternaria solani*
(c) *Phytophthora infestans*
(d) *Phytophthora megasperma*
19. Which one of the following is an essential ingredient in Bordeaux mixture?
(a) Mercuric chloride (b) Arsenic oxide
(c) Lead nitrate (d) Copper sulphate
20. The most widely used chemical for protoplast fusion, as fusogen, is
(a) mannitol (b) polyethylene glycol
(c) sorbitol (d) glycerol

21. How many molecules of ATPs are produced during oxidation of each molecule of NADH?
(a) 1 (b) 2
(c) 3 (d) 4
22. Photosystem II has an absorption maximum at
(a) 450 nm (b) 660 nm
(c) 680 nm (d) 700 nm
23. CO_2 fixation during C_4 pathway occurs in the chloroplast of
(a) bundle sheath cell (b) palisade parenchyma
(c) spongy parenchyma (d) guard cell
24. The growth retardant cycocel (CCC) inhibit sub-apical cell division by blocking the biosynthesis of
(a) abscisic acid (b) kinetin
(c) traumatin (d) gibberellin
25. Pollination effected by wind is called
(a) ornithophily (b) anemophily
(c) entomophily (d) hydrophily