11618

11 - STD FIRST REVISION TEST - 2024

11618

BOTANY

Time : 3.00 Hrs Marks : 70

I. Answer all the question : 15 X 1 =15

1. Pollen grains are fused together as a single mass called as :
   (a) Gynostegium (b) Syngenesious (c) Synandrous (d) Pollinium
2. Wood is :
   (a) Secondary Xylem (b) Secondary Phloem
   (c) Secondary Medullary rays (d) Secondary Cortex
3. The correct sequence in cell cycle is :
   (a) G1 - S - G2 - M (b) S - M - G1 - G2 (c) M - G1 - G2 – S (d) S - G1 - G2 – M
4. ' The Father of Botany ' is :
   (a) Linnaeus (b) Aristotle (c) Haeckel (d) Theophrastus
5. Which of the plant group has gametophyte as a dominant phase ?
   (a) Gymnosperms (b) Pteridophytes (c) Angiosperms (d) Bryophytes
6. Cell theory was proposed by :
   (a) Bentham and Hooker (b) Beadle and Tatum
   (c) Schleiden and Schwann (d) Engler and Prantl
7. Synapsis occur between :
   (a) two homologous chromosomes (b) mRNA and ribosomes
   (c) a male and female gamete (d) spindle fibres and centromeres
8. Dumb-bell shaped guard cells are present in _____.
   (a) Maize (b) Grasses (c) Sunflower (d) Bean
9. What type of transpiration is possible in the xerophyte Opuntia ?
   (a) Lenticular (b) Cuticular (c) Stomatal (d) All the above
10. The compound which links glycolysis and Kreb's cycle is :
    (a) Acetyl CoA (b) Succinic acid (c) Citric acid (d) Pyruvic acid
11. _____ is responsible for yellow colour change of leaves during autumn season.
    (a) Carotene (b) Phycocyanin (c) Phycoerythrin (d) Lutein
12. Which plant hormones induces closure of stomata ?
    (a) Abscissic acid (b) Auxin (c) Cytokinin (d) Gibberellin
13. If a plant is provided with all mineral nutrients but, Mn concentration is increased, what will be the deficiency ?
    (a) Only increases the uptake of Ca (b) Mn prevents the uptake of Fe, Mg but not Ca
    (c) Prevents the uptake of Fe, Mg and Ca (d) Mn increases the uptake of Fe, Mg and Ca
14. The storage product in Rhodophyceae is :
    (a) Cyanophycean starch (b) Floridean starch
    (c) Paramylon starch (d) Starch
15. The binomial of Onion is :
    (a) Allium cepa (b) Allium sativum (c) Daucus carota (d) Raphanus sativus

II. Answer any six questions. Question no. 24 is compulsory 6 X 2 =12

16. Differentiate Porous and Non-porous wood.
17. What is Richmond Lang effect ?
18. Write the characteristic features of root.
19. Write any two general characteristic features of Lichen.
20. Define Nucleoside and Nucleotide.
21. Write the floral formula of Datura metel.
22. Why Bryophytes are called Non-Vascular Cryptogams ?
23. What is Plasmodesmata ?
24. Write any two difference between Photorespiration and Dark respiration.

III. Answer any six questions. Question no. 33 is compulsory 6 X 3 =18

25. What are the different types of Transpiration ?
26. Write any three differences between plant and animal cell.
27. Find out the floral formula for a bisexual flower with bract, regular, pentamerous, distinct calyx and corolla,superior ovary without bracteole.

28. Write any three functions of Epidermal Tissue system.
29. List the functions of Nucleus.
30. What is Imbibition ? Give an example.
31. Write any 3 importance of Mycorrhizae.
32. Draw and label a diagram to show the different types of meristem based on their position in the plant body.
33. Draw and label the parts of flower.

IV. Answer all questions. **5 X 5 =25**

34. (a) Write the steps involved in Gram staining.

(OR)

(b) Write the Physiological effects of Cytokinin.

35. (a) Write the Botanical description of Clitoria ternatea. .

(OR)

(b) (i) Define Endosmosis.
(ii) Write the demonstration of Endosmosis by Potato Osmoscope.

36. (a) Write the differences between Sap wood and Heart wood.

(OR)

(b). What is Stele ? Explain the types of Stele.

37. (a). Draw the life cycle of Agaricus.

(OR)

(b) . Write the features of DNA.

38. (a). Mention the significance of Pentose Phosphate Pathway.

(OR)

(b). Differentiate Cyclic Photophosphorylation and Non-cyclic Photophosphorylation