

E 6397



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Reg. No.....

Name.....

B.Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MAY 2024

Fourth Semester

Complementary Course—Botany
ANATOMY AND APPLIED BOTANY

(For B.Sc. Zoology Model I)

[2013 to 2016 Admissions]

Time : Three Hours

Maximum : 60 Marks

Part A

Answer all questions.

Each question carries 1 mark.

1. What are resins ? Give an example.
2. Name a living permanent tissue.
3. What are clinging roots ?
4. What is stratified cambium ?
5. What is exarch ?
6. What is parthenocarpy ?
7. What is mass selection ?
8. What is simple layering ? Give an example.

(8 × 1 = 8)

Part B

Answer any six questions.

Each question carries 2 marks.

9. List any four characteristic features of sap wood.
10. What are xylem fibres ? Mention any two applications.
11. What are starch grains ? Mention different types of it.
12. Mention the features of middle lamella in a cell wall.

Turn over





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13. List the various components of phloem.
14. Point out any four adaptations of hydrophytes.
15. Differentiate between apomixis and apospory.
16. Write a note on tissue culture media.
17. What is pure line selection ? Mention its advantages.
18. What is mutation breeding? Mention its applications.

(6 × 2 = 12)

Part C

Answer any four questions.

Each question carries 4 marks.

19. Explain the diagnostic features of internal structure of a dicot leaf.
20. Draw the structure of a dicot root T.S.
21. Explain the xerophytic adaptations of *Nerium* leaf.
22. What is plant introduction ? Explain its procedure.
23. Differentiate between approach grafting and whip grafting.
24. Explain the steps involved in procedure of hybridization.

(4 × 4 = 16)

Part D

Answer any two questions.

Each question carries 12 marks.

25. With a labelled diagram, explain anomalous secondary thickening in *Bignonia*.
26. Illustrate morphological and anatomical modifications of halophytes.
27. Explain the different types of budding practiced in horticulture.
28. Give a concise account of procedure involved in organogenesis.

(2 × 12 = 24)

