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Reg. No.....

Name.....

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

Fourth Semester

Core Course—ANATOMY AND REPRODUCTIVE BOTANY OF ANGIOSPERMS

(Common for Botany Model I and Model II)

[2013—2016 Admissions]

Time : Three Hours Maximum Marks : 60

Part A

Answer **all** *questions.*
Each question carries 1 *mark.*

1. What is polyderm ?
2. What is Suberin ?
3. What is a nectar ?
4. What are laticifers ?
5. What is histogen theory ?
6. What are alkaloids ? Give an example.
7. What is a free central placentation ?
8. What is experimental embryology ?

(8 × 1 = 8)

Part B

Answer any **six** *questions.*
Each question carries 2 *marks.*

9. What are trichomes ? Mention its significance.
10. What are conjoint, collateral open and endarch condition ?
11. Draw the structure of a lenticel.
12. What are essential oils ? Give an example.
13. Mention the economic importance of plant fibres.
14. Point out the stem thickening in monocots.
15. Differentiate between Tension wood and Compression wood.

Turn over

16. Compare role of cambium in budding and grafting.
17. What is incompatibility ?
18. What is bisporic type of embryo sac ? Give an example.

(6 × 2 = 12)

Part C

Answer any **four** *questions.*
Each question carries 4 *marks.*

19. Explain various theories associated with shoot apex.
20. Explain the extra cell wall thickening materials.
21. Differentiate between hard wood and soft wood.
22. What are wood rays ? Explain the structure and cell types.
23. Differentiate between orthotropous ovary and anatropous ovary with diagrams.
24. Explain the development of a dicot embryo.

(4 × 4 = 16)

Part D

Answer any **two** *questions.*
Each question carries 12 *marks.*

25. With a labelled diagram, explain ground tissue system in plants.
26. Illustrate anomalous secondary growth in *Dracaena* stem.
27. Illustrate microsporogenesis in detail.
28. Give a concise account of different methods of pollination mechanisms noticed in plants.

(2 × 12 = 24)