Reg. No ..... Name **24U424**

B. Sc. DEGREE END SEMESTER EXAMINATION - MARCH 2024

SEMESTER 4 - BOTANY

COURSE : **19U4CRBOT4 - ANATOMY, MICROTECHNIQUE AND ANGIOSPERM MORPHOLOGY**

(For Regular - 2022 Admission and Improvement / Supplementary - 2021/2020/2019 Admissions)

Time : Three Hours Max. Marks: 60

PART A

Answer All (1 mark each)

1. What are adventitious roots?
2. What is maceration?
3. What are Mounting Media?
4. What are plasmodesmata?
5. What is alburnum?
6. What is Palisade Parenchyma?
7. Define opposite deccusate phyllotaxy.
8. Who coined the term 'meristem'?

(1 x 8 = 8)

PART B

Answer any 6 (2 marks each)

9. What is rhytidome?
10. Define a syconus. Provide one example.
11. What is Conjoint vascular bundle?
12. Define hypanthium.
13. What is quiescent centre? Explain its role.
14. How are growth rings formed and how are they exploited by man?
15. What is Fast Green?
16. Differentiate between ring porous and diffuse-porous wood.
17. Differentiate between simple and compound starch grains.
18. What is Double Staining? Give examples of stains used for double staining.

(2 x 6 = 12)

PART C

Answer any 4 (5 marks each)

19. Explain the structure of a typical angiosperm flower using technical terms. Draw labeled diagram.
20. With the help of a suitable diagram explain the primary structure of dicot root.
21. Briefly explain the structure of cell wall.
22. With the help of a suitable diagram explain the reaction wood formation in angiosperms.
23. What are the different types of cavities inside the plant body with secretory contents? Explain with diagrams.
24. What are Mounting Media? What are the properties of an ideal mounting media.

(5 x 4 = 20)

PART D
Answer any 2 (10 marks each)

25. With the help of a suitable diagram explain the anomalous secondary thickening in *Dracaena* stem.
26. With the help of suitable diagrams, explain the following types of inflorescence: (a) Cyathium (b) Hypanthodium (c) Capitulum (d) Spadix.
27. Write an essay on different types of Dry, Multiple and Aggregate fruits. Draw labelled diagrams with examples for each type.
28. Describe complex permanent tissue? What are the different type? Explain with suitable diagrams.

(10 x 2 = 20)