25004554

QP CODE: 25004554

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) SPECIAL REAPPEARANCE EXAMINATIONS, FEBRUARY 2025

Fifth Semester

CORE COURSE - BO5CRT05 - ANATOMY, REPRODUCTIVE BOTANY AND MICROTECHNIQUE

Common to B.Sc Botany Model I, B.Sc Botany Model II Environmental Monitoring And Management, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Horticulture and Nursery Management, B.Sc Botany Model II Plant Biotechnology & B.Sc Botany and Biotechnology Model III Double Main.

2022 Admission Only

335EF576

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Mention the functions of plasmodesmata.
2. What is apposition?
3. Compare sclereids and fibres.
4. What is a concentric vascular bundle?
5. What is bundle cap in dicot stem?
6. What is autumn wood?
7. What is stomium?
8. What is sporopollenin?
9. What is raphe?
10. What are synergids?
11. What is cellular endosperm?
12. What is the purpose of doing maceration?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Write a short note on mineral crystals in plant cells.
14. Explain the classification of meristems based on their function.
15. Make a brief account on hypodermis in stems.
16. Comment on the different anomalous primary features seen in dicot plants.
17. By means of brief notes and examples, distinguish between diffuse porous and ring porous wood.
18. Briefly describe the different parts of a flower.
19. How does fertilization take place in Angiosperms?
20. Describe the different types of polyembryony.
21. Explain the chemistry behind killing and fixing methods in botanical specimen preparation.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the ultra structure of cell wall.
23. Explain the formation of periderm and secondary wood in dicot stem.
24. With a labeled diagram, explain the structure and development of Allium type of embryo sac.
25. What are stains? Explain various staining procedures usually employed in botanical microtechnique.

(2×10=20)