TB144080B **Reg. No: .....**

Name: .....

B. Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2017
(Supplementary – 2014 Admission)
SEMESTER IV- CORE COURSE (BOTANY)
BOT4ARA - ANATOMY AND REPRODUCTIVE BOTANY OF ANGIOSPERMS

Time: Three Hours **Maximum Marks: 60**

PART A

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

1. What is anther culture?
2. What is tapetum?
3. Which layer is known as starch sheath?
4. What is dendrochronology?
5. What is apomixis?
6. Name a living mechanical tissue.
7. What is polyembryony?
8. What are plasmodesmata?

(8x1=8)

PART B

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

9. Differentiate between primary meristem and secondary meristem.
10. What is pit membrane? Give its function.
11. What is meant by double fertilization?
12. Mention the structure of dicot embryo.
13. What is middle lamella? Give its role in cell wall.
14. Add a note on the structure of ovule.
15. Define pollination? How does it differ from fertilization?
16. What is vascular cambium? Mention the role of cambium in budding and grafting.
17. Difference between fruit and seed.
18. What are lysigenous and schizogenous cavities?

(6x2=12)

PART C

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

19. With the help of labelled diagrams describe the types of stomata in dicots.
20. Describe structure of a dithecous anther with a labelled diagram.
21. Discuss about extra wall thickening materials.
22. What is anemophily? List out the characteristic features of such flowers?
23. Discuss about the formation of heart wood and sap wood.
24. Explain Histogen theory? Mention it's important drawback.

(4x4=16)

PART D

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

25. With labelled diagrams explain the structure and development of monosporic embryo sac.
26. Describe the anomalous secondary growth in Bignonia.
27. Briefly explain the non living inclusions of plant cell.
28. What are conducting tissues? State the function of each, describe the elements of them.

(2x12=24)