

TB174090C

Reg. No: .....

Name: .....

**B. Sc. DEGREE (C.B.C.S.S.) EXAMINATION, MARCH 2019**  
**(2017 Admissions Regular, 2016 Admissions Improvement/Supplementary & 2015**  
**Admissions Supplementary)**  
**SEMESTER IV – COMPLEMENTARY COURSE (BOTANY)**  
**BO4C04TB – ANATOMY AND APPLIED BOTANY**  
**(For Zoology)**

**Time: Three Hours**

**Maximum Marks: 60**

**PART A**

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

1. What are plasmodesmata?
2. Define guttation.
3. What are pit pairs?
4. What is apomixis?
5. Define meristem culture.

**(5x1=5)**

**PART B**

**II Answer any five questions. Each question carries 2 marks.**

6. What are lysosomes?
7. Write short notes on tyloses.
8. Write an account on bark.
9. What is parthenocarpy? How is it chemically induced?
10. How is pureline selection done to improve crops?
11. Define heterosis.
12. What is meant by intergeneric hybridization? Give an example.
13. What is organogenesis?

**(5x2=10)**

**PART C**

**III Answer any five questions. Each question carries 5 marks.**

14. Explain the primary structure of a monocot root with a neat labelled diagram.
15. Explain periderm formation.
16. Comment on the adaptations seen in epiphytes.
17. Write short notes on parasitic plants.
18. Enlist the objectives of plant breeding.
19. What is meant by primary and secondary plant introduction?
20. How is mass selection done to improve plants?
21. Explain the characters seen in plants showing hybrid vigour.

**(5x5=25)**

## **PART D**

**IV Answer any two questions. Each question carries 10 marks.**

22. Differentiate between the primary structures of monocot and dicot stems.
23. Give an account of the anomalous secondary thickening seen in Bignonia stem.
24. Explain secondary thickening in dicot roots. How is it different from that of stems?
25. Explain any three different methods adopted to improve the quality of cultivated plants.

**(2x10=20)**