



QP CODE: 22000475



22000475

Reg No : .....

Name : .....

**MSc DEGREE (CSS) EXAMINATION , JANUARY 2022**

**Second Semester**

M Sc BOTANY

**CORE - BY010201 - PLANT ANATOMY, DEVELOPMENTAL BIOLOGY AND  
HORTICULTURE**

2019 Admission Onwards

952AFC39

Time: 3 Hours

Weightage: 30

**Part A (Short Answer Questions)**

*Answer any **eight** questions.*

*Weight 1 each.*

1. Explain various changes occur in the shoot apex during leaf development.
2. Differentiate between apotracheal parenchyma and paratracheal parenchyma.
3. What are the reasons for the durability of teak wood?
4. Classify the stomatal complexes.
5. What are the different methods of fruit dehiscence?
6. Briefly explain the following a) Cell fate b) Commitment c) Potency.
7. Differentiate between Xenia and Metaxenia.
8. Define pomology.
9. What is meant by composting, write a short note on its significance.
10. What are the advantages of aquaponics.

(8×1=8 weightage)

**Part B (Short Essay/Problems)**

*Answer any **six** questions.*

*Weight 2 each.*

11. Write a note on secretory tissues.
12. Give an account of mechanical tissues in plants.
13. By mentioning proper examples explain the role of floral anatomy in taxonomy.





14. Mention the application of anatomy in pharmacognosy.
15. Explain the mechanism of differentiation.
16. Explain Microgametogenesis.
17. Write a short note on: roof garden and vertical garden.
18. Describe cultivation process of orchids.

(6×2=12 weightage)

**Part C (Essay Type Questions)**

*Answer any **two** questions.*

*Weight 5 each.*

19. Describe the extrastelar secondary growth in plants.
20. With suitable diagram, describe nodal anatomy. Explain nodal evolution.
21. Explain floral meristem and floral development in plants.
22. Write an essay on: artificial propagation.

(2×5=10 weightage)

