TM242662E

2.4

Reg. No :
Name :

MASTER'S DEGREE (C.S.S) EXAMINATION, MARCH 2024 2023 ADMISSIONS REGULAR

SEMESTER II - CORE COURSE BOTANY

BO2C05TM20 - Plant Anatomy, Developmental Biology and Horticulture

Time : 3 Hours

Maximum Weight: 30

Part A

I. Answer any Eight questions. Each question carries 1 weight

(8x1=8)

- 1. Explain the importance of floral anatomy in solving taxonomic problems.
- 2. Explain the anatomy of seeds.
- 3. Describe the floral anatomy of sepals and petals.
- 4. Briefly explain the formation of nerula stage.
- 5. Explain the stages in early animal development.
- 6. Explain " Pollen kit".
- 7. What is polyembryony?
- 8. What is the difference between edges and hedges?
- 9. Explain the importance of pruning in Bonsai.
- 10. Give an account on horticultural therapy.

LIBRARY E

Part B

II. Answer any Six questions. Each question carries 2 weight

(6x2=12)

- 11. Briefly explain the role of anatomy in Systematics.
- 12. Describe the importance of plant fibres.
- 13. Write brief notes on lignification patterns of xylem.
- 14. Briefly describe the different cleavage patterns.
- 15. Briefly explain the types of apomixis with examples.
- 16. Describe the various garden adornments.
- 17. Describe any four styles of Bonsai.
- 18. Explain the primary methods of aquaponic growing.

Part C

III. Answer any Two questions. Each question carries 5 weight

(2x5=10)

- 19. Describe the vascular cambium and cork cambium, its structure and functions.
- 20. Briefly describe different nodal patterns with suitable diagrams. Comment on their evolutionary trends.
- 21. Explain the structure of ovule with suitable diagrams. Add a note on the development of female gametophyte.
- 22. Discuss the preparation of different types of composts and their advantages.