

FIFTH SEMESTER B.Sc. DEGREE EXAMINATION, NOVEMBER 2023

(Regular/Improvement/Supplementary)

BOTANY

GBOT5B08T: TISSUE CULTURE, HORTICULTURE, ECONOMIC BOTANY & ETHNOBOTANY

Time: 2 Hours

Maximum Marks: 60

SECTION A: Answer the following questions. Each carries *two* marks.

(Ceiling 20 Marks)

1. Differentiate between dedifferentiation and re-differentiation.
2. What is cellular totipotency?
3. Define embryo culture.
4. Describe synthetic seeds.
5. Comment on the Binomial, family and morphology of useful part of All spice.
6. Explain cybridization.
7. Differentiate between pruning and training.
8. Describe the ethnobotanical significance of *Trichopus zeylanicus*.
9. Write the four principles of Bonsai making.
10. What is somatic embryogenesis?
11. What is Seed Certification?
12. What are Tillers?

SECTION B: Answer the following questions. Each carries *five* marks.

(Ceiling 30 Marks)

13. Explain the various Irrigation techniques used in horticulture.
14. Write an account on Binomial, family and morphology of the useful part, of any three Cucurbits studied in your syllabus.
15. Discuss seed treatment methods in horticulture.
16. Explain bioreactors.
17. Give a note on the Binomial, family and morphology of the useful part, and uses of White Dammer, Gum Arabic and Asafoetida.
18. Mention the composition of Murashige and Skoog medium.
19. What are fertilizers and mention the types.

SECTION C: Answer any *one* question. Each carries *ten* marks.

20. Write an essay on the importance of ethnobotanical knowledge and TBGRI model of Benefit Sharing.
21. Write an essay on micropropagation.

(1 x 10 = 10 Marks)