

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2024
(Regular/Improvement/Supplementary)
BOTANY
FBOT4E01 - BIOTECHNOLOGY IN CROP IMPROVEMENT

Time: 3 Hours

Maximum Weightage: 30

Part A: Answer any *four* questions. Each carries *two* weightage.

1. What are Cybrids?
2. Comment on Synthetic seeds.
3. Write a note on NBPGR.
4. What is hairy root culture?
5. Define RFLP.
6. Write down the use of Colchicine.
7. Define Trade mark.

(4 × 2 = 8 weightage)

Part B: Answer any *four* questions. Each carries *three* weightage.

8. Describe somatic hybridization techniques.
9. Write a note on Indian Seed Act (1966).
10. Write the procedure of producing saline tolerant plant.
11. What is batch bioreactor?
12. Explain somaclonal variation and its application.
13. Write down the methods of micropropagation.
14. Describe the role of ICAR and CSIR in research.

(4 × 3 = 12 weightage)

Part C: Answer any *two* questions. Each carries *five* weightage.

15. Describe immobilization techniques for cells and enzymes.
16. Write the application of biotechnology in crop improvement.
17. What is bioreactor? Explain the types and its applications.
18. Write an essay on haploid production and its applications.

(2 × 5 = 10 weightage)