

FOURTH SEMESTER M.Sc. DEGREE EXAMINATION, APRIL 2025
(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. Expand 'HEPA'. Where it is used?
2. What is an Ideotype?
3. What is an Autoclave?
4. What is homozygous lines?
5. Expand RFLP and RAPD.
6. Name the chemicals used for protoplast fusion.
7. What are cell lines?

(4 × 2 = 8 weightage)

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

8. What are the difference between somatic hybrids and cybrids?
9. What are the types of patent applications?
10. Write down the procedures for releasing a variety.
11. What are the applications and limitations of enzyme linked markers?
12. How shelf life of fruits and flowers can be extended?
13. Drought and salinity tolerance can be increased by using genetic engineering. How?
14. What is seed certification?

(4 × 3 = 12 weightage)

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

15. What are the types of Bioreactors?
16. Crop genetic resource activities. Explain.
17. Briefly mention about the forms of IPR.
18. What are the advantages and disadvantages of Immobilization technique?

(2 × 5 = 10 weightage)