D3ABT2403 **(1 Page)** **Name.....**
Reg.No.....

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2025
(Regular/Improvement/Supplementary)

BOTANY
FBOT3C09 - BIOTECHNOLOGY AND BIOINFORMATICS

Time: 3 Hours **Maximum Weightage: 30**

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

1. Elaborate on DNA microarray.
2. Comment on Endosperm culture.
3. Explain Clustal W.
4. What is terminator technology?
5. Comment on World Wide Web.
6. Differentiate between AFLP and RFLP.
7. What is J pred?

(4 × 2 = 8 weightage)

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

8. Write a note on Human Genome Project.
9. Comment on biosafety aspects of biotechnology.
10. Write an account on GenBank.
11. What are the factors effecting organogenesis?
12. Explain Antisense RNA technology.
13. Write down the applications of computer in Biological Sciences.
14. What is Protein Sequence Database? Explain.

(4 × 3 = 12 weightage)

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

15. Explain vector dependent and vector independent methods of gene cloning.
16. What are the aseptic techniques in plant tissue culture? Explain.
17. Describe the applications of bioinformatics.
18. Write an essay on online publications in biology.

(2 × 5 = 10 weightage)