

THIRD SEMESTER M.Sc. DEGREE EXAMINATION, NOVEMBER 2024
(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. What is an open source software? Discuss their advantages and disadvantages.
2. Briefly explain surface sterilization.
3. Expand and explain SCOP.
4. What is secondary database? Give examples.
5. Write a brief note on human genome project.
6. What is Jpred?
7. Explain physical containment in biotechnology laboratory.

(4 × 2 = 8 weightage)

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

8. What are the different levels of CATH databases?
9. Write a note on RFLP and explain one of its applications.
10. What is open access publishing? Write a note on different open access.
11. Write a brief account on GenBank.
12. What is the common strategy to produce transgenic plants with herbicide tolerance?
13. Describe the methods for measurement of cell growth in a suspension culture.
14. What is somatic hybridization? Discuss its importance.

(4 × 3 = 12 weightage)

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

15. Write an account on different protein databases.
16. Describe the method of ovule culture and discuss its applications.
17. Discuss the various applications of bioinformatics.
18. Give an account on PCR and its applications.

(2 × 5 = 10 weightage)