QP CODE: 25020933

25020933

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

Sixth Semester

B.Sc Botany and Biotechnology Model III Double Main

CORE COURSE - BO6CRT23 - BIOINFORMATICS

Common for B.Sc Botany Model I, B.Sc Botany Model II Food Microbiology, B.Sc Botany Model II Environmental Monitoring And Management, B.Sc Botany Model II Horticulture and Nursery Management & B.Sc Botany Model II Plant Biotechnology

2017 Admission Onwards

9EA38586

Time: 3 Hours Max. Marks : 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. Write down two key findings of HGP.
2. What is a database?
3. Expand NCGR.
4. Enumerate on biological databases.
5. Name two file formats used in Prints.
6. Which database provides information related to 2D gel immunoblots and immunohistochemistry pictures?
7. Describe dot plot algorithm.
8. Name the algorithm used in global alignment.
9. Write any two use of FASTA.
10. What is progressive alignment method?
11. What are motifs?
12. Explain PROSITE.

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Briefly explain the steps in genome analysis.
14. Infer on PIR and its types.
15. Write on Gene Expression Ominibus NCBI.
16. What is NCBI? Explain its importance.
17. Write a note on the various uses of sequence alignment.
18. Comment on the uses of local alignment.
19. What are the different types of phylogenetic trees?
20. Write in detail the different steps involved in Rasmol.
21. Comment on the various uses and applications of protein docking.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Highlight on the ENTREZ genome and TIGR database.
23. Write on 2D gel electrophoresis data base- ExPASy SWISS-2DPAGE.
24. What is PERL? How is it applied for data mining in Bioinformatics?
25. Discuss on drug applications and safety testing process.

(2×10=20)