QP CODE: 25020941

25020941

Reg No : .....

Name : .....

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

Sixth Semester

B.Sc Biotechnology Model III

CHOICE BASED CORE COURSE - BT6CBT01 - BIOINFORMATICS

2017 Admission Onwards

41763BB2

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

*Each question carries **2** marks.*

1. Write the purpose of Bioinformatics.
2. Interpret any three skills needed for a good bioinformatician.
3. The role plays of genome in Bioinformatics.
4. Compare the primary and secondary database with examples.
5. Explain EMBL formats.
6. What is Pearson format?
7. Quote the goal of multiple sequence alignment.
8. Identify the applications of computational biology.
9. Relate the method used for analysing phylogenetic trees.
10. Why is homology modelling important?
11. Name two tools used in immunoinformatics.
12. Infer the role of computational Biology.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Judge the importance of transcriptomics in bioinformatics.

14. Infer proteomics with the help of suitable illustration.

15. Define sequence submission.

16. Explain the process of Genpept formats write its application in bioinformatics.

17. Summarize the Smith-Waterman algorithm for local alignments.

18. Summarize the applications of BLAST in sequence homology search.

19. Compare different structure prediction methods.

20. Explain comparative genomics and databases.

21. Write the development of Chemiinformatics.

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **15** marks.*

22. Uses and importance of biological databases with examples.

23. Summarise on dot matrix analysis and various matrices used in it.

24. Relate the uses and importance of Rasmol.

25. Summarize an essay on Geoinformatics.

(2×15=30)