QP CODE: 24026901

24026901

Reg No : .....

Name : .....

B.Sc DEGREE (CBCS) REGULAR / IMPROVEMENT / REAPPEARANCE EXAMINATIONS, OCTOBER 2024

Third Semester

B.Sc Bioinformatics Model III

CORE COURSE - BI3CRT07 - ADVANCED BIOCOMPUTING

2017 Admission Onwards

B4606E99

Time: 3 Hours Max. Marks : 80

Part A

*Answer any **ten** questions.*

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

1. What is Biochip?
2. What are Paralogs?
3. What are the benefits of spotted Microarray?
4. Define Photodeprotection using mask.
5. Define Manual method in Hybridisation.
6. Define Sample Preparation and labelling.
7. Define Specific Probe.
8. Types of Substitution Matrices.
9. What are the disadvantages of profiles?
10. NOR – MD and RASCAL.
11. UPGMA.
12. Phylip.

(10×2=20)

Part B

*Answer any **six** questions.*

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

13. Explain about Affymatrix technology.

14. Explain
    1) Photo deprotection using mask
    2) Maskless Photo deprotection technology

15. Discuss about Alignment Algorithms.

16. Which are the Dot Matrix Programmes?

17. Explain Basic Local Alignment Search Tool.

18. Differentiate between distance and similarity.

19. Enlist the main Features of any phylogenetic tree.

20. What is Maximum Parsimony Method?

21. Explain Kishino -Hasegawa Test and Shimodaira -Hasegawa Test.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Define Microarray. What are the different techniques used in Micro array? What are the concept & Advantage of Microarray?

23. Give an account on Dynamic Programming .Discuss Smith Waterman algorithms.

24. Explain Prosite Database .Importance and Flat File Format.

25. Discuss about Molecular Phylogenetics .Explain Terminology of phylogenetics.

(2×15=30)