

PG II S (1089) A – 15



M.Sc. II Semester (CBCS) Degree Examination, 2015

BIOTECHNOLOGY

SCT – 2.1 : Bioinformatics

Time : 3 Hours]

[Max. Marks : 80

Instructions : 1) Section 'A' has **all compulsory** questions.

2) Answer 'B' and 'C' Sections as per **instructions**.

SECTION – A

Answer the following :

(10×2=20)

1. Hovergen
2. MIPS
3. Bank It
4. TAIR
5. Biochips
6. Plasmo DB
7. Sequence Manipulation Suite
8. ECDC
9. Regression
10. FAST3.

SECTION – B

Answer **any four** of the following :

(4×6=24)

11. What are Boolean operators ? Explain their uses in database.
12. How are the protein sequences identified from DNA sequences ?
13. What is SEQUIN ? Explain.

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14. What are Networking and Search Engines ?
15. Write a note on the importance of science citation index.
16. What is SWISS PORT and add a note on its importance in proteomics ?

SECTION – C

Answer **any three** of the following :

(3×12=36)

17. Enumerate the use of primer designing and add a detailed note on the procedure and application in DNA microarray.
18. Explain the prediction of the secondary structure using modelling tools such as Easy Modeller and its validation by Ramachandran Plot.
19. Discuss in detail the procedure of DNA or protein solvence submission to the databases and construction of phylogenetic tree.
20. Write an detailed account on the virtual library and its organisations.