

Exam. Code : 103203

Subject Code : 1363

B.A./B.Sc. Semester—III

BIOINFORMATICS

(Introduction to Bioinformatics &

Biological Databases)

Time Allowed—3 Hours]

[Maximum Marks—75

SECTION—A

(Marks : $10 \times 1.5 = 15$)

1. Explain the following terms :

- (a) Proteomics
- (b) Transcriptomics
- (c) SRS
- (d) FASTA
- (e) Pubmed
- (f) Model organism
- (g) TIGR
- (h) PDBsum
- (i) GlycoSuiteDB
- (j) Redundant database.

SECTION—B**(Marks : 4×15=60)**

2. What is comparative genomics ? Discuss tools and its application for comparative genomics.

OR

What is genome sequencing project ? Discuss in brief application of Bioinformatics tools in genome sequencing project.

3. What is biological database ? Discuss ASNI and NCBI data model.

OR

Discuss different types of tools used for data retrieval. What do you mean by sequence format ?

4. Mention any three nucleic acid or protein sequence databases ? Discuss their significance and features.

OR

Explain importance of model organism's genome databases. Discuss feature and significance of any genome database of a model organism.

5. What is PDB ? Explain features and importance of PDB.

OR

Discuss features and importance of Pfam and SCOR database.