

Exam. Code : 103203

Subject Code : 1309

B.A./B.Sc. 3rd Semester

BIOINFORMATICS

(Introduction to Bioinformatics & Biological Databases)

Time Allowed—3 Hours]

[Maximum Marks—75

Note :—Candidates are required to attempt **FIVE** questions, selecting at least **ONE** question from each section. The fifth question may be attempted from any section. All questions carry equal marks.

SECTION—A

1. What are Genome sequencing project ? Discuss Human genome sequencing project and its application.
2. Define genomics, pharmacogenomics and proteomics. Explain functional genomics and its application.

SECTION—B

3. What are biological databases ? Discuss its different types with two examples each. Explain their significance.
4. Explain Entrez, Webin, Autodep and Sequin. Discuss importance of data retrieval and deposition system.

SECTION—C

5. What is Ensembl genome project ? Discuss any genome database of a model organism. Explain its feature and significance.
6. What are TrEMBL and SWISS PROT ? Discuss importance of protein sequence databases.

SECTION—D

7. Discuss PDB and PDBsum. What type of data is present in PDB ? Explain significance of Pfam.
8. What is BLAST ? Discuss significance of RNABase.