

Exam. Code : 103203

Subject Code : 1329

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

BIOINFORMATICS

(Introduction to Bioinformatics & Biological Databases)

Time Allowed—Three 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 do you understand by Human Genome sequencing project ? Discuss importance of genome sequencing project and its application.
2. Define proteomics, transcriptomics and population genomics. Explain comparative genomics and its application.

SECTION—B

3. What are biological literature databases ? Discuss different types with their significance.
4. Explain SRS, Bankit, Sakura and Sequin. Discuss importance of sequence formats.

SECTION—C

5. What is TIGR ? Discuss any viral genome database. Explain its features and significance.
6. What are GenBank and SWISS PROT ? Discuss importance of sequence databases.

SECTION—D

7. Discuss Prosite and Pfam. What type of data is present in PDB ? Explain significance of PDBsum.
8. What is FASTA ? Discuss significance of Lipid and Carbohydrate database with example.