M.Sc. Bio-Informatics- Ist Sem.

(2118)

Paper: BT-515

Introduction to Bioinformatics & Biological Databases

Time allowed: 3 hrs.   **Max. Marks: 75**

Candidates are required to attempt five questions, selecting at least one question from each section. The fifth question may be attempted from any section.   15X5=75

Section A

1) a) What are genetic code and ORF? Explain differences between intron and exon.

   5 Marks

   b) What is PCR? Discuss methods used for DNA sequencing.

   10 Marks

   OR

2) Explain bioinformatics? Discuss major milestones and application of bioinformatics in biological sciences.   15 Marks

Section B   15 Marks

3) What is a literature database? Discuss different types of biological databases with examples.

   OR

4) Discuss features and significances of any one nucleotide and one protein database.

Section C   15 Marks

5) What are Flybase and TAIR? Discuss significance of any one genome database.

   Or

6) What are Prosite and Pfam? Discuss significance of pattern database.

Section D   15 Marks

7) What is PDB? Discuss feature and significance of a database of small molecule.

   Or

8) What do you understand by file format? Discuss GenBank, MSF and SDF format.

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