

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.
