

Unique Paper Code : 42167905
Name of the Course : B. Sc. (P) Life Sciences
Name of the Paper : Bioinformatics
Semester : V

Duration : 3 + 1 Hrs

Maximum Marks : 75

Instructions for Candidates

Attempt *four* questions in all. All questions carry equal (18.75) marks.

Attempt all parts of the questions together.

Write your examination roll number on answer sheet.

Q1: Discuss importance of bioinformatics in biological sciences and discuss its applications in research? (8.75+10)

Q2: Discuss salient features of Biological databases and its types? (8.75+10)

Q3: Define Standard BLAST in detail and discuss its uses in bioinformatics? (10+8.75)

Q4: Write down the steps for construction of phylogenetic tree and discuss different methods of tree construction in detail. (10+8.75)

Q5: Describe salient features of protein databases. Discuss PIR database and the three layers of Uniprot database in detail. (8.75+5+5)

Q6: Discuss multiple sequence alignment in detail with the help of flow chart. Write its significance also. Name five important tools of multiple sequence alignment. (8.75+5+5)