

Bioinformatics (Elective-III)

Time: Three Hours <http://www.rgpvonline.com>

Maximum Marks: 70

Note: 1. Attempt any five out of eight questions.

2. All questions carry (14) marks.

3. Use diagrams wherever necessary.

1. Discuss in detail the introduction and objectives of bioinformatics. 14

2. What do you understand by the word cloning? Write a flow diagram for the cloning methodology and discuss its salient features. 14

3. Distinguish between two bioinformatics databases and image processing. What are the similarities and differences. 14

4. Write short notes on any four. 14

a) Dynamic programming

b) CORBA

c) Protein folding

d) MYSQL

e) Genome

5. What are the different types of databases? Distinguish between nucleotide sequence database and protein sequence database. 14

6. Distinguish between pairwise sequence alignment and multiple sequence alignment. Discuss the what and flow of each of these. 14

7. Distinguish between proteomics and problem solving in bioinformatics. How similar rifting and near by words can be separated and mixed? 14

8. What are the strategies and options for similarity search? Make and discuss flow charts for protein structure prediction. 14