

M.Sc. (Part-II) Semester—IV (CBCS Pattern) Examination
COMPUTER SOFTWARE
Paper—XVI
(Computing Techniques in Bio-Informatics)

Time : Three Hours]

[Maximum Marks : 80

N.B. :— (1) Due credit will be given to neatness and adequate dimensions.
(2) Illustrate your answers necessary with the help of neat sketches.

1. (A) What are the applications of Bio-informatics ? Explain. 8
(B) State and explain the categories of databases. 8

OR

2. (A) Explain retrieval system in detail. 8
(B) State and explain prediction of protein structure. 8
3. (A) Explain sequence database with example. 8
(B) Explain :
(i) DALI
(ii) FASTA. 8

OR

4. (A) Explain following :
(i) CAZY
(ii) BLAST. 8
(B) Explain enzyme database in detail. 8
5. (A) Explain data submission in brief. 8
(B) Describe different data analysis tools. 8

OR

6. (A) State and explain protein submission. 8
(B) Explain prediction tools in detail. 8
7. (A) State and explain sequence comparison with example. 8
(B) Describe UPGMA in detail. 8

OR

8. (A) Explain substitution matrices in brief. 8
(B) State and explain structure algorithm. 8
9. (A) State and explain Monte Carlo methods. 8
(B) Explain PERL for bio-informatics. 8

OR

10. (A) Explain molecular dynamics simulation package. 8
(B) State and explain commercial and academic bio-informatics software. 8

