Roll No. ....

(04/17-I)

5223

B. Sc. EXAMINATION

(Fourth Semester)

BIOTECHNOLOGY : BIOINFORMATICS

Ninth Paper

Time : Three Hours   *Maximum Marks : 40*

Note : Q. No. **1** is compulsory. Attempt any *Four* questions by selecting *two* questions from each Unit.

1. Write short notes on the following :

    (i)   Bioinformatics

    (ii) Secondary databases

    (iii) BLAST

    (iv) PDB. $2 \times 4 = 8$

Unit I

2. What is a Biological Database ? Describe any *two* biological databases.   2+3+3=8

3. What is a functional proteomics ? Describe it.
                                                4+4=8

4. What is information flow in biology ? Describe different experimental approaches in genome sequence data.   2+6=8

Unit II

5. What is Multiple Sequence Alignment ? Write a note on it.   2+6=8

6. Write notes on the following :   4+4=8

    (i)   Predictive methods using protein sequences

    (ii) Protein Information Resources.

7. Write a note on Small molecules databases. 8