GSM/J-21   1644

BIOTECHNOLOGY

Bioinformatics

Paper : IX

Time : Three Hours]   [Maximum Marks : 40

Note : Question No. **1** is compulsory. Attempt *four* other questions, selecting *two* questions from each Unit. All questions carry equal marks.

(Compulsory Question)

1. Full form of the following :   **4×2=8**

 (a) DNA

 (b) BLAST

 (c) NCBI

 (d) FASTA.

Unit I

2. (a) Define Bioinformatics.   **4**

  (b) Role of Bioinformatics in current situation of Covid-19.   **4**

3. (a) Define Protein Sequence. **3**

(b) Name and detail about a Protein Structural Database.

5

4. (a) Define Genomics. **3**

(b) Write a short note on Experimental approach to Genome Sequence Data. **5**

Unit II

5. (a) Write a short note on Pairwise sequence analysis. **4**

(b) Define Multiple Sequence Alignment. **2**

(c) How MSA is different from Pairwise Sequence Alignment ? **2**

6. Write short notes on the following : **4×2=8**

(a) PDB

(b) PIR.

7. Differentiate between BLAST and FASTA. **8**