



**DJJ-003-012210**

Seat No. \_\_\_\_\_

**M. Sc. (Biochemistry) (Sem. II) (CBCS) Examination**

**May / June – 2015**

**IBC - 2 : Bioinformatics & Biostatistics :  
Concept and Application**

**Faculty Code : 003**

**Subject Code : 012210**

Time :  $2\frac{1}{2}$  Hours]

[Total Marks : 70

Que 1 Answer the following (any 7 out of 10) 14

1. Global Alignment
2. Graph matching algorithm
3. Brief history of Bioinformatics
4. Briefly explain the specialized DNA database
5. Database similarity search
6. Define Data mining
7. What is PDB?
8. Define BLAST
9. Fingerprint
10. Define Standard Deviation

Que 2 Answer the following (any 2 out of 3) 14

1. What are the different branches of Bioinformatics and its applications?
2. Methods of Sequence Analysis
3. Write notes on Gene Bank

Que 3 Answer the following 14

1. DDBJ
2. Write notes on EMBL

**OR**

Que 3 Answer the following 14

1. Summarize Uniprot
2. Write short notes on SCOP and CATH

Que 4 Answer the following (any 2 out of 3) 14

1. Chi-Square test
2. Write a note on Pymol
3. Write a note on biological databases

Que 5 Write short note (any 2 out of 4)

14

1. Automated gene prediction
  2. Nucleic acid sequence databases.
  3. Define mean, median and mode. Give examples for each.
  4. Explain in detail student's t test with an example.
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