This question paper contains 2 printed pages]

## NY-38-2023

## FACULTY OF SCIENCE AND TECHNOLOGY

## M.Sc. (Second Year) (Fourth Semester) EXAMINATION

## **NOVEMBER/DECEMBER, 2023**

(New/CBCS Pattern)

**BIOTECHNOLOGY** 

Paper-BT-XIV

(Computational Biology)

(Wednesday, 6-12-2023)

Time: 2.00 p.m. to 5.00 p.m.

Time—3 Hours

Maximum Marks—75

- N.B. := (i) Attempt all questions.
  - (ii) All questions carry equal marks.
  - (iii) Illustrate your answers with suitable diagram, scheme etc.
- 1. Describe in detail Sequence database.

Or

Give an account of Biological Databases.

2. Describe Approaches for analysis and interpretation of Sequence Data.

Or

Give a detailed classification of Proteins.

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3. Describe Databases and search engines in proteomics.

Or

Describe the procedure of 2D PAGE.

4. Describe Protein evolution from exon shuffling.

Or

Describe types and applications of microarrays.

- 5. Write short notes on (any three):
  - (a) Graphical representation of data
  - (b) Median
  - (c) Standard deviation
  - (d) Variance.