

This question paper contains 2 printed pages]

NB—27—2023

FACULTY OF SCIENCE AND TECHNOLOGY

B.Sc. (Third Year) (Fifth Semester) EXAMINATION

NOVEMBER/DECEMBER, 2023

(New Course)

BIOTECHNOLOGY

Paper-[DSEBT-4E]

(Advanced Bioinformatics)

(Friday, 8-12-2023)

Time : 10.00 a.m. to 1.00 p.m.

Time—3 Hours

Maximum Marks—75

N.B. :— (i) Attempt all questions.

(ii) Figures to the right indicate full marks.

(iii) Illustrate your answers with suitable diagram, scheme etc.

1. What is bioinformatics ? Describe in detail the challenges and opportunities in bioinformatics. 15

Or

Write notes on :

(a) HTML 8

(b) WWW. 7

2. Describe pairwise sequence alignment. 15

Or

Write notes on :

(a) Cn3D 7

(b) PyMol. 8

P.T.O.

WT

(2)

NB—27—2023

3. Describe in brief structural databases. 15

Or

Write notes on :

(a) DDBJ 8

(b) EMBL. 7

4. Describe protein secondary structure prediction methods. 15

Or

Write notes on :

(a) Homology modeling. 8

(b) Domain. 7

5. Write short notes on (any *three*) : 3×5=15

(a) Role of internet

(b) Rasmol

(c) Pubmed

(d) Motif.

NB—27—2023

2