



DCBT – 301

III Semester B.Sc. Examination, February/March 2024
(NEP Scheme) (Freshers and Repeaters)
BIOTECHNOLOGY
Biomolecules (Paper – III)

Time : 2½ Hours

Max. Marks : 60

Instruction : Draw a neat labelled diagrams *wherever* necessary.

SECTION – A

I. Write short answer on the following.

(5×2=10)

- 1) Allosteric site
- 2) Saponification
- 3) Aldose
- 4) Di sulphide bond
- 5) Rancidity.



SECTION – B

II. Answer **any four** of the following.

(4×5=20)

- 6) What are amino acid ? Give example.
- 7) Give an account on reducing and non reducing sugar. Give example.
- 8) Explain the principle and application of paper chromatography.
- 9) Give an account on steroid hormones.
- 10) Classify enzyme with suitable example.

P.T.O.

DCBT – 301



SECTION – C

III. Answer **any three** of the following.

(3×10=30)

- 11) With neat labelled diagram explain the structure of protein.
- 12) Explain the role of fat soluble vitamin with example.
- 13) Enumerate the principle, procedure and applications of thin layer chromatography.
- 14) What are enzyme ? Discuss the mechanisms of action with reference to lock and key and induced fit model.
- 15) Write a note on :
 - a) Glycolysis
 - b) Structure of purines and pyrimidin bases.

