



B.Sc. III Semester Degree Examination, April/May - 2024

BIOTECHNOLOGY

Bt-3 : Biomolecules

(NEP)

Time : 2 Hours

Maximum Marks : 60

Note : (i) Answer **all** sections.

(ii) Draw the labelled diagrams wherever necessary.

SECTION - A

1. Answer the following sub-questions in **one** word or **one** sentence each. **10x1=10**
- (a) Define Glycosidic bond.
 - (b) Expand FADH.
 - (c) What is isoelectric point ?
 - (d) What are the products of urea cycle ?
 - (e) What is rancidity ?
 - (f) What is Holoenzyme ?
 - (g) Name the deficiency disease of Vitamin-C.
 - (h) Define Endocrinology.
 - (i) What is Chromatography ?
 - (j) Define Spectroscopy.

SECTION - B

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

4x5=20

- 2. Define Carbohydrates. Classify them with suitable examples.
- 3. Describe the beta pleated structure of proteins with examples.
- 4. Explain the nomenclature and IUBMB classification of Enzymes.
- 5. Give an account of the sources, symptoms and functions of Vitamin-C.
- 6. Explain the principle and applications of Electrophoresis.
- 7. Write a short note on the properties of Lipids.



SECTION - C

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

3x10=30

8. Explain the steps involved in Glycolysis with the schematic representation.
9. Write a detailed note on urea cycle.
10. Explain in detail about the clinical significance of enzymes.
11. Write a note on fat soluble Vitamins.
12. Elaborate the principles, procedures and applications of paper chromatography.

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