



Paper Code : BIODSC 13L

B.Sc. III Semester Degree Examination (NEP), April 2023

Subject : BIOTECHNOLOGY (Paper – I)

Paper : DSC – I : Biomolecules

Time : 2 Hours

Max. Marks : 60

Instructions : 1) Answer *all* the Sections.
2) Draw diagrams *wherever* necessary.

SECTION – A

1. Answer **any five** of the following : (5×2=10)

- a) Glycosidic bond
- b) Define simple lipids
- c) Saponification value
- d) High performance liquid chromatography
- e) Purines and pyrimidines
- f) Testosterone
- g) SDS – PAGE.

SECTION – B

Answer **any four** of the following : (4×5=20)

2. Write a note on oligosaccharides.
3. Describe chemical structure and function of epinephrine and glucagon.
4. Write brief note on Triglycerides.

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5. Explain in brief the factors influencing enzyme activity.
6. Explain biological role and deficiency manifestation of Vitamin A and Vitamin D.
7. Write the principle and technique of thin layer chromatography.

SECTION – C

Answer **any three** of the following :

(3×10=30)

8. Explain glycolysis.
 9. Describe the secondary structure of proteins.
 10. Explain in detail nomenclature and classification of enzymes.
 11. Write the principle, technique and applications of Gel electrophoresis.
 12. Explain water soluble and fat soluble vitamins.
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