

B.Sc. (Bio-Technology) Semester—II

BIOCHEMISTRY—II

Paper—BT-9

Time Allowed—3 Hours] [Maximum Marks—40

Note :— (1) Attempt **ALL** parts from Section-A. Each question carries 1 mark.

(2) Attempt any **FIVE** questions from Section-B. Each question carries 4 marks.

(3) Attempt any **THREE** questions from Section-C. Each question carries 6 marks.

SECTION—A

1. (i) Triacylglycerol
- (ii) Sphingolipids
- (iii) Sterols
- (iv) Terpenes
- (v) Rare aminoacids
- (vi) Vitamin-C
- (vii) Endocrine system
- (viii) Pituitary gland.

SECTION—B

2. Discuss biological relevance lipids.
3. Glycosphingolipid.
4. Saponification.
5. Give an example of a heterocyclic aminoacid and discuss its biological significance.
6. Comment on the structural complexity of proteins.
7. Discuss the role of vitamins as cofactors.
8. Comment on vitamin-A deficiency symptoms and its remedy.
9. Discuss the role of hormone on growth and development of animals and humans.
10. Peptide hormones.

SECTION—C

1. Classify lipids. Discuss general structure and function of major classes of lipid.
2. Discuss primary, secondary and tertiary structures of protein. Comment the significance of these structures and the forces that stabilizes these structures.
3. Mention various of types vitamins and their deficiency symptoms.
4. Discuss various steroidal and peptide hormones and their mode of action.