

Exam. Code : 107402

Subject Code : 1846

B.Sc. (Biotechnology) 2<sup>nd</sup> Semester

## BT-9 : BIOCHEMISTRY—B

Time Allowed—3 Hours] [Maximum Marks—40

**Note** :— Attempt *five* questions, selecting at least *one* question from each section. The **fifth** question may be attempted from any section.

## SECTION—A

1. (A) What are essential fatty acids ? Draw the structure of any two essential fatty acids. 3
- (B) Write a note on phosphoglycerides. 5
2. (A) Write a note on sterols. 4
- (B) Discuss the structure and function of Triacylglycerols. 4

## SECTION—B

3. (A) Write a note on non protein amino acids. 4
- (B) Explain different forces stabilizing primary, secondary, tertiary and quaternary structures of proteins. 4
4. Name and draw the structure of any *two* :
  - (i) Aromatic Amino acids
  - (ii) Hydroxyl containing amino acids
  - (iii) Sulphur containing amino acids
  - (iv) Basic amino acids. 8

**SECTION—C**

5. Discuss the biological importance of fat soluble vitamins. 8
6. Explain the role of water soluble vitamins as cofactors with the help of suitable examples. 8

**SECTION—D**

7. Discuss the biological role of peptide hormones. 8
8. (A) Differentiate between peptide and steroid hormones. 3  
(B) Name different steroid hormones and state their function. 5