

BS-2051
BIOCHEMISTRY-I
(Semester-IV)

Time : Three Hours]

[Maximum Marks : 40

Note : Attempt *two* questions each from Section A and B.
Section C will be compulsory.

SECTION-A

- I. What are monosaccharides ? Discuss the properties and functions of monosaccharides. 6
- II. (a) Classify the Proteins according to their structural level.
(b) Give the functions of Proteins. (3,3)
- III. Give a brief account of Coenzymes. 6
- IV. (a) Differentiate between saturated and unsaturated fatty acids.
(b) Write the functions of DNA. 3,3

SECTION-B

- V. Describe tricarboxylic acid (TCA) cycle. 6
- VI. What is Gluconeogenesis ? Describe it. Give its significance also. 6

VII. Write notes on :

(a) Transamination.

(b) Decarboxylation. (3,3)

VIII. What is Beta (β)-oxidation of fatty acid ? Describe it. 6

SECTION-C
(Compulsory Question)

IX. Write short answers on the following :

(a) What are enzymes ?

(b) Define glycogenesis and glycogenolysis.

(c) Write a short note on ornithine cycle.

(d) Proteins show unlimited variety. Give reason.

(e) What is the special property of phospholipids.

(f) Write a short note on cellulose.

(g) What is RNA ? Name the types of RNA.

(h) Give the significance of Krebs Cycle. (8×2=16)
