Roll No. ..... Total No. of Pages : 2

PC 11457-NH

BS/2111

BIOCHEMISTRY-I

Semester–III

Time Allowed : Three Hours] [Maximum Marks : 40

Note :- Candidates are required to attempt *two* questions each from Section-A and Section-B. Entire Section C is compulsory.

SECTION—A

1. Write short note on various derivatives of Monosaccharides.
2. Discuss about Gluconeogenesis and Glycogenolysis along with their biological significance.
3. Discuss about the levels of protein organization.
4. Discuss about urea cycle and its biological significance. 2×6=12

SECTION—B

5. Discuss briefly about the structure of Steroids, Sphingolipids and Terpenoids.
6. Differentiate between nucleotides and nucleosides.
7. Write a short note on factors rate of enzyme catalyzed reaction.
8. Give derivation of Michaelis-Menton equation and Lineweaver-Burk plot. 2×6=12

SECTION—C

1. Properties of water as biological solvent.
2. Polysaccharides.
3. Derivatives of monosaccharides.
4. Classification of amino acids.
5. Triacylglycerol.
6. Formation of lipid bilayer.
7. Cofactor.
8. Enzyme kinetics. 8×2=16