Roll No. | | | | | | | | | | | | |

Total No. of Pages : 02

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B.Sc.(BT) (2014 to 2017) (Sem.–2)

# BIOCHEMISTRY–I

Subject Code : BSBT-108

M.Code : 47013

Time : 3 Hrs. Max. Marks : 60

**INSTRUCTION TO CANDIDATES :**

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

**Q1. Answer briefly :**

a) Define Monosaccharides. Give example and the structure.

b) Write the name and molecular structure of a reducing disaccharide.

c) Write the structures of cAMP and its role.

d) Write the names of aromatic aminoacids.

e) Write the structure and function of a c-20 fatty acid.

f) What is apoprotein?

g) Write the names of functional oligopeptides.

h) Define Enzymes.

i) Discuss peptide bond.

j) Write the different types of bases present in RNA.

## SECTION-B

Q2. How many types of phospholipids are there? Classify and give structures.

Q3. Describe Hybridization of DNA. Why it is important to us?

Q4. Describe Mutarotation with an example.

Q5. Describe and distinguish α,β,z DNA.

Q6. Describe and distinguish the structure and function of starch and glycogen.

## SECTION-C

Q7. Discuss Watson and Crick model of DNA and draw the molecular structure of 5' ATTGC 3' and its complementary strand.

Q8. Describe the different types of secondary structures present in proteins with the help of labeled diagrams. Give examples.

Q9. Describe in detail various types of phospholipids and their structures and functions.



**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**