

Roll No. 

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Total No. of Pages : 02

Total No. of Questions : 09

B.Sc.(BT) (2013 to 2017) (Sem.-2)

**BIOCHEMISTRY**

Subject Code : BSBT-108

Paper ID : [F0237]

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****1. Answer briefly :**

- a) What is glycosidic bond? Write the structure consisting of this bond.
- b) What is denaturation of proteins?
- c) Define enzymes. Give an example.
- d) Write the structure of Chitin and its functions.
- e) Write the names and structures of two unsaturated fatty acids.
- f) Write the names and structure of an aromatic amino acid.
- g) What is the role sphingolipids in a cell?
- h) Write the function of lipoproteins.
- i) Write the structure of cyclic AMP.
- j) What is hypochromicity in context to DNA?

### SECTION-B

- 2) Write a note on protein degrading enzymes.
- 3) Discuss in brief the method of isolation of nucleic acids.
- 4) Distinguish between standard and non standard amino acids with examples.
- 5) Describe the double helical Watson and Crick model of DNA.
- 6) Discuss mutarotation and explain with an example.

### SECTION-C

- 7) Write the molecular structure and functions of various phospholipids and glycolipids you have studied.
- 8) Describe the secondary, tertiary and quaternary structures present in proteins with diagrams.
- 9) Write the biological functions of DNA and RNA in detail. Also discuss the functions and specific roles of various specialized nucleosides and nucleotides.