Roll No. | | | | | | | | | | | | | Total No. of Pages : 01

Total No. of Questions : 08

M.Sc. (BT) (2018 Onwards Batch) (Sem.–1)

BIOMOLECULES AND METABOLISM

Subject Code : MBT-101

M.Code : 75659

Time : 2 Hrs. Max. Marks : 35

INSTRUCTIONS TO CANDIDATES :

1. Attempt any FIVE question(s), each question carries 7 marks.

1. Describe the Watson and Crick model of DNA. Explain the characteristics which make DNA ideal hereditary molecule.
2. Define and distinguish between tertiary and quaternary structures of proteins.
3. Give an overview of techniques of protein purification.
4. Deduce the Michelis-Menton equation for determination of enzyme kinetics.
5. Give the labelled diagram of generalized tRNA molecule and show the binding sites for amino acids and messenger RNA.
6. Give structures of at least three important phospholipids based on phosphatidic acids.
7. What is glycogenesis? Give the steps leading to the synthesis of glycogen and explain the role of cyclic AMP.
8. Describe the citric acid cycle with well illustrated diagram.