Exam. Code : 107403
Subject Code : 1732

B.Sc. Biotechnology 3rd Semester (Batch 2020-23)

MOLECULAR BIOLOGY

Paper : BTL-206

Time Allowed—3 Hours] [Maximum Marks—40

Note :—Attempt **FIVE** questions in all, selecting at least **ONE** question from each section. The **fifth** question may be attempted from any section. All questions carry equal marks.

SECTION–A

1. Give an account of Watson and Crick's double stranded model of DNA molecule. Mention the evidence which indicates that nucleotides occur in matched pairs in DNA molecule.
2. Describe various steps of DNA replication in prokaryotes.

SECTION–B

3. Elaborate the post transcriptional modification of mRNA.
4. Describe the general properties of Genetic code.

SECTION–C

5. Compare and contrast the process of protein synthesis in bacteria and eukaryotic cells.

6. Write short notes on :
   (a) Post translational modification of proteins
   (b) Structure of tRNA.

SECTION–D

7. Explain how the type of cleavage of the Holliday intermediates leads to non-cross over recombinants and cross over recombinants.
8. Describe different types of mutations with appropriate examples.