

**A-0079**

Total Pages : 3

Roll No. ....

**MSCZO-507**

**M.Sc. Zoology (MSCZO)**  
**(Molecular Biology & Biotechnology)**

Examination, June 2025

Time : 2:00 Hrs.

Max. Marks : 70

**Note :-** This paper is of Seventy (70) marks divided into Two (02) Sections 'A' and 'B'. Attempt the questions contained in these Sections according to the detailed instructions given therein. *Candidates should limit their answers to the questions on the given answer sheet. No additional (B) answer sheet will be issued.*

**Section-A**

**(Long Answer Type Questions)**     2×19=38

**Note :-** Section 'A' contains Five (05) Long-answer type questions of Nineteen (19) marks each. Learners are required to answer any *two* (02) questions only.

1. Describe the process of Eukaryotic translation.
2. What is recombinant DNA technology ? What are the basic steps involved in recombinant DNA technology ?
3. What are molecular markers in recombinant DNA Technology ?
4. Explain in detail the Bacterial Artificial Chromosomes.
5. Give detail of cell culture technique.

### **Section–B**

**(Short Answer Type Questions)**      4×8=32

**Note :-** Section ‘B’ contains Eight (08) Short-answer type questions of Eight (08) marks each. Learners are required to answer any *four* (04) questions only.

1. Write a short note on DOLL Y.
2. Explain the Plasmid Biology in detail ?
3. What is post -transcriptional modification ?
4. What is polyadenylation ?

5. Write the function of 5 cap.
6. Difference between promoters for RNA polymerase I and Class II promoters.
7. Explain transfer RNA (tRNA).
8. Explain the splicing and editing.

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