

A-0101

Total Pages : 3

Roll No.

MSCZO-507

M.Sc. ZOOLOGY (MSCZO)

(Molecular Biology & Biotechnology)

2nd Semester Examination, Session December 2024

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. Write an account of the enzymology of DNA replication.
2. Describe the process of replication in Eukaryotes.
3. Describe the structure and function of different type of RNA.
4. Describe the essential mechanism of transcription.
5. Describe the process of Prokaryotic translation.

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 short notes on the following :
 - (a) Okazaki fragments
 - (b) DNA polymerase synthesizes
2. What is transcription ?
3. What is transcriptional regulation ?
4. Write short notes on the following :
 - (a) Regulation of Translation
 - (b) Post translational modification

5. Write a short note on Pbr322 Plasmid ?
6. What do you understand by the Cloning Vectors ?
7. Write short notes on the following :
 - (a) Cryobiology
 - (b) Human gene therapy
8. Explain the process of in vitro fertilization.
