

S-167

Total Pages : 3

Roll No.

MZO-504

Molecular Biology

M.Sc. Zoology (MSCZO)

1st Semester Examination, 2022 (Dec.)

Time : 2 Hours]

[Max. Marks : 35

Note : This paper is of Thirty Five (35) marks divided into two (02) Sections A and B. Attempt the questions contained in these sections according to the detailed instructions given therein.

SECTION-A

(Long Answer Type Questions)

Note : Section 'A' contains Five (05) long answer type questions of Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

(2×9½=19)

1. Describe in detail the process of DNA replication.

2. What are the different stages of cancer? Describe the treatment strategies against cancer.
3. Describe the process of protein synthesis in prokaryotes.
4. Describe Lac operon and its significance.
5. How genes are transferred in prokaryotes? Describe any two methods in detail.

SECTION-B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Four (04) marks each. Learners are required to answer any Four (04) questions only. (4×4=16)

1. Write notes on t-RNA.
2. Who proposed the double helical structure of the DNA? write brief notes about it.
3. Write about the the enzyme that unwinds and unzips the DNA molecule.
4. Write notes on the properties of genetic code.

5. Write about carcinogens and its types. Name any natural carcinogen.
 6. Write notes on Retrotransposons.
 7. What is the difference between transcription and reverse transcription?
 8. What is the alternative splicing? Write about its significance.
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