S-1071

Total Pages : 3

Roll No.

ZO-502

Cell & Molecular Biology

M.Sc. Zoology (MSCZO) 1st Year Examination, 2022 (Dec.)

Time : 2 Hours]

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.

SECTION-A (Long Answer Type Questions)

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.

 $(2 \times 19 = 38)$

1. Give detail structure of plasma membrane and describe its function.

S-1071/ZO-502

[P.T.O.

- 2. Explain electron transport chain and ATP generation.
- **3.** Describe the process of DNA replication.
- 4. Give detail account of transcription in eukaryotes.
- 5. What is translation? Explain its mechanism.

SECTION-B

(Short Answer Type Questions)

- **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. (4×8=32)
- 1. Differentiate between light microscope and electron microscope.
- **2.** Write a short note on :
 - (a) Golgi complex.
 - (b) Nucleus.
- 3. Differentiate between mitosis and meiosis.
- 4. Write a short note on cell cycle regulation.
- **5.** What is cell signaling?
- S-1071/ZO-502 [2]

- **6.** What are transposons?
- 7. What is Transduction? Explain with diagram.
- 8. What are the characteristic features of cancer?