

Total Pages : 03

Roll No. :

MZO-503

Cell Biology

M.Sc. Zoology (MSCZO-20)

1st Semester Examination June 2022

Time : 2 Hours

Max. Marks : 40

Note : This Paper is of forty (40) marks divided into two (02) Section A and B. Attempt the questions contained in these sections according to the detailed instructions given there in.

Section-A

(Long Answer-type questions)

Note: Section 'A' contains Five (05) Long-answer type questions of ten (10) marks each. Learners are required to answer any two (02) questions only.

(2 x 10 = 20)

Q.1. Differentiate between mitotic and meiotic cell division . In detail discuss different phases of meiotic cell division ?

P.T.O.

- Q.2 Explain the methods used for culturing the plant and animal cells ?
- Q.3 What are the difference between light and electron microscope ?
- Q.4 Explain the transport function of plasma membrane with suitable examples ?
- Q.5 Describe the structure and function of Endoplasmic Reticulum ?

Section-B

(Short Answer-type questions)

Note: Section 'B' contains Eight (08) Short-answer type questions of five (05) marks each. Learners are required to answer any four (04) questions.

(4 x 5 = 20)

P.T.O

- Q.1 What are signaling molecules? Explain with examples ?
- Q.2 Give the structure and function of Mitochondria ?
- Q.3 Write the structure and function of Nucleus ?
- Q.4 Write a short on the chromatin organization ?
- Q.5 Explain in detail the Cell Cycle ?
- Q.6 Explain the Electron microscope ?
- Q.7 Giving the principle explain the working of flow cytometry?
- Q.8 Write a short note on :
- (A) Lysosomes
 - (B) Scanning Electron Microscopy

.....