

K-545

Total Pages : 3

Roll No.

MSCZO-506

CONCEPTS OF CELL BIOLOGY AND GENETICS

M.Sc. Zoology(MSCZO)

2nd Semester Examination, 2023 (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. 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)

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.

(2×19=38)

1. What is sex determination? Describe various examples of sex chromosomal mechanism of sex determination.
2. Explain dosage compensation in *Drosophila*.
3. Explain the Gene regulation in Prokaryotic & Eukaryotic cell.
4. Differentiate between Mitosis and Meiosis.
5. Describe chromosomal abnormalities in malignancy.

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. Describe the process of cell cycle.
2. What are somatic hybrids?
3. Write a short note on the human genome.
4. Write a note on bacterial chromosome.

5. What are the types of bacteriophage?
 6. Write a note on the following :
 - (a) FISH.
 - (b) GISH.
 - (c) VNTR.
 7. What is Metaphase chromosome banding?
 8. Explain the Molecular basis of Neoplasia.
-

