## A - 924

Total Pages: 3 Roll No. -----

### **MZO-508**

# **Human Cytogenetic**

M.Sc. Zoology (MSCZO)

2<sup>nd</sup> Semester Examination 2024 (June)

Time: 2:00 hrs Max. Marks: 35

Note: This paper is of Thirty Five (35) marks divided into Two (02) Section A and B. Attempt the questions contained in these sections according to the detailed 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 Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

 $[2x9\frac{1}{2}=19]$ 

- Q.1. Describe the process of cell division in detail.
- Q.2. Explain different types of mutations.
- O.3. Describe Numerical chromosomal abnormalities.
- Q.4. Explain Autosomal Recessive Inheritance.
- Q.5. Describe the different types of staining.

### **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.

[4x4=16]

- Q.1. Explain Prophase I of meosis in detail.
- Q.2. Write short notes:
  - a. Autosomes
  - b. Aacrocentric
- Q.3. Give details about the media.
- Q.4. Describe microscopy and imaging.

- Q.5. Write short notes on:
  - a. Laminar Air Flow
  - b. Incubator.
- Q.6. Write about different important parts of microscope.
- Q.7. What is the mechanism that protects organisms from harmful mutations?
- Q.8. Explain dominant mutations with example.

\*\*\*\*\*\*\*\*