

C302

Total Pages : 3

Roll No.

MSCZO-506

Concepts of Cell Biology and Genetics

M.Sc. Zoology (MSCZO)

2nd Semester Examination, 2022 (June)

Time : 2 Hours]

Max. Marks : 80

Note : This paper is of Eighty (80) 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 Twenty (20) marks each. Learners are required to answer any Two (02) questions only.

(2×20=40)

1. Explain the technique of DNA fingerprinting.

2. Describe the process of Somatic cell fusion in detail.
3. Differentiate between Mitosis and Meiosis with well labelled diagram.
4. Explain the process of Bacterial Transformation, Transduction and Conjugation.
5. Describe the different theories of sex determination.

SECTION-B

(Short Answer Type Questions)

Note : Section 'B' contains Eight (08) short answer type questions of Ten (10) marks each. Learners are required to answer any Four (04) questions only. (4×10=40)

1. Differentiate between chromosomal deletion and chromosomal duplication.
2. Write a note on human genome project.
3. What are Transposable elements ? Give examples in detail.
4. Explain C-value paradox.
5. Write a note on Maturation Promoting Factors.

6. Differentiate between Polytene and lampbrush chromosome.
 7. Write a short note on Neoplasia.
 8. What is Nucleosome model?
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