K-533

Total Pages: 3 Roll No.

MZO-603

Animal Biotechnology

M.Sc. Zoology (MSCZO)

3rd Semester Examination, 2023 (Dec.)

Time: 2 Hours] [Max. Marks: 35

Note: This paper is of Thirty Five (35) 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 Nine and Half (9½) marks each. Learners are required to answer any Two (02) questions only.

(2×9½=19)

(2x972=19)

- 1. Discuss stem cell technology and its applications.
- **2.** Write in detail about in vitro fertilization.
- 3. Differentiate between benign and malignant tumors.
- **4.** Write a note on biology of cultured cells.
- **5.** Write a note on steps involved in the establishment of primary culture.

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. (4×4=16)

- **1.** Write a note on properties of cancer cells.
- **2.** Write a note on scope of biotechnology.
- **3.** Define tissue culture and organ culture.
- **4.** Write a note embryo culture.
- **5.** Write a note on propagation of cell lines.

- **6.** What is pluripotent stem cell?
- 7. What are the applications of animal biotechnology?
- **8.** What are the methods employed to generate first transgenic animal Dolly?