

**K-558**

Total Pages : 3

Roll No. ....

**ZO-552**

**ANIMAL BIOTECHNOLOGY**

M.Sc. Zoology (MSCZO)

2nd Year 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)

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**[P.T.O.]**

1. Discuss the scope and limitations of the role of biotechnology in basic and applied biology.
2. Name some biotechnologically important microorganisms. Explain in detail, about the use of microorganism in waste water treatment.
3. Describe about animal cell line and animal tissue culture. Explain in detail about the different steps involved in preparation of media for animal cell culture.
4. What is bioremediation? How is it carried out by micro-organisms and what is its significance?
5. Write an essay on micro-organisms producing useful enzymes.

## 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. What is *in-vitro* fertilization?
2. What is DNA fingerprinting and its uses in forensic science?

3. What is laminar air flow? Explain its uses.
  4. Discuss about Vermicomposting.
  5. Discuss the factors affecting plastic degradation.
  6. Write short note on analytical use of enzymes.
  7. What is fermentation? Discuss with suitable examples.
  8. Write about tumor cells.
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