

**C282**

Total Pages : 3

Roll No. ....

**ZO-552**

**Animal Biotechnology**

M.Sc. Zoology (MSCZO)

2nd Year 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. Describe the techniques of maintenance of cell culture?
2. Write a short note on :

- (a) Selection of cell line.
  - (b) Cell Banks.
3. Describe the process of transformation of Malignancy.
  4. Explain in detail about biofertiliser.
  5. Discuss in detail about the molecular biology of nitrogen fixation.

### **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. Briefly describe the technique employed for the transfer of gene.
2. Explain the use of Polymerase chain reaction for disease diagnosis in aquaculture.
3. Discuss about environmentally important microorganism.
4. Explain the types of waste water treatments and its utilization.
5. Explain the Biosynthesis of L-Glutamic acid.

6. Describe the course of plastic degradation.
  7. What are the advantage and limitation of composting.
  8. Explain the advantage of Ex-situ and In-situ bioremediation.
-

