K-534

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

MZO-604

Applied 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)

1. Explain the need to study Applied Biotechnology. Describe how the Biotechnology is helping humans beings.

2. Discuss how Bio Technology can help us in managing the waste and treating waste water.

3. What is the role of enzyme in biotechnology? Discuss its application area.

4. What is Agricultural Biotechnology? Describe the Importance of Agriculture Biotechnology in Crop Improvement.

5. Write an essay on the role of micro organism in decomposition of sewage.

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. What is Bioremediation? Mention its Types with examples.

2. Explain the nutrients requirement for the growth of microbes.

3. Define the need of vermicompost? Explain how vermicompost is better than compost.

4. Discuss the methods by which Plastics can be degraded by microbes.

5. Write short notes on any *one*.

(a) Bio Fertilizers.

(b) Growth Curve in microbes.

6. Write note on the impact of marine pollution on fisheries.

7. What are the main utilities of Fermenter? Describe the process of Fermentation.

8. Write short note on antibodies production process.
