## A-938

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

## **MSCZO-611**

# ENTOMOLOGY (MORPHOLOGY, PHYSIOLOGY AND DEVELOPMENT BIOLOGY)

M.Sc. Zoology (MSCZO)

4th Semester Examination, 2024 (June)

Time: 2:00 Hrs. 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** $2 \times 19 = 38$

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.

- 1. Describe a typical integument of insect.
- 2. Discuss the important characters of the order coleopteran and discuss the importance of this order.
- 3. Describe a generalized structure of reproductive system in insects.
- 4. What modifications are found in the antennae of the insects?
- 5. Describe a generalized structure of respiratory system in insects

#### Section-B

#### **Short Answer Type Questions** $4 \times 8 = 32$

- **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.
- 1. Describe the biting and chewing type mouth parts of insects.
- 2. Describe the Sucking type mouth parts of insects.
- 3. Short note:
  - (a) Ommatidium of insect
  - (b) Auditory organs
- 4. Explain the different type of larvae, pupa and metamorphosis in insects.

## **A-938/MSCZO-611** (2)

- 5. Describe the exocrine and endocrine glands of insects.
- 6. Short note:
  - (a) Sex pheromones
  - (b) Courtship pheromones
- 7. Write a short note on diapause.
- 8. Describe the typical eyes of insects.

\*\*\*\*\*\*