

**A-0111**

**Total Pages : 3**

**Roll No. ....**

**MSCZO-611**

**M.Sc. ZOOLOGY (MSCZO)**

**(Entomology (Morphology, Physiology &  
Development Biology)**

**4th Semester Examination, Session December 2024**

**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      2×19=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.*

- Q. 1. Explain in detail the different type of insect antenna.
- Q. 2. Describe the different types of insect wings.
- Q. 3. Give the process of digestion in insects with suitable diagrams.
- Q. 4. Explain the different organs of respiration in Insects.
- Q. 5. Discuss various sound producing organs of Insects.

### **Section–B**

#### **Short Answer Type Questions      4×8=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.

- Q. 1. Discuss the phenomenon of oogenesis in insects.
- Q. 2. Explain the production of urine and its hormonal regulation in Insects.
- Q. 3. Write about different type of insect larvae and pupae.
- Q. 4. Define different types of haemocytes.
- Q. 5. Briefly discuss on the light producing organs of Insects.

- Q. 6. Write the composition and function of hemolymph.
- Q. 7. Explain the phenomenon of spermatogenesis in insects.
- Q. 8. Briefly discuss on the Pheromones producing Gland of Insects.

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