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# 2022

## M.Sc.

#### **Third Semester**

### DISCIPLINE SPECIFIC ELECTIVE - 01

### **ZOOLOGY**

Course Code: MZOD 3.11 (D) (Entomology – I)

Total Mark: 70 Pass Mark: 28

Time: 3 hours

Answer five questions, taking one from each unit.

#### UNIT-I

- 1. Explain the different types of insect mouthparts.
- 2. Describe the structure and variation of insect genitalia.

#### **UNIT-II**

- 3. Discuss the structure and types of muscles in insects. Add a note on flight mechanism.
- 4. Explain the structure of tracheal system in insects. Write the mechanism of respiration in terrestrial insect. 8+6=14

### UNIT-III

- 5. Describe the structure and types of a compound eye. 8+6=14
- 6. Define juvenile hormone. Write its effect on male and female gonads in insects. 2+12=14

### **UNIT-IV**

- 7. Explain the various chemical composition of cuticle.
- 8. Write notes on chemistry and functions of haemolymph.

# UNIT-V

9. Explain the three patterns of development in insect.
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10. Describe the hormonal control in moulting and metamorphosis in insect.
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