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(Pages : 2)

Name.....

Reg. No.....

**FOURTH SEMESTER M.Sc. DEGREE (REGULAR/SUPPLEMENTARY)  
EXAMINATION, APRIL 2026**

(CBCSS)

Zoology

ZOL 4E 11 01—ENTOMOLOGY—II : ANATOMY AND PHYSIOLOGY

(2019 Admission onwards)

Time : Three Hours

Maximum : 30 Weightage

I. Short Answer Questions. Answer any *four* questions. Each question carries 2 weightage :

- 1 Name the hormones involved in moulting process.
- 2 What is the function of sterols in insect body ?
- 3 Define Heart beat rate and its control in insects.
- 4 What are malpighian tubules and give its functions ?
- 5 Draw the structure of nerve cell with label.
- 6 What are the types and functions of endocrine glands ?
- 7 Define Blastoderm.

(4 × 2 = 8 weightage)

II. Short Essay Questions. Answer any *four* questions. Each question carries 3 weightage :

- 8 Give a brief account on process of moulting.
- 9 Give brief account on anatomy of insect gut.
- 10 Give a brief account on functions of hemolymph.
- 11 Give a brief account on process of respiration in insects.
- 12 Briefly explain the sound and light production in insects.
- 13 Give a brief account on types of endocrine glands in insects with neat sketch.
- 14 Give a brief account on post embryonic development in insects.

(4 × 3 = 12 weightage)

**Turn over**

III. Essay Questions. Answer any *two* questions. Each question carries 5 weightage :

- 15 Describe in detail about the structure of integuments.
- 16 Describe in detail about the circulatory organs in insects.
- 17 Explain briefly the transmission of nerve impulse in insects.
- 18 Discuss in detail about the types and significance of parthenogenesis in insects.

(2 × 5 = 10 weightage)