



K24P 0338

Reg. No. :

Name :

**IV Semester M.Sc. Degree (C.B.S.S. – Reg./Supple.-(One Time Mercy
Chance)/Imp.) Examination, April 2024
(2016 Admission Onwards)
ZOOLOGY**

ZOO4E02(B) : Insect Physiology

Time : 3 Hours

Max. Marks : 60

I. Answer **any two** of the following :

- 1) Explain the process of moulting and sclerotisation in insects.
- 2) Give an account on the excretory organs and physiology of excretion in insects.
- 3) Comment on the mechanoreceptors and chemoreceptors in insects.
- 4) Describe the histomorphology of insect muscles and the excitation of muscle fibres. (2×12=24)

II. Answer **any two** of the following :

- 5) Comment on the cellular elements in insect haemolymph.
- 6) Give an account on the endocrine glands in insects.
- 7) Comment on the sex determination in insects.
- 8) Discuss the process of digestion of wood and keratin in insect gut. (2×8=16)

III. Answer **any four** of the following :

- 9) Comment on polyembryony and paedogenesis in insects.
- 10) Give an account on pheromones in insects.
- 11) Explain the light producing organs in insects.
- 12) Write an account on complete and incomplete metamorphosis and hormonal control of metamorphosis.
- 13) Discuss the process of gas exchange in aquatic insects.
- 14) Briefly explain the process of blastoderm formation during embryogenesis in insects. (4×5=20)