



K23P 0222

Reg. No. :

Name :

IV Semester M.Sc. Degree (C.B.S.S. – Reg./Supple./Imp.)

Examination, April 2023

(2019 Admission Onwards)

ZOOLOGY

ZOO4E02(B) : Insect Physiology

Time : 3 Hours

Max. Marks : 60

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

- 1) Write an essay on endocrine glands, hormones and their functions in insects.
- 2) Give an account on the composition of insect haemolymph.
- 3) Describe the structure of the male and female reproductive systems in insects.
- 4) Write an essay on the structure of the alimentary canal and its modifications in insects. (2×12=24)

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

- 5) Describe the post embryonic development of insects.
- 6) Give an account on the histology and chemical composition of cuticle.
- 7) Write an account on the mechanoreceptors in insects.
- 8) Discuss the role of microflora and microfauna in the digestive process of insects. (2×8=16)

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

- 9) Comment on closed and open tracheal systems.
 - 10) Write about apolysis and ecdysis.
 - 11) Give an account on the excretory organs in insects.
 - 12) Briefly explain the organization of central and peripheral nervous systems in insects.
 - 13) Comment on the sex determination in insects.
 - 14) Give an account on polyphenism and diapause. (4×5=20)
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