



**K18P 0335**

Reg. No. : .....

Name : .....

**Fourth Semester M.Sc. Degree (Reg./Suppl./Imp.) Examination, March 2018  
(2014 Admission Onwards)  
ZOOLOGY  
ZOO4E02 (B) : Insect Physiology**

Time : 3 Hours

Max. Marks : 60

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

- 1) Describe circulatory system in insects in detail.
- 2) Give a detailed account on nerve impulse transmission and synaptic transmission in insects.
- 3) Describe segmentation, appendage formation and organogenesis in insects.
- 4) Explain excretory system and physiology of excretion in insects in detail. (2×12=24)

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

- 5) Explain histomorphology of insect muscles.
- 6) Describe male and female reproductive system in insects.
- 7) Explain sex determination and parthenogenesis in insects.
- 8) Discuss the role of hormones in insect metamorphosis. (2×8=16)

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

- 9) Write an account on neurosecretory cells and endocrine glands in insects.
- 10) Explain the histology of integument in insects.
- 11) Explain the general structure of alimentary canal in insects. Add a note on digestive enzymes.
- 12) Explain the synthesis of uric acid and formation of excreta in insects.
- 13) Give an account on the anatomy of brain and ganglia in insects.
- 14) Explain the tracheal system in insects. (4×5=20)