

Roll No.....

Total No. of Units : 04

Total No. of Printed Pages : 03

Code No. : 04/105

Fourth Semester Examination, May 2019

M.A. ZOOLOGY

Paper - I

INSECT PHYSIOLOGY

Time : 3 Hrs.

Max. Marks : 80

- Part A and B of each question in each unit consist of very short answer type questions which are to be answered in one or two sentences.
Part C (Short answer type) of each question should be answered in 200-250 words.
Part D (Long answer type) of each question should be answered within the word limit 400-450.

Unit - I

Q.1 A. What is tracheal respiration? (2)

Q.1 B. Define detoxification. (2)

Q.1 C. Write short notes on the physiology of aquatic insects obtaining O₂ from water. (4)

OR

Make a note on the effects of dietary deficiency on insects.

Q.1 D. Describe the protein metabolism in insects. (12)

OR

Write an essay on physiology of terrestrial respiration in insects.

P.T.O.

(2)

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Unit - II

Q.2 A. What are the excretory organs of insects called and how do they function? (2)

Q.2 B. How do insects make sounds? (2)

Q.2 C. Write short notes on nitrogenous excretion in insects. (4)

OR

Describe the structure and functioning of compound eye in insects.

Q.2 D. Give an account of Haemocytes and Connective tissue in insects. (12)

OR

Give a detailed account of mechanism of sound production and its significance in insects.

Unit - III

Q.3 A. What is oviposition? (2)

Q.3 B. Define muscle energetics. (2)

Q.3 C. Write short notes on Parthenogenesis. (4)

OR

Describe structure of nervous system in insects.

Q.3 D. Describe female reproductive organization in insects. (12)

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OR

Write an essay on development, growth and metamorphosis in insects.

Unit - IV

Q.4 A. Give the name and use of any two types of insecticides. (2)

Q.4 B. Name any one insect pest of Sugarcane and its mode of entry. (2)

Q.4 C. Write short notes on organic insecticides. (4)

OR

Give an account of pest of stored grains.

Q.4 D. Give classification of insecticides and describe systemic insecticides. (12)

OR

Write an essay on biological control of insect pests.

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