



AF-3539

M.Sc. (Final)

Term End Examination, 2017-18

ZOOLOGY

Group - A (I)

Paper - III

Morphology and Physiology of Insects

Time : Three Hours] [*Maximum Marks* : 100

[*Minimum Pass Marks* : 36

Note : Answer **all** questions. All questions carry equal marks.

Unit - I

1. Describe the structure of insect integument and discuss the chemical composition of cuticle and process of sclerotization and moulting.

OR

Describe the structure of typical leg and functional modification of leg.

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(Turn Over)

(2)

Unit - II

2. Give an account on digestive system in insects and physiology of digestion.

OR

Write short notes on the following :

- (a) Structure of spiracles
- (b) Cryptonephridia

Unit - III

3. Describe the structure of compound eye and discuss how image is formed.

OR

Give the basic plan of nervous system in insects and give the detailed structure of brain.

Unit - IV

4. Describe the embryonic development of insects up to blastokinesis.

OR

Write short notes on the following :

- (a) Types of larvae in insects
- (b) Structure and types of ovary in insects