

DD-783

M. Sc. (Fourth Semester) EXAMINATION, 2020

ZOOLOGY

(Group—I)

Paper Third

(Entomology)

Time : Three Hours

Maximum Marks : 80

Note : Attempt all the *five* questions. First question is based on all four Units. All questions carry equal marks.

1. Write short notes on the following :
 - (i) Piercing-Sucking Mouthparts
 - (ii) Salivary glands of insects
 - (iii) Humoral immunity
 - (iv) Hemimetabolous metamorphosis
2. Describe the various types of heads in insects.

Or

Write short notes on any *two* of the following :

- (a) Cuticle
- (b) Types of antennae
- (c) Siphoning mouthpart

3. Describe the structure and functions of circulatory system of insects.

Or

Write short notes on the following :

- (a) Malpighian tubules
 - (b) Haemolymph
4. Give a detailed account of various sound producing organs of insects.

Or

Write short notes on the following :

- (a) Physiology of vision in insects
 - (b) Endocrine glands in insects
5. Write an essay on 'Effects of Pesticides on Central Nervous System'.

Or

Write short notes on the following :

- (a) Important pests of 'Soyabean'
- (b) Paurometabolous metamorphosis