

Roll No.

ZO-554(A)

Applied Entomology

M. Sc. Zoology (MSCZO-12)
Second Year, Examination, 2018

Time : 3 Hours

Max. Marks : 80

Note : This paper is of **eighty (80)** marks containing **three (03)** Sections A, B and C. Learners are required to attempt the questions contained in these Sections according to the detailed instructions given therein.

Section-A

(Long Answer Type Questions)

Note : Section 'A' contains four (04) long answer type questions of nineteen (19) marks each. Learners are required to answer *two* (02) questions only.

1. Describe the modification of mouthparts in insects.
2. Describe the anatomy of central nervous system in the insects.
3. Trace the origin of insect and explain the theories of insect evolution.
4. Give an account of circulatory organs in insect.

Section-B

(Short Answer Type Questions)

Note : Section 'B' contains eight (08) short answer type questions of eight (08) marks each. Learners are required to answer *four* (04) questions only.

(B-100) P. T. O.

1. Write a short note on Chewing and Tapping mouthpart.
2. Write a short note on Filter chamber.
3. Write a short note on Endocrine gland.
4. Describe the light producing organs in insects.
5. Write a short note on the use of insects in cosmetics.
6. Define the entomology.
7. Define the pheromones.
8. Explain "Insect as biological weapons".

Section-C

(Objective Type Questions)

Note : Section 'C' contains ten (10) objective type questions of one (01) mark each. All the questions of this Section are compulsory.

1. in the smallest order of class insect.
2. Chewing and cutting type of mouthpart are found in
3. The main characteristic feature of an insect is
4. The true name of BHC is
5. Insecticides is capable of controlling mites.
6. Mayflies belong to the order :
 - (a) *Diptera*
 - (b) *Ephemeroptera*
 - (c) *Odonata*
 - (d) *Coleoptera*
7. In insects alary muscles are associated with :
 - (a) Heart
 - (b) Legs
 - (c) Wings
 - (d) Gut

8. hormone is responsible for moulting in insects.
9. (ZSI) Zoological Survey of India is situated at :
 - (a) Kolkata
 - (b) Dehradun
 - (c) New Delhi
 - (d) Chennai
10. Which of the following is called “Lac State of India” ?
 - (a) Meghalaya
 - (b) Chhattisgarh
 - (c) Uttarakhand
 - (d) Jharkhand