

Roll No. :

Total No. of Questions : 11]

[Total No. of Printed Pages : 3

BFMS-415

M.Sc. (Final) Examination, 2023

ZOOLOGY

Paper - VII(c)

(Entomology)

Time : 3 Hours]

[Maximum Marks : 75

Section-A

(Marks : 2 × 10 = 20)

Note :- Answer all *ten* questions (Answer limit **50** words). Each question carries **2** marks.

Section-B

(Marks : 5 × 5 = 25)

Note :- Answer all *five* questions. Each question has internal choice (Answer limit **200** words). Each question carries **5** marks.

Section-C

(Marks : 10 × 3 = 30)

Note :- Answer any *three* questions out of five (Answer limit **500** words). Each question carries **10** marks.

Section-A

1. (i) What was the first insect to evolve ?
- (ii) Write five main features of order Diptera.
- (iii) Draw a labelled diagram of typical mandibulate mouthparts.
- (iv) Define Arista with example.

BRI-541

(1)

BFMS-415 P.T.O.

- (v) What do you understand by Eclosion ?
- (vi) Define Exuvia.
- (vii) What do you mean by 'Haematophagous' ?
- (viii) Name Haemocytes found in Insects.
- (ix) Write the names of excretory products excreted by different insects.
- (x) Write the functions of air sacs.

Section-B

2. Write short note on Relative of insects.

Or

Write short note on characteristic features of the order Orthoptera.

3. Differentiate between Homoptera and Heteroptera.

Or

Differentiate between Beetles and Weevils.

4. Name the different types of Antennae found in insects (with diagram).

Or

Write about the wing coupling mechanism found in insects.

5. Write short note on physical gills found in insects.

Or

Write short note on Muller's organ.

6. Write in brief 'significance of pupal stage'.

Or

Write in brief on 'Oviposition in insects'.

Section-C

7. Give an account on the evolution of insects.
8. Describe characteristic features of the order Hymenoptera and classify up to families.
9. Describe the appendages of the head.
10. Write short notes on any *two* of the following :
 - (a) Significance of light production
 - (b) Sound production in insects
 - (c) Compound eyes of insects
11. Explain metamorphosis and its types.