

**Roll No.**

**Total No. of Pages : 02**

**Total No. of Questions : 09**

**B.Voc.(Agriculture) (2018 Batch) (Sem.-2)**

# FUNDAMENTALS OF INSECT MORPHOLOGY AND SYSTEMATICS

**Subject Code : BVAG-203-18**

**M.Code : 76175**

**Time : 3 Hrs.**

**Max. Marks : 60**

### INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.**
3. **SECTION-C contains THREE questions carrying TEN marks each and students have to attempt any TWO questions.**

## SECTION-A

**1. Write briefly :**

- a) Write in short importance of insects to human beings.
- b) Write short notes on sponging types of mouth parts.
- c) Describe the structure and function of insect cuticle.
- d) What are the functions of antennae?
- e) What are the organs involved in blood circulation in insects?
- f) Write short note on sense organs in insects.
- g) What type of respiratory system is present in insects?
- h) Write the distinguishing characters of order Coleoptera.
- i) Define taxonomy and systematic.
- j) Name four entomologists who have made a mark in Indian entomology.

## SECTION-B

2. Enlist various factors responsible for insect abundance.
3. Write in brief the salient features of five families of Lepidoptera.
4. Classify the pupae of insects into different groups.
5. Diagrammatically explain the structure of head of a generalized insect.
6. Describe in brief the excretory system in insects.

## SECTION-C

7. a) Draw a well labeled diagram showing the hypothetical wing venation in insects and enlist various modifications with examples. (7)  
b) Define metamorphosis and classify it into various types. (3)
8. Give distinguishing features of the following orders : (10)  
a) Thysanoptera  
b) Hemiptera  
c) Orthoptera  
d) Diptera  
e) Hymenoptera
9. a) What are the different segments of a typical insect leg? (3)  
b) Explain the digestive system of a typical insect with suitable diagram. (7)

**NOTE : Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.**