

MAHARASHTRA AGRICULTURAL UNIVERSITIES EXAMINATION BOARD (PUNE)
SEMESTER END EXAMINATION

B.Sc. (Hons.) Horticulture

Semester : II (New)	Term : II	Academic Year : 2018-19
Course No. : H/ENTO 121	Title : Fundamentals of Entomology	
Credits : 3 (2+1)		
Day & Date : Monday, 13.05.2019	Time : 09.00 to 12.00	Total Marks : 80

- Note :**
1. Solve ANY EIGHT questions from SECTION "A".
 2. All questions from SECTION "B" are compulsory.
 3. All questions carry equal marks.
 4. Draw neat diagrams wherever necessary.

SECTION "A"

- Q.1 Explain economic importance of insects with examples.
- Q.2 Write economic importance, distinguishing characters of order Coleoptera and state four important families with example.
- Q.3 Explain in brief reasons of dominance of insects in animal kingdom.
- Q.4 Define ecdysis and describe insect integument with figure.
- Q.5 Write short notes (Any Two).
 - a) Insect antenna
 - b) Modifications of wings
 - c) Types of metamorphosis
- Q.6 Write economic importance and distinguishing characters of order Lepidoptera and state the difference between moth and butterfly.
- Q.7 Explain typical structure of insect leg and enlist the modifications of leg with example.
- Q.8 Enlist different types of mouthpart in insects with examples. Explain mouthparts of honey bee.
- Q.9 Explain female reproductive system of cockroach with neat labeled diagram.
- Q.10 Draw well labeled diagram of insect head capsule and enlist segments of head region.

SECTION "B"

- Q.11 State the function of the following.
 - 1) Tympanum
 - 2) Auricular valve
 - 3) Labrum epipharynx
 - 4) Johnston's organ
 - 5) Tenidium
 - 6) Halteres
 - 7) Malpighian tubules
 - 8) Gizzard
- Q.12 Do as directed.
 - 1) What is eucephalous larva?
 - 2) Define systematic.
 - 3) Name the order of thrips.
 - 4) Insect belongs to class Arthropoda (State True or False).
 - 5) Which type of antenna is present in housefly?
 - 6) Give one example of endocrine gland.
 - 7) State the family of two spotted mite.
 - 8) Give long form of NBAIR.

