

[This question paper contains 4 printed pages.]

**Sr. No. of Question Paper : 6817**

**D**

**Your Roll No.....**

Unique Paper Code : 217565

Name of the Course : **B.Sc. Applied Life Sciences with Agrochemicals and  
Pest Management**

Name of the Paper : Applied Entomology

Semester : V

Time : 3 Hours

Maximum Marks : 75

**Instructions for Candidates**

1. Write your Roll No. on the top immediately on receipt of this question paper.
2. Attempt five questions in all including Question No. 1 which is compulsory.
3. Draw well labeled diagram wherever necessary.

1. (a) Define : (5)

(i) Vector

(ii) Honey flow period

(iii) Myiasis

(iv) Stifling

(v) Economic injury level

(b) Expand the abbreviations : (4)

(i) CSRS

(ii) IARI

P.T.O.

(iii) SALO

(iv) EDCT

(c) Distinguish between : (8)

(i) Stadium and instar

(ii) Saltatorial and raptorial legs

(iii) Solitary and gregarious phase of Locust

(iv) Dead heart and bunchy top

(d) Fill in the blanks : (4)

(i) Labial glands of silkworm are modified \_\_\_\_\_ .

(ii) Clavate type of antenna is found in \_\_\_\_\_ .

(iii) Elytra are modified \_\_\_\_\_ present in the order \_\_\_\_\_ .

(e) Indicate whether following statements are true or false : (4)

(i) Halteres are found in dragonflies.

(ii) Larva of mosquito is called wriggler and pupa as tumbler.

(iii) Both nymphs and adults of Gundy bug suck sap of sugar cane plant.

(iv) Honey bees convert nectar into honey and pollen into bee wax.

(f) Write name of diseases transmitted by the following insect : (2)

(i) Sand fly

(ii) Culex

2. (a) Explain biotic theory of periodicity for the origin of swarm of desert locust.
- (b) Describe the damage caused by the termite. Write about its control measures. (6+6)
3. (a) Describe life cycle and economic importance of lac insect.
- (b) Enumerate diseases of silkworm. (8+4)
4. (a) Describe the bionomics of any one coleopteran pest of stored grain.
- (b) Explain the importance of moisture contents, Oxygen and temperature in safe storage of food grain. (6+6)
5. Write the distinguishing features of *Xenopsylla*. Describe its life cycle. Add a note on its medical importance. (12)
6. (a) Write scientific names of important pests of cotton. Describe the nature of damage caused, life cycle and control measure for any one of them.
- (b) Give brief account of the economic importance of the following agricultural pests :
- (i) *Helicoverpa armigera*
- (ii) *Pyrrilla purpusilla* (8+4)
7. Write short notes on **any three** of the following :
- (i) Pusa bin

(ii) Newton's hive

(iii) Central anti locust control organization

(iv) Rearing and culture of Insect pest

(v) *Pediculus*

(4+4+4)