

This question paper contains 3 printed pages]

Roll No.

--	--	--	--	--	--	--	--	--	--

S. No. of Question Paper : 3068

Unique Paper Code : 2232582403

Name of the Paper : DSC-Agricultural Pests and Diseases

Name of the Course : B.Sc. (P) Applied Life Science with Agro-
Chemical & Pest Management

Semester : IV (NEP-UGCF)

Duration : 2 Hours

Maximum Marks : 60

(Write your Roll No. on the top immediately on receipt of this question paper.)

Attempt any four questions including Question No. 1 which is compulsory.

Attempt various parts of a question at one place only.

Draw well-labelled diagram wherever necessary.

1. (a) Define the following terms : 3×1=3

(i) Chaffy grains

(ii) Trenching

(iii) Tritonymph

(b) Differentiate between the following pairs : 3×2=6

(i) Polyphagous and Monophagous pest

(ii) Solitary and Gregarious phases of desert locust

(iii) Dead heart and Bunchy top

P.T.O.

(c) Write scientific names of the following insect : 2×1=2

(i) Dusky cotton bug

(ii) Khapra beetle

(d) Fill in the blanks : 4×1=4

(i) Larval stage of *Achaea janata* is called as

(ii) The first instar nymph of pest has a whitish thorax and abdominal segment bearing a pair of anal filaments.

(iii) Larvae of pest eat the endosperm and germ, leaving empty light weight grains with characteristic "window" holes for adult emergence.

(iv) The most effective chemical against mustard aphid is

2. (a) Describe the economic importance, life cycle and control measures of *Sitophilus oryzae*. 8

(b) Describe the life cycle, economic importance and control measures of termites. 7

3. (a) Discuss the adult characteristics, damage caused and control measures of *Earias vitella* and *Athalia lugens proxima*. 8

(b) Explain the life cycle and crop damage of any two sugarcane insect pests. 7

4. (a) Write the classification of agricultural pests based on the different modes (occurrence, host range, economic impact, etc.) with suitable examples. 8
- (b) Describe the feeding damage, life cycle and management of *Macrosiphum miscanthi* on crops. 7
5. (a) Give the scientific names of important pests of Paddy. Describe the biology, nature of damage caused and control measure for any *one* of them. 8
- (b) Write the classification of pesticides based on their mode of entry and chemical reaction. 7
6. Write short notes on any *three* of the following : 3×5=15
- (i) Life cycle of *Hispa (Dicladispa) armigera* and its damage.
- (ii) Biology of *Sesamia inferens* with their control measures.
- (iii) Ecological and professional approaches to reduce bird damage.
- (iv) Distribution and host range of any *two* major agricultural pests.