Duration – 2.30 hr. **Max marks – 60**

N.B. - (1) Attempt all questions.
(2) Figures to the right indicate full marks.
(3) Draw diagrams wherever necessary.

Q.1 Answer any four questions from thefollowing. (12)

1. Comment on insects used in textile industry.
2. Give an account of insects used in biological war.
3. Write a note on Insect immune systems with comparison to vertebrates.
4. Explain role of Markers gene in sex identification.
5. Comment on Insect Proteomics.
6. Explain insect genomics of Hemiptera (Pea Aphid)

Q.2 Answer any two of the following. (12)

1. Explain the term Insect as a medicine (Entomotherapeutics).
2. Write a note on Insect as weapons
3. Give a comment on Ornamental products from insects.

Q.3 Answer any two of the following. (12)

1. Write the mechanism of Transcription and translocation.
2. Describe DNA recombinant technology.
3. Explain the Genetic improvement of natural enemies.

Q.4 Answer any two of the following. (12)

1. Describe DNA finger printing for taxonomy and phylogeny.
2. Explain the Molecular basis of metamorphosis.
3. Comment on Insect gene transformation.

Q.5 Answer any two of the following. (12)

1. Explain the insect genomics of Drosophila melanogaster (Fruit fly).
2. Comment on proteomic approach for studying insect phylogeny.
3. Explain the insect genomics of Butterflies, Diamondback moth.

****

X51YCD98ECX51YCD98ECX51YCD98ECX51YCD98EC

Duration – 2.30 hr. **Max marks – 60**

N.B. - (1) Attempt all questions.

(2) Figures to the right indicate full marks.

(3) Draw diagrams wherever necessary.

Q.1 Answer any **four questions** from the following: (12)

a. Write a note on classification of insecticides

b. How antifeedents can be used to control insect pests

c. Explain synthetic insecticides

d. Enlist various microbial pathogens used in insect control

e. How insects induce galls on plants

f. Explain handling of insects from crime scene

Q.2 Answer any **two questions** from the following: (12)

a. Explain termites as a serious pest of plants

b. Write a note on leaf mining insects as pests

c. Discuss various leaf defoliator insect pests

Q.3 Answer any **two questions** from the following: (12)

a. Explain role of arthropods in forensic science

b. Enlist various coleopterans of forensic importance

c. Discuss the chronology of arrival of insects at the corpse

Q.4 Answer any **two questions** from the following: (12)

a. Discuss in detail the biological control of insect pests

b. Compare male sterile therapy with chemosterilization

c. Write a note on insecticide formulations

Q.5 Answer any **two questions** from the following: (12)

a. Write a note on the recent trends in insect pest management

b. Describe fungicides used in insect pest control

c. Explain the impact of insecticides on human health

****

X51YAF7F9FX51YAF7F9FX51YAF7F9FX51YAF7F9F

Duration – 2.30 hr. **Max marks – 60**

Instructions-

All questions are compulsory

All questions carry equal marks

Draw neat and labelled diagrams wherever necessary

Q. 1 Write notes on (**any four**)- (12)

a) *Bruchus*
b) Host plant damage by Pink Bollworm
c) Aphids
d) Appearance of Stable fly
e) Flea
f) Measures to control Screw Worm Fly

Q. 2 Answer **any two** questions from the following (12)

a) Describe the habit, distribution and control measures of any one pest of Sugarcane
b) Describe the life history and host plant damage byany one pest of Jowar
c) Describe the appearance, habit and control measures of any one pest of Ground nut

Q. 3 Answer **any two** questions from the following (12)

a) Describe appearance, habit and host plant damage by any one pest of Brinjal
b) Describe the life history of any one pest of mango
c) Describe the appearance and control measures of any one pest of ginger

Q. 4 Answer **any two** questions from the following (12)

a) Describe in brief the life history of mosquito
b) Describe the appearance, habit and distribution of Tsetse Fly
c) Give an account of diseases caused by House fly and measures to control it

Q. 5 Answer **any two** questions from the following (12)

a) Describe the life history of Cattle Blood Sucking Fly
b) Describe the damage caused by Horse fly and measures to control it
c) Describe the life history of Flesh fly

****

X51Y2727D8X51Y2727D8X51Y2727D8X51Y2727D8