**22ZOP418N**

**PSG COLLEGE OF ARTS & SCIENCE**
(AUTONOMOUS)

**MSc DEGREE EXAMINATION MAY 2025**
(Fourth Semester)

Branch – **ZOOLOGY**

**AGRICULTURAL ENTOMOLOGY**

Time: Three Hours Maximum: 75 Marks

**SECTION-A (10 Marks)**
Answer **ALL** questions
**ALL** questions carry **EQUAL** marks (10 × 1 = 10)

| Module No. | Question No. | Question | K Level | CO |
|---|---|---|---|---|
| 1 | 1 | What is the primary characteristic of insects in the order Coleoptera?<br>a) Wings covered in scales<br>b) Two pairs of wings, hard forewings<br>c) Piercing-sucking mouthparts<br>d) Jumping hind legs | K1 | CO1 |
| | 2 | Which method of insect collection is most suitable for nocturnal species?<br>a) Pitfall traps b) Light traps<br>c) Sweep nets d) Vacuum collection | K2 | CO2 |
| 2 | 3 | Relate the primary damage caused by *Nephantis serinopa* (Coconut caterpillar) is:<br>a) Feeding on coconut roots<br>b) Attacking coconut fruits<br>c) Defoliation of coconut leaves<br>d) Destruction of the coconut trunk | K1 | CO1 |
| | 4 | What is the primary damage caused by ***Tryporyza incertulas*** (Rice stem borer)?<br>a) Leaf defoliation b) Tunneling in the soil<br>c) Root damage d) Damage to the stem and grains | K2 | CO1 |
| 3 | 5 | Select the following type of insecticide?<br>a) Carbamates b) Glyphosate<br>c) Methyl bromide d) Sodium nitrate | K1 | CO1 |
| | 6 | Choose the most common method of applying liquid pesticides?<br>a) Broadcasting b) Foliar spraying<br>c) Soil drenching d) Trapping | K2 | CO2 |
| 4 | 7 | Select the mulberry plant is best known for its role in which industry?<br>a) Textile b) Agriculture<br>c) Sericulture d) Horticulture | K1 | CO1 |
| | 8 | Which of the following is a major pest that affects mulberry plants?<br>a) Grasshopper b) Mulberry aphid<br>c) Root borer d) Leaf miner | K2 | CO2 |
| 5 | 9 | Tell the causes of disease Flacherie in silkworms?<br>a) Bacterial infection b) Viral infection<br>c) Fungal infection d) Protozoan infection | K1 | CO1 |
| | 10 | Find the method of reeling is the most common in modern silk production?<br>a) Hand reeling b) Mechanical reeling<br>c) Solar reeling d) Manual rolling | K2 | CO2 |

**Cont...**

## SECTION - B (35 Marks)

Answer **ALL** questions
**ALL** questions carry **EQUAL** Marks (5 × 7 = 35)

| Module No. | Question No. | Question | K Level | CO |
|---|---|---|---|---|
| 1 | 11.a. | What is the difference between complete and incomplete metamorphosis in insects? | K3 | CO3 |
| | | (OR) | | |
| | 11.b. | Describe the significance of insects in ecosystems. | | |
| 2 | 12.a. | Explain about morphology, life history, destruction caused, and control measures of *naphalocrocis medinalis* (Rice Leaf Folder). | K4 | CO4&CO5 |
| | | (OR) | | |
| | 12.b. | Discuss about morphology, life history, destruction caused, and control measures of *Chilo infuscatellus* (Pink Stem Borer). | | |
| 3 | 13.a. | How are pesticides classified based on their chemical composition? | K3 | CO3 |
| | | (OR) | | |
| | 13.b. | How does biological control work in pest management. | | |
| 4 | 14.a. | Classify Morphology of the Mulberry Plant. | K4 | CO4 |
| | | (OR) | | |
| | 14.b. | List out manuring and its application of fertilizers. | | |
| 5 | 15.a. | Discuss the morphology of the *Bombyx mori* silkworm. | K4 | CO4 |
| | | (OR) | | |
| | 15.b. | What are the different silkworm rearing methods and appliances used? | | |

## SECTION -C (30 Marks)

Answer **ANY THREE** questions
**ALL** questions carry **EQUAL** Marks (3 × 10 = 30)

| Module No. | Question No. | Question | K Level | CO |
|---|---|---|---|---|
| 1 | 16 | Discuss about the Methods of insects Collection and Preservation Techniques. | K5 | CO5 |
| 2 | 17 | Justify morphology, life history, destruction caused, and control measures of *Amrasca biguttula* (Cotton Leafhopper). | K6 | CO5 |
| 3 | 18 | Elaborate the different types of pesticide with suitable examples. | K5 | CO5 |
| 4 | 19 | Explain about different methods of mulberry cultivation. | K4 | CO4 |
| 5 | 20 | Describe the equipment used in the reeling of silk from the cocoon. | K4 | CO5 |

Z-Z-Z END