

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATIONS MAY 2024  
(Fourth Semester)

Branch – ZOOLOGY

AGRICULTURAL ENTOMOLOGY

Time: Three Hours

Maximum: 50 Marks

SECTION-A (5 Marks)

Answer ALL questions

ALL questions carry EQUAL marks (5 x 1 = 5)

- 1 What is the purpose of using a sweep net in insect collection?  
(i) Collecting flying insects (ii) Capturing ground-dwelling insects  
(iii) Sampling aquatic insects (iv) Trapping nocturnal insects
- 2 Find out the stage of *Orseolia oryzae* that is often targeted for effective control measures?  
(i) Adult Stage (ii) Larval Stage  
(iii) Pupal Stage (iv) Egg Stage
- 3 Which application method involves injecting pesticides directly into the soil around the plant's root zone?  
(i) Foliar application (ii) Basal application  
(iii) Fertigation (iv) Soil drenching
- 4 Identify the mulberry variety that is commonly cultivated for silkworm rearing?  
(i) *Morus alba* (ii) *Morus cathayana*  
(iii) *Morus macroura* (iv) *Morus serrata*
- 5 Which process follows the reeling of silk in the production cycle?  
(i) Spinning (ii) Dyeing  
(iii) Weaving (iv) Twisting

SECTION - B (15 Marks)

Answer ALL Questions

ALL Questions Carry EQUAL Marks (5 x 3 = 15)

- 6 a List out any ten general characteristic features of class Insecta.  
OR  
b Summarize the various methods adopted for the collection of insects.
- 7 a Analyze the methods employed for the control of jassids in cotton field.  
OR  
b Discuss the life history of coconut rhinoceros beetle.
- 8 a Classify the different types of pesticide.  
OR  
b Elucidate the chemical control strategies in integrated pest management.

Cont...

- 9 a With a neat sketch discuss the morphology of a mulberry plant.  
OR  
b Explore the different varieties of mulberry and their uses.
- 10 a List out the necessary conditions for successful silkworm rearing.  
OR  
b Highlight technological advancements, efficiency and output differences between the traditional hand-operated and automated machinery in silk industry.

**SECTION -C (30 Marks)**

Answer ALL questions

ALL questions carry EQUAL Marks

(5 x 6 = 30)

- 11 a Categorize the insects up to the level of order with examples.  
OR  
b Explain the methods adopted for preservation techniques and its importance in entomology.
- 12 a Examine the morphology, life history, symptoms and control measures of rice pests.  
OR  
b Provide an in-depth description of the morphology, life history, damages and preventive measures of sugarcane pests.
- 13 a Assess the environmental impact of different pesticide application methods.  
OR  
b Evaluate the effectiveness of pest management strategies in controlling insect populations.
- 14 a Discuss the Vegetative propagation method of cultivation of mulberry.  
OR  
b Emphasize the symptoms and spread of the mulberry disease powdery mildew.
- 15 a Elaborate the life cycle of *Bombyx mori*.  
OR  
b Focus on the symptoms, mode of infection and management strategies for the bacterial disease Flacherie.

Z-Z-Z

END