

ZOOL2051

3 Yr. Degree/4 Yr. Honours 2nd Semester Examination, 2025 (CCFUP)

Subject : Zoology
Course : ZOOL2051 (SEC)
(Sericulture)

Time: 2 Hours

Full Marks: 40

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

1. Answer *any five* of the following: 2×5=10
 - (a) Write the scientific names of any two non-mulberry silkworms.
 - (b) What is voltinism? State its types.
 - (c) Write the causative organism of Pebrine disease and one key Symptom in silkworm larvae for the disease.
 - (d) Mention any two sericulture research stations located in West Bengal.
 - (e) What is leaf spot disease? State its economic importance.
 - (f) What is degumming?
 - (g) Write the use of black-boxing of silkworm eggs.
 - (h) What is croissure? Mention its uses.

2. Answer *any two* of the following: 5×2=10
 - (a) Describe salient features of family Moraceae. What is catkin? 4+1
 - (b) Mention advantages of sericulture to rural economy. Name four major types of Silk in India. 3+2
 - (c) Briefly describe the post-harvesting treatments of cocoon.
 - (d) Briefly describe fungal diseases of silkworm and their control measures. 2+4

3. Answer *any two* of the following: 10×2=20
 - (a) Draw and describe male and female reproductive system of adult *Bombyx mori*. 5+5
 - (b) How could you determine sex of silkworm larvae, pupa, cocoon and adult? 2½×4
 - (c) Name one major and one minor pest of Mulberry plants. Write about their nature of damage and control. 2+4+4
 - (d) Write short notes on: 5+5
 - (i) Silk apparatus
 - (ii) Reeling of silk

Time: 2 Hours

Full Marks: 40

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as far as practicable.*

1. Answer *any five* of the following: $2 \times 5 = 10$
 - What is aqua sapping?
 - Define the term 'quarantine tank'.
 - Write two major roles of aeration in an aquarium.
 - Name two famous Aquariums in India.
 - Write the names of two antibacterial agents used during fish transportation.
 - Mention two economic importance of the Aquarium Fish Keeping.
 - What do you mean by gonopodium?
 - What are the different types of planktons available for fish feeding?
 2. Answer *any two* of the following: $5 \times 2 = 10$
 - Elucidate the social behaviour of the following live-bearers: $2\frac{1}{2} + 2\frac{1}{2}$
 - Guppy
 - Sword tail
 - Write briefly about conditioning of fish before transportation. What is closed system of fish transport?
 - How can you determine the gender of a gold fish? Describe the common characteristic features of anemone fish.
 - Elucidate briefly the potential scope of the aquarium fish keeping as a cottage industry.
 3. Answer *any two* of the following: 5
 - How would you build a good aquarium? What are the basic requirements to start ornamental fish farming business? $10 \times 2 = 20$
 - Mention the different types of filters that are used in aquarium. Briefly explain different methods applied by egg layers for spawning.
 - Write about the preparation procedure and composition of formulated fish feed. What is living capsule of nutrition? $3 + 7$
 - Define sexual dimorphism and explain its significance in aquarium fish keeping. Describe sexually dimorphic traits commonly observed in Guppy & Molly. Name three marine aquarium fishes showing sexual dimorphism. $8 + 2$
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