

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.

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

ZOOL2051

(2)

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

Subject : Zoology

Course : ZOOL2051 (SEC) (OR)

(Aquarium Fish Keeping)

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:

- (a) What is aqua sapping?
- (b) Define the term 'quarantine tank'.
- (c) Write two major roles of aeration in an aquarium.
- (d) Name two famous Aquariums in India.
- (e) Write the names of two antibacterial agents used during fish transportation.
- (f) Mention two economic importance of the Aquarium Fish Keeping.
- (g) What do you mean by gonopodium?
- (h) What are the different types of planktons available for fish feeding?

2×5=10

2. Answer any two of the following:

- (a) Elucidate the social behaviour of the following live-bearers:
 - (i) Guppy (ii) Sword tail
- (b) Write briefly about conditioning of fish before transportation. What is closed system of fish transport?
- (c) How can you determine the gender of a gold fish? Describe the common characteristic features of anemone fish.
- (d) Elucidate briefly the potential scope of the aquarium fish keeping as a cottage industry.

5×2=10

2½+2½

3+2

2+3

5

3. Answer any two of the following:

- (a) How would you build a good aquarium? What are the basic requirements to start ornamental fish farming business?
- (b) Mention the different types of filters that are used in aquarium. Briefly explain different methods applied by egg layers for spawning.
- (c) Write about the preparation procedure and composition of formulated fish feed. What is living capsule of nutrition?
- (d) 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.

10×2=20

5+5

3+7

8+2

4+3+3