B.Sc. Semester-IV Examination, 2022-23

ZOOLOGY [Honours]

Course ID : 42615   Course Code : SH/ZOO/405/SEC-2

Course Title : Sericulture

Time : 2 Hours   Full Marks : 40

The figures in the right-hand margin indicate marks.

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

UNIT-I

1. Answer any **five** of the following questions:

$2 \times 5 = 10$

a) Write the names of different exotic races of Silk worm.

b) Write the names of two pest of Silk worm.

c) What is Diapause?

d) What is Stiffling?

e) Write the scientific name of Muga and mulberry Silk.

f) What is mountage? Why is it needed in sericulture?

g) Name two viral diseases of silk worm.

h) What do you mean by moriculture?

UNIT-II

2. Answer any **four** of the following questions:

$5 \times 4 = 20$

a) What is voltinism? Describe different types of voltinism with example. $2+3=5$

b) What is non-mulberry sericulture? Write the names of the non-mulberry sericulture types and the districts of WB where these types are being practised. $2+3=5$

c) Mention the characteristic features of a typical rearing house of silkworm.   5

d) Name two fungal diseases of silk moth. Describe its symptoms and preventive measures. $1+2+2=5$

e) How silk was discovered in China? State the role of formalin, bleaching powder, and RKO in sericulture. $2+3=5$

f) Write short notes on: $2\frac{1}{2}+2\frac{1}{2}=5$

   i) Economic importance of sericulture in India.

   ii) Distinctive features to identify the male and female moth of *Bombyx mori*.

UNIT-III

3. Answer any **one** of the following questions:

$10\times1=10$

a) Describe briefly the life cycle of *Bombyx mori* along with suitable diagram of its different stages. Draw and describe 5th instar larva of *Bombyx mori*.   (5+2)+(1+2)=10

b) What do you mean by stifling? What should be the initiatives to be introduced to improve silk industry in India? Write down the distinctive processes of spinning, harvesting and storage of cocoons.   1+5+4=10

B.Sc. Semester-IV Examination, 2022-23
ZOOLOGY [Honours]

Course ID : 42615   Course Code : SH/ZOO/405/SEC-2

Course Title : Aquarium Fish Keeping

Time : 2 Hours   Full Marks : 40

The figures in the right-hand margin indicate marks.
Candidates are required to give their answers in their own words as far as practicable.

UNIT–I

1. Answer any **five** of the following questions:

$2\times5=10$

a) Write the scientific names of butterfly fish and gold fish.

b) What is gonopodium?

c) How do you remove chlorine from water?

d) What is food additive? Give one example.

e) Write the scientific names of two indigenous ornamental fishes.

f) Give two examples of rooted plants used in aquarium.

g) Mention two precautions of live fish handling.

h) How do you maintain the pH of an aquarium?

UNIT–II

2. Answer any **four** of the following questions:

$$5×4=20$$

a) Write down advantages and drawbacks of aquarium fish keeping. $2\frac{1}{2}+2\frac{1}{2}$

b) Explain sexual dimorphism in gold fish and guppy. $2\frac{1}{2}+2\frac{1}{2}$

c) What is formulated fish feed? Give one example. Write the advantages of using formulated fish feed in aquarium. $1+1+3$

d) Outline the process of *Artemia* culture for aquarium fishes. 5

e) What do you mean by endemic and exotic aquarium fishes? Write down the importance of endemic fishes in ornamental fish industry of India. $2+3$

f) What are the important precautions for the maintenance of an aquarium? What are the common components used for decorating an aquarium? $4+1$

UNIT–III

3. Answer any **one** of the following questions:

$$10×1=10$$

a) Explain the different types of Aquariums with suitable diagram. Mention the essential equipments required to set up an aquarium. Name a mosquito larvicidal fish. $3+6+1$

b) Differentiate between open system and closed system of fish transport. Mention the different steps associated with fish transport. Name two diseases of aquarium fish. $3+5+2$

———