698/Zool 22-23 / 62616

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

Course ID: 62616 Course Code: SH/ZOO/603/DSE-3

Course Title: Fish & Fisheries

Time: 1 Hour 15 Minutes Full Marks: 25

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:

 $1 \times 5 = 5$

- a) Name the parasite which is known as carp lice.
- b) What do you mean by catadromous fish migration?
- c) Give one example each of Lean fish and Fatty fish.
- d) What is brood stock management?
- e) What do you mean by morphometric analysis?
- f) Give example of a fish which shows bioluminescence.
- g) Give an example of bacterial fish disease.
- h) Why fishes are said to have a streamlined body?

UNIT-II

- 2. Answer any **two** of the following questions: $5 \times 2 = 10$
 - a) Discuss various types of indigenous fishing crafts used by fishermen of eastern India. 5
 - b) What do you mean by transgenic fish? Give example. Why zebra fish is found to be most suitable for transgenics? 1+1+3
 - what is retia mirabilia? What are physostomous and physoclistous swim bladder? Explain the role of swim bladder in maintaining buoyancy in fishes.

 1+2+2
 - d) Write in brief the by-products of fish processing and their utilization. $2\frac{1}{2}+2\frac{1}{2}=5$

UNIT-III

- 3. Answer any **one** of the following questions: $10 \times 1 = 10$
 - a) What are primary and accessory respiratory organs? Describe the structure and function of gills of fishes. What is osmoregulation?

3+6+1

b) What do you mean by fish polyculture? Give example. State the advantages of induced breeding in fish culture. Briefly discuss the importance of pH, temperature and dissolved oxygen in aqua culture.

1+1+2+6

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

Course ID: 62616 Course Code: SH/ZOO/603/DSE-3 **Course Title: Parasitology**

Time: 1 Hour 15 Minutes Full Marks: 25

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:

 $1 \times 5 = 5$

- Distinguish between hard tick and soft tick.
- Enumerate the major symptoms (any two) of schistosomiasis.
- What is cysticercosis?
- Name one disease caused by fleas.
- Distinguish between ectoparasitism and endoparasitism with example.
- Distinguish between male and female Ascaris lumbricoides.
- What is nocturnal periodicity of filarial worm?

(3)

What is molecular mimicry?

UNIT-II

- 2. Answer any **two** of the following questions: $5\times2=10$
 - What is the infective stage of filarial worm? Write briefly on epidemiology and modes of transmission of Wuchereria brancrofti. 1+2+2
 - Name the disease transmitted by *Cimex* sp. Name any two plant nematodes and diseases caused by them. 1+2+2
 - What is vector? Give example of a mechanical vector. Mention any two pathogens carried by the mechanical vectors. 2+1+2
 - Write the scientific name of vampire bat. What do you mean by "resident males" and "nonresident males" of vampire bats? Comment on its feeding habit. 1+2+2

UNIT-III

- 3. Answer any **one** of the following questions: $10 \times 1 = 10$
 - Describe the characteristic features of bloodstream trypomastigote of Trypanosoma gambiense with suitable diagram. Name the disease caused by T. gambiense. Mention the diagnosis and treatment of the disease.

(3+1)+1+3+2

b) Why *Ascaris lumbricoides* is regarded as a monogenetic parasite? How this parasite infects a healthy individual? Discuss the life cycle of *Ascaris* and mention the epidemiology of Ascariasis.

1+2+5+2=10
