## 2021

## **ZOOLOGY — HONOURS**

Paper: SEC-B-4-1

(Aquarium Fish Keeping)

Full Marks: 80

The figures in the margin indicate full marks.

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

Answer any eight questions.

1.	(a)	What is cannibalism?	
	(b)	Describe any two techniques of fish packing.	
	(c)	What is the role of insulation in fish transportation?	2+6+2
2.	(a)	Define ornamental fish.	
	(b)	Discuss the factors controlling fish transportation.	
	(c)	What are sinking pellets?	2+6+2
3.	(a)	What are flakes?	
	(b)	How is formulated fish feed prepared?	
	(c)	Mention two distinguishing features of Guppy.	2+6+2
4.	(a)	Define planktons. Give example of two planktons used as fish food.	
	(b)	What do you mean by sedation techniques? How is it important in fish transport	ortation?
	(c)	Cite example of two fishes showing sexual dimorphism.	$(2+1)+(2\frac{1}{2}+2\frac{1}{2})+2$
5.	(a)	What is the difference between indigenous and exotic ornamental fish?	
	(b)	Outline the steps involved in the Mass production of microalgae.	
	(c)	What is the advantage of using Daphnia as fish feed?	2+6+2
6.	(a)	State the factors required for maintenance of aquarium.	
	(b)	Mention the special features of Butterfly fish.	
	(c)	How does pH affect water quality?	3+4+3

7.	Write short notes on any two of the following:	5×2	
	(a) Exotic species of aquarium fish		
	(b) Fish feed		
	(c) Egg layers.		
8.	(a) What is a balanced diet?		
	(b) Comment on the endemic species of aquarium fish with examples.		
	(c) Mention two characters of Molly.	2+6+2	
9.	(a) What are live-bearers? Cite an example.		
	(b) Describe different categories of fish feed used in aquarium fish culture.		
	(c) Name two Indigenous ornamental fishes.	(1+1)+6+2	
10.	(a) What are the conditions required for fish packing?		
	(b) Compare between live feed and artificial feed in aquarium fish.		
	(c) Briefly comment on the importance of ornamental fish in cottage industry.	2+4+4	
11.	(a) Describe the Biology of Poecilia reticulata.		
	(b) Write a short note on the indigenous ornamental fishes in West Bengal.	5+5	
12.	(a) Distinguish between egg scatterers and egg depositors with examples.		
	(b) What is the role of starvation during transportation in fishes?		
	(c) Cite an example of fish anaesthesia and state its role.	5+2+(1+2)	
13.	Write short notes on any two of the following:		
	(a) Angel Fish		
	(b) Blue morph		
	(c) Anemone Fish		
	(d) Sword Tail.		
14.	Answer any five of the following questions:		
	(a) How does temperature influence water quality parameter?		
	(b) Can clove oil be used as fish food? If not, why?		
	(c) Name a microalgae used as fish feed and comment on its nutritional value.		
	(d) What are the threats associated with aquarium fish keeping?		
	(e) What is the role of pre-packing in fish transportation?		
	(f) What are fishing gears?		
	(g) What is the scientific name of Sword tail?		
	(h) State one example of aquarium fish which is an inhabitant of coral reef ecosystem.		

(2)

T(4th Sm.)-Zoology-H/[SEC-B-4-1]/CBCS