# 2020/TDC(CBCS)/ODD/SEM/ ZOOSEC-501T/037

# TDC (CBCS) Odd Semester Exam., 2020 held in March, 2021

# **ZOOLOGY**

(5th Semester)

Course No.: ZOOSEC-501T

( Aquarium Fish Keeping )

Full Marks: 50
Pass Marks: 20

Time: 3 hours

The figures in the margin indicate full marks for the questions

#### SECTION—A

Answer any fifteen of the following questions:

 $1 \times 15 = 15$ 

- **1.** Name the four things essential for a successful aquarium.
- **2.** Can we use the chlorinated tap water directly for aquarium? Give reason for your answer.

(2)

- **3.** How much surface water is required for 2.5 cm of fish?
- **4.** What is the ideal temperature for aquarium water for tropical fishes?
- **5.** What should be the wattage of light bulb for an aquarium of 30 litres capacity?
- **6.** Name a recently developed water filter for aquarium.
- 7. What do you understand by ornamental fish?
- **8.** Name two ornamental fishes of N-E region exported as aquarium fish.
- **9.** Why are breeding and rearing of ornamental fishes possible in N-E India?
- 10. Name two exotic aquarium fishes.
- 11. Name two aquarium plant species.
- **12.** What is 'ageing' of water for aquarium?
- **13.** What do you understand by sexual dimorphism?

10-21**/138** (Turn Over) 10

10-21**/138** (Continued)

(3)

(4)

- 14. What is the other name of Guppy fish?
- **15.** What is a gonopodium in molly fish?
- **16.** State whether the swordtail fish is livebearer or egg-layer.
- **17.** State whether the butterfly fish is freshwater fish or marine fish.
- **18.** What do you understand by aquarium fish feed?
- 19. What are pellets and flakes fish food?
- **20.** What do you understand by prepared foods for aquarium fishes?
- 21. What are Zebra Cichlids?
- **22.** What is 'vacation food' for aquarium?
- **23.** Name different organisms used as frozen fish diet in aquarium.
- **24.** Mention few live food provided to aquarium fishes.
- **25.** What is live fish transport?

- **26.** Mention the parameters to be maintained during live fish transport.
- **27.** What is the ideal way of packaging for transport of live fishes?
- **28.** How frequently the water in an aquarium be changed?
- **29.** What are 'dead pockets' in the sand bed of aquarium?
- **30.** How can an aquarium setup be made cost effective?

## SECTION—B

Answer any five of the following questions:

 $2 \times 5 = 10$ 

- **31.** State the scope of aquarium fish industry as a cottage industry in N-E India.
- **32.** Name some endemic ornamental fishes of Barak Valley.
- **33.** State the sexual dimorphism of angel fish.
- **34.** State the characters of Zebra Cichlids.

(5)

(6)

- **35.** What are the basic components of formulated fish food?
- **36.** Why is beta carotene used in some prepared fish foods?
- **37.** What do you understand by oxygen pack system of fish transport?
- **38.** Why should fishes not be shifted to higher or lower temperature suddenly?
- **39.** Why should snails be removed during swarming in aquarium?
- **40.** State the pH range to be maintained for aquarium water and why.

## SECTION—C

Answer any five of the following questions:

 $5 \times 5 = 25$ 

- **41.** Why are endemic species better suited than endemic species for tropical aquarium?
- **42.** Elucidate the practice of fish-keeping in aquarium as a hobby.

- **43.** State the general characteristics of aquarium fishes.
- **44.** What do you understand by protandrous hermaphrodites? Give example. 4+1=5
- **45.** What is the other name of anemone fish? State their natural habitat and distribution.
- **46.** What are the main objectives of fish feed formulation? What specific knowledge is involved in it?
- **47.** State the ideal composition of fish feed used for aquarium fishes.
- **48.** What are different packaging and forwarding techniques for live fish transport?
- **49.** Mention the techniques used to monitor water quality in aquarium.
- **50.** Give a breakup of budget required to set up an industrial aquarium fish tank.

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