

**2023/TDC(CBCS)/ODD/SEM/
ZOOSEC-501T/037**

TDC (CBCS) Odd Semester Exam., 2023

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 *fifteen* questions, selecting any *three* from
each Unit :

1×15=15

UNIT—I

1. What is meant by aquarium fish industry?
2. What is endemism?
3. Name one exotic aquarium fish species.

(2)

4. Which is the largest aquarium fish market in India?

UNIT—II

5. What is meant by sexual dimorphism?
6. Give the scientific name of swordtail.
7. Cite example of a live-bearer ornamental fish species.
8. Name one ornamental fish species belongs to carp family.

UNIT—III

9. What is live-fish feed?
10. Cite example of two zoo planktons.
11. What are rotifers?
12. What is brine shrimp?

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(Continued)

(3)

UNIT—IV

13. What is the favourable range of pH of the media for transportation of fish?
14. What is the permissible limit of CO₂ in the fish transportation medium?
15. What are the agents used for maintaining pH in the traditional method of fish transport?
16. What are fish fry?

UNIT—V

17. Name two plant species used in aquarium.
18. What is the disinfectant used at the time of introduction fish species in an aquarium?
19. Name the scavenging animals usually introduced in the aquarium to consume the debris.
20. Tubifex worm belongs to which phylum?

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(Turn Over)

(4)

SECTION—B

Answer *five* questions, selecting *one* from each
Unit : 2×5=10

UNIT—I

21. What is meant by ornamental fish culture?
Discuss briefly.
22. Why is aquarium fish industry known as cottage industry?

UNIT—II

23. Give four general characters of ornamental fish species.
24. Differentiate between egg-layers and live-bearers in aquarium fish species. Cite examples.

UNIT—III

25. What are the essential qualities of formulated fish feeds?
26. Differentiate between simple feed and compound feed. What is FCR?

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(Continued)

(5)

UNIT—IV

27. What are possible causes of mortality of fishes during transportation?
28. Write briefly the traditional method of transportation of live fish.

UNIT—V

29. What is the importance of provision of light in an aquarium?
30. Why is an optimal level of temperature necessary to be maintained in an aquarium?

SECTION—C

Answer *five* questions, selecting *one* from each
Unit : 5×5=25

UNIT—I

31. Discuss the potential scope of aquarium fish industry as a cottage industry in India.
32. Give an account of ornamental fish farming in India. What are the benefits of this farming?

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(Turn Over)

(6)

UNIT—II

33. Enlist commercially important indigenous and exotic ornamental fish species with their common names and scientific names.
34. Give scientific name and biology of Angelfish and Guppy.

UNIT—III

35. Discuss the principles of fish feed formulation.
36. How are formulated fish feeds being prepared? Elucidate.

UNIT—IV

37. Discuss the closed system technique of transportation of live aquarium fishes.
38. What is the procedure of conditioning of fishes before transportation? Give a note on anaesthetising agents and ammonia absorbents used in closed system of fish transportation. 2+3=5

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(Continued)

(7)

UNIT—V

39. Enumerate the minimal requirements for setting up an aquarium fish farm. Discuss briefly the technique of setting up biological filter in an aquarium and its utility. 2+3=5
40. Discuss the budgetary provisions and budgetary involvements for setting up a sustainable aquarium fish farm.

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