Sub. Code 548E07

M.Sc. DEGREE EXAMINATION, APRIL - 2023

Tenth Semester

Integrated Marine Biology

AQUARIUM KEEPING

(CBCS - 2018 onwards)

Time: 3 Hours Maximum: 75 Marks

Part A $(10 \times 2 = 20)$

Answer all questions.

All questions carry equal marks.

- 1. Scope of Aquarium Fish Industry as a cottage industry.
- 2. Types of aquarium feed-Live and Artificial feed.
- 3. What are the various Aquarium Filters?
- 4. Write the sexual dimorphism of Brackishwater ornamental fishes.
- 5. What are Exotic and Endemic Aquarium Fishes?
- 6. Write about the bacterial diseases caused in aquarium fishes.
- 7. Explain the factors and principles associated with live fish transport.
- 8. Brief on aquarium maintenance.
- 9. Explain about probiotics.
- 10. Define Brood stock management.

Part B

 $(5 \times 5 = 25)$

Answer all questions, choosing either (a) or (b).

11. (a) What do you mean by sequential hermaphroditism?

Or

- (b) Explain about hypophysation.
- 12. (a) What is Aqua scaping? Explain its importance?

Or

- (b) What are the requirements for ornamental fish hatchery?
- 13. (a) Write about the functions of aquarium filters.

Or

- (b) Explain the common two diseases of aquarium fish
- 14. (a) Explain about live aquarium fish food with two examples.

Or

- (b) Why ornamental fishes are known as living jewels? Give scientific name of two exotic and two endemic species of aquarium fishes.
- 15. (a) Differentiate between open system and closed system of fish transport? Mention the steps associated with fish transport.

Or

(b) What is formulated fish feed? Write the composition of one formulated fish feed. Write the advantages of using formulated fish feed in aquarium.

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Part C $(3 \times 10 = 30)$

Answer any **three** questions.

- 16. Briefly describe the essential basic requirements to start ornamental fish farming business.
- 17. Write an essay on emerging fungal diseases symptoms, treatment, and therapy in ornamental fishes.
- 18. Explain in detail the history and current status of ornamental fish trade.
- 19. Discuss in detail about criterion for selection of ornamental fishes.
- 20. Explain about the brood stock management practices in ornamental fish culture.

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