

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

SECOND SEMESTER EXAMINATION

(2024 ADMISSION ONWARDS)

MG2DSCAQC100 – Ornamental Fish Culture and Breeding

Duration: 1.5 hrs

Maximum Marks: 50

Students should attempt at least one question from each course outcome to enhance their overall outcome attainability.

Part A

Name the Following

Answer all Questions

Each question carries 1 marks

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|---|-----------|
| 1. Any two substances used in Chemical Filtration of water | [R] [1] |
| 2. Bacteria involved in converting Ammonia to Nitrites? | [U] [1] |
| 3. The functions of aerators in an Aquarium | [A] [1] |
| 4. Any two functions of Aquarium Plants? | [U] [1] |
| 5. Any two vegetative propagation methods of Aquarium Plants? | [A] [1] |
| 6. Any two species of ornamental Aquarium shrimps? | [R] [2] |
| 7. Name the Aquascaping style emphasizing colourful and structured layout of plants | [U] [2] |
| 8. Name a Cladoceran used as live feed ? | [U] [2,3] |
| 9. Name any two viral diseases of Aquarium Fishes? | [R] [2] |
| 10. Name any two Anaesthetics used to reduce stress in Live Fish Transportation? | [U] [4] |

[1 x 10=10] Marks

Part B

Short Answer Questions

Answer any 6 Questions

Each question carries 5 marks

11. Explain the advantages, benefits and different aspects of Aquarium Fish keeping as a hobby? [A] [1]
12. Illustrate Broodstock development and preparation of breeding tank for Goldfishes [A] [4]
13. Discuss the role of different Physical water quality parameters in Aquarium Fish keeping? [U][2]
14. Elaborate upon the history of Ornamental and Aquarium fish keeping? [U][1,2]
15. Summarise the different Funding agencies and Schemes for Ornamental Fish Culture and marketing? [U] [5]
16. Explain Sexual dimorphism, Broodstock management and breeding in Pearl Gourami? [A] [3,4]
17. Give a brief account of the Economics of Ornamental Fish Culture? [U] [5]
18. Provide a generalized account of indigenous Freshwater Aquarium Fishes? [R] [2]
19. Explain briefly the procedures for export of Ornamental Fishes? [U] [4]

[5 x 6 = 30] Marks

Part C
Essay Questions
Answer any one Question
Each question carries 10 marks

20. Give an account of different steps in the setting up and maintenance of a Freshwater Aquarium [A] [2]
21. Explain the breeding of live bearers, taking Guppy as an example? [U] [4]
22. Elaborate upon the different ingredients and the preparation of a formulated feed for Aquarium Fishes [U] [2,3]

[10 x 1 = 10] Marks

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MGU-UGP (HONOURS)

SECOND SEMESTER EXAMINATION

(2024 ADMISSION ONWARDS)

MG2MDCAQC100 – Introduction to Aquarium and Ornamental fishes

Duration: 1 hr

Maximum Marks: 35

Students should attempt at least one question from each course outcome to enhance their overall outcome attainability.

Part A

Very Short Answer Questions

Answer any 10 out of 12

Each question carries 2 marks

1. Define an aquarium and name the person who coined the term. [U] [1]
 2. List any four benefits of keeping an aquarium. [U] [1]
 3. What is the importance of quarantine measures in an aquarium? [A] [2]
 4. Name any two types of Aquarium. [R] [1]
 5. Write the scientific name of any two indigenous egg laying ornamental fish species. [R] [5]
 6. What is the scientific name of gold fish and what is the nature of its eggs? [R] [5]
 7. List any two aquarium accessories and their functions. [R] [1]
 8. What are the major types of filtration systems used in a marine aquarium? Provide an example each. [U] [1]
 9. What are the common methods to control snails and algal growth in an aquarium? [U] [2]
 10. Differentiate between Anaesthetic, Prophylaxis and Treatment. [A] [3, 4, 5]
 11. Name any two ornamental organisms other than fish that are of significance in a marine aquarium. [R] [5]
 12. How are Aquarium plants classified according to their position in aquarium? Give examples? [U] [5]
- [2 x 10=20] Marks

Part B
Short Answer Questions
Answer 3 Questions
Each question carries 5 marks

13. Write in detail about the packaging and transportation of ornamental fishes. [U] [3, 5]
14. Discuss the different collection methods of marine ornamental fishes. [A] [5]
15. Describe the process of setting up freshwater and marine aquaria, and explain the importance of aquarium maintenance and water quality management. [U] [2]
16. Explain the differences between live feed, natural feed and artificial feed in aquarium fish nutrition, and discuss their advantages and disadvantages. [U] [4]
17. Compare the design and construction of public freshwater aquaria, marine aquaria and an oceanarium? [U] [1]

[5 x 3=15] Marks