

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

FIRST SEMESTER EXAMINATION

(2024 ADMISSION ONWARDS)

MG1DSCAQC100 – Introduction to Aquaculture Systems and Resources

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

Very Short Answer Questions

Answer any 10 out of 12

Each question carries 2 marks

1. Define FCR? What is the use of FCR in Aquaculture [R] [1]
2. Distinguish between Broodstock ponds, Nursery ponds, Stocking Ponds and Rearing Ponds? [U] [2]
3. What is Raceway Culture? Explain its advantages [R] [1]
4. Explain diurnal fluctuation of oxygen in Fish culture ponds? [U] [2]
5. What are Oxidation Ponds? Add notes on its function [U] [3]
6. Explain the different types of Paddy cum Fish Integrated farming [A] [3]
7. Explain briefly the advantages of duck cum fish culture [A] [4]
8. List out the major morphological differences between Caridean and Penaeid prawns? [R] [5]
9. Name any three exotic carps used in Polyculture and mention the water level they inhabit? [U] [5]
10. Recall the morphological characters of catfishes? Mention any two examples? [R] [5]
11. Explain the importance of C:N ration in Biofloc Technology? [E] [6]
12. How is Banana farming integrated with Fish culture [U] [3]

[2 x 10=20] Marks

Part B
Short Answer Questions
Answer 3 Questions
Each question carries 6 marks

13. Explain the concept of Integrated Multitrophic Aquaculture systems with suitable Examples [An] [6]
14. Explain the morphological features and organization of body parts in clams? Give the names of any two families and any species coming under them? [U] [5]
15. Explain Sewage fed Fish culture, with emphasis on different methods for treating sewage [A] [3]
16. Explain the Scope and Salient features of Integrated Farming , with emphasis on pig cum fish culture and Poultry cum Fish Culture [A] [4]
17. Summarise the varied Physical Soil quality parameters influencing fish culture ponds [U] [2]

[6 x 3 = 18] Marks

Part C
Essay Type Questions
Answer any one Question
Each question carries 12 marks

18. Explain the structure of a bund or dyke? Explain the different steps in the construction of fish ponds [U] [2]
19. Describe the Morphology of Penaeid Prawns with suitable diagrams? Write a note on the Taxonomy of Penaeid prawns? [U] [5]
20. Explain the concept of Aquaponics? Describe the setup and methods used? [U] [6]

[12 x 1 = 12] Marks

MAHATMA GANDHI UNIVERSITY, KOTTAYAM

MGU-UGP (HONOURS)

FIRST SEMESTER EXAMINATION

(2024 ADMISSION ONWARDS)

MG1MDCAQC100 – General Perspectives in Aquaculture

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. Discuss the qualities required of candidate species in Aquaculture? [U] [1]
2. Recall the advantages of Aquaculture compared to agriculture? [U] [1]
3. Explain the diurnal variation of dissolved oxygen concentration in culture ponds?
Mention a method for the estimation of dissolved oxygen in culture ponds? [A] [2]
4. Give notes on the importance of Ammonia in culture ponds and methods of its
elimination? [U] [2]
5. Distinguish between Fixed and Operational costs in Aquaculture, with examples? [U] [3]
6. Name different factors affecting market price of fish? [R] [3]
7. What is Eutrophication? How does it affect aquatic life? [U] [4]
8. What is Heavy Metal pollution? How does it influence aquatic life? [U] [4]
9. Distinguish between Habitat Conservation and Restoration? [U] [5]
10. Distinguish between Chemical oxygen demand and Biological oxygen demand? [U] [5]
11. What are Oviparous and Viviparous Aquarium Fishes? Give examples? [R] [6]
12. How are Aquarium plants classified according to their position in water column?

Give examples?

[U] 6]

[2 x 10=20] Marks

Part B

Short Answer Questions

Answer 3 Questions

Each question carries 5 marks

13. Distinguish between Monoculture, Polyculture and Monosex culture with suitable examples [U] [1]
14. Discuss the different Physical water quality parameters in culture pond and add notes on their management? [A] [2,5]
15. Briefly explain the causes of Aquatic pollution and their preventive methods [U] [4]
16. Discuss the different Aquarium accessories and their role in fish Aquaria? [A] [6]
17. Discuss Fish Marketing platforms, their advantages and Disadvantages? [U] [3]

[5 x 3=15] Marks