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Name.....

Reg. No.....

**FOURTH SEMESTER (CBCSS—UG) DEGREE EXAMINATION
APRIL 2025**

Aquaculture

AQC4B07—BRACKISH WATER AQUACULTURE AND MARICULTURE

(2019—2023 Admissions)

Time : Two Hours

Maximum : 60 Marks

Part A (Short Answer)*Students can answer **all** questions.**Each question carries 2 marks.*

1. What are two major advantages of farming shellfish like oysters and mussels in mariculture ?
2. How does mariculture contribute to biodiversity conservation ?
3. How does the biology of *Etroplus suratensis* (pearlspot) influence its culture practices in brackish water systems ?
4. Name three species of shrimp commonly cultured in brackish water.
5. What are the main ecological subdivisions of the sea ?
6. Suggest two bioengineering solutions to mitigate biofouling in open sea farming.
7. What is the primary environmental concern associated with effluent discharge from brackish water aquaculture ?
8. What are the potential effects of chemical residues, including antibiotics, in coastal aquaculture systems ?
9. What are the impacts of salinity intrusion due to coastal aquaculture ?
10. What is the primary goal of coastal zone management (CZM) ?
11. What are the roles of Aquaculture authority ?
12. Explain the concept of genetic erosion in the context of indigenous fish stocks.

(Ceiling 20)

Turn over

Part B (Paragraph)

*Students can answer **all** questions.*

Each question carries 5 marks.

13. What are the key ecological parameters to monitor in brackish water farming ?
14. Why is salinity an important parameter in brackish water farming ?
15. Compare the advantages and disadvantages of monoculture and polyculture systems for *Chanos chanos*.
16. Compare extensive and intensive shrimp farming systems in terms of stocking density, feed, and management practices.
17. What are the prospects for lobster culture in India ?
18. Compare the advantages and disadvantages of submersible and floating cages in open sea farming.
19. How does eutrophication affect aquatic ecosystems in coastal aquaculture areas ?

(Ceiling 30)

Part C

*Write essays on any **one** of the following.*

20. Outline the culture practices for *Oreochromis mossambicus* (Mozambique tilapia) in brackish water systems.
21. Assess the future prospects of shrimp and crab culture in India, considering current trends and technological advancements.

(10 × 1 = 10 marks)