

FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION, NOVEMBER 2021**Aquaculture****AQC 1B 01—BIOLOGY OF FISHES****(2019 to 2020 Admissions)****Time : Two Hours****Maximum : 60 Marks****Part A (Very Shortly)***Answer all questions.**Each question carries 2 marks.**Ceiling : 20*

1. What are otoliths ?
2. Define instinct.
3. What is Ampullae of Lorenzini ?
4. Comment on lunar rhythm.
5. What is ICZN ?
6. Define condition factor.
7. What are viviparous fishes ?
8. What is tidal rhythm ?
9. What is natality ?
10. Comment on respiratory structures of crustaceans.
11. What is fecundity ?
12. Comment on catadromous migration.

Part B (Short Essay)*Answer all questions.**Each question carries 5 marks.**Ceiling : 30*

13. Write down the importance of moulting hormones in crustaceans.
14. Comment on maturation and spawning in fishes.

Turn over

15. Write an account on biological clocks in fishes.
16. Explain digestion in prawns.
17. Differentiate between herbivorous and carnivorous fishes.
18. What are reproductive hormones ? Comment on their role.
19. Explain secondary sexual characters of fishes.

Part C (Essay Question)

*Answer any **one** question.*

The question carries 10 marks.

Ceiling : 10

20. Write an essay on sexual dimorphism in fishes.
21. Elaborate on binomial nomenclature of commercially important fishes.

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Aquaculture

AQC 1B 01—BIOLOGY OF FISHES

(2021 Admissions)

Time : Two Hours

Maximum : 60 Marks

Section A

*Answer at least **eight** questions.*

Each question carries 3 marks.

All questions can be attended.

Overall Ceiling 24.

1. What is Fecundity ?
2. Define condition factor.
3. Mention the important functions of otoliths.
4. What is Natality ?
5. Mention the respiratory gases in fishes.
6. List out any two examples of catadromous fishes.
7. What is gut content analysis ?
8. What is Homing ?
9. What is lateral line system ?
10. What are antennary glands ?
11. Give an example of a fish which possess cycloid scales.
12. Give one example of an anadromous fish.

(8 × 3 = 24 marks)

Turn over

Section B

Answer at least five questions.

Each question carries 5 marks.

All questions can be attended.

Overall Ceiling 25.

13. Comment on sexual dimorphism in crustaceans.
14. Write down the adaptations for air breathing in fishes.
15. Write a note on the equations used for deriving growth rates.
16. Describe on endocrine organs in fishes.
17. Comment on sense organs of fishes.
18. Explain types and modifications of fish scales.
19. Write an account on age and growth in fishes.

(5 × 5 = 25 marks)

Section C

Answer any one question.

The question carries 11 marks.

20. Explain circulatory system and oxygen transport in fishes.
21. Write an essay on breeding migration in fishes and crustaceans.

(1 × 11 = 11 marks)