D 93898

Name..

Reg. No...................................

FIRST SEMESTER (CBCSS—UG) DEGREE EXAMINATION NOVEMBER 2020

Aquaculture

AQC 1B 01—BIOLOGY OF FISHES

(2019 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. Comment on Weberian apparatus.

2. Explain anadromous migration with examples.

3. Ovoviviparity in fish.

4. Define GSI.

5. Role of pituitary gland and its secretion in fishes.

6. What is closed circulation ?

7. Length weight relationship in fishes.

8. Major digestive glands in fishes.

9. Types of teeth in fishes.

10. What is Osmolarity ?

11. Parental care in fishes.

12. Morphometric *vs.* meristic characters.

(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. Age determination of fish using hard parts.

14. Gas transport in fishes and role of respiratory pigments.

15. Isometric *vs.* allometric growth.

16. Various locomotion types in fish.

17. Specialised sense organs in fish.

18. Constituents of blood of teleosts.

19. Discuss the osmoregulatory adaptations of catadromous fish and the role of hormones.

$(5 \times 5 = 25 \text{ marks})$

Section C

Answer any **one** *question.*
The question carries 11 marks.

20. Physiology of moulting and the role of hormones in crustaceans.

21. Sense organs in fish.

$(1 \times 11 = 11 \text{ marks})$

D 93769

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Reg. No...............................

FIRST SEMESTER (CUCBCSS—UG) DEGREE EXAMINATION NOVEMBER 2020

Aquaculture

AQC 1B 01—BIOLOGY OF FISHES

Time : Three Hours

Maximum : 80 Marks

Part A

Answer **all** *the questions below.*

Each question carries 1 *mark.*

1. Write the scientific name of mullet :

    (a) *Sardinella longiceps.*

    (b) *Mugil cephalus.*

    (c) *Etroplus suratensis.*

    (d) *Lactariu lactarius.*

2. Name an air breathing fish :

    (a) Anabas.

    (b) Hilsa.

    (c) Telescope.

    (d) Zebra fish.

3. Name the scales of Teleost fishes :

    (a) Cycloid scales.

    (b) Placoid scales.

    (c) Ganoid scales.

    (d) Cosmoid scales.

4. Fish which give birth to young ones ?

    (a) Viviparous fish.

    (b) Oviparous.

    (c) Placental.

    (d) Marsupial.

5. Which Order does the lung fishes belongs to ?

    (a) Dipnoi.

    (b) Teleostei.

    (c) Actinopterygii.

    (d) Agnatha.

Turn over

6. Give an example of a freshwater Prawn.

7. Give an example of a fish that exhibit diadromous migration.

8. Name a chromatophores present in fish.

9. Give an example of an omnivorous fish.

10. Name one endocrine gland in fishes.

(10 × 1 = 10 marks)

Part B

*Write any **five** of the following questions.*

Each question carries 2 marks.

11. Write notes on the Cephalic appendages in prawn.

12. Comment on Unpaired fin.

13. Write short notes on Bio-luminescence.

14. What is Diurnal rhythm ?

15. Comment on Ganoid scale.

16. What is Homocercal tail ?

17. Give a short note on Otolith.

(5 × 2 = 10 marks)

Part C

*Answer any **six** of the questions below.*

Each question carries 5 marks.

18. Write a note on biological clock.

19. Give an account on Feeding adaptation of fishes.

20. Briefly explain the different types of scales in fish.

21. Write a note on Ultimobranchial gland.

22. How the age is determined in fish ?

23. Write a note on different body forms in fish.

24. Explain the hormonal control of moulting in prawns.

25. Give a detailed account on the different types of appendages present in Prawn.

(6 × 5 = 30 marks)

Part D

Answer any **two** *of the following questions.*

Each question carries 15 *marks.*

26. Write an essay on excretion and osmoregulation in fresh water and marine fishes.

27. Give an account of sexual dimorphism in fish and crustaceans.

28. Elaborate on Fish migration.

29. Write an essay on sense organs in fishes.

(2 × 15 = 30 marks)