



QP CODE: 26019282



Reg No :

Name :

M.Sc DEGREE (CSS) EXAMINATION, MARCH 2026

Fourth Semester

M Sc ZOOLOGY

ELECTIVE - ZL800401 - NUTRITION, GROWTH AND PHYSIOLOGY OF FISHES

2019 Admission Onwards

07E3EFDB

Time: 3 Hours

Weightage: 30

Part A (Short Answer Questions)

*Answer any **eight** questions.*

Weight 1 each.

1. What is suction feeding?
2. What is the difference between digestible energy and metabolizable energy?
3. What are immunostimulants?
4. What is the importance of oxygen and temperature in fish growth?
5. What is spawning? What are different pattern of spawning in teleost fishes?
6. What is aplacental viviparity? Write an example.
7. Mention the role of pineal gland in fish reproduction.
8. What is meat by statoacoustic organ?
9. Name the four chromatophores in fishes.
10. What is aestivation? Write an example.

(8×1=8 weightage)

Part B (Short Essay/Problems)

*Answer any **six** questions.*

Weight 2 each.

11. Explain briefly the digestive system of shell fish?
12. Describe the source, functions and deficiency symptoms of protein nutrition in fishes.





13. Explain the source, functions and deficiency symptoms of lipid nutrition in fishes.
14. Explain the deficiency symptoms of minerals in fishes.
15. Describe different stages in the development of male gonad in fishes.
16. Write a short account on seasonal reproductive cycle in fish.
17. Explain the mode of action of Weberian ossicles.
18. Explain the structure of the inner ear in a fish.

(6×2=12 weightage)

Part C (Essay Type Questions)

*Answer any **two** questions.*

Weight 5 each.

19. Explain the modifications of the digestive system in relation to age and growth.
20. Write an essay on metabolism and growth of fish.
21. Write an essay on reproductive cycles and breeding behaviour in fish.
22. Write an essay on accessory respiratory organs in fishes with suitable examples.

(2×5=10 weightage)

