



QP CODE: 20100967



20100967

Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATION, MARCH 2020

Fourth Semester

B.Sc Zoology Model II Aquaculture

**Vocational Course - ZA4VOT07 - REPRODUCTIVE PHYSIOLOGY AND
ENDOCRINOLOGY**

2017 Admission onwards

82010609

Time: 3 Hours

Marks: 60

Part A

*Answer any **ten** questions.*

*Each question carries **1** mark.*

1. What are Mesorchia?
2. Cite examples for viviparity in Elasmobranchs?
3. Name the three parts of a teleost sperm?
4. Comment on the functions of melatonin?
5. Comment on Hypothalamus-Pituitary-Gonadal axis in fishes?
6. Comment on the role of Androgenic gland in parasitic castration?
7. What are the different levels of control in the induced breeding and maturation of fishes?
8. What is Pregnant Mare Serum?
9. Comment on Benzocaine?
10. What are the methods of sex reversal in fishes?
11. What are the cryoinjuries associated with freezing?
12. Explain involution?

(10×1=10)

Part B

*Answer any **six** questions.*

*Each question carries **5** marks.*

13. Explain the female reproductive system in Penaeid prawns with suitable diagram?
14. Explain accessory reproductive structures in male and female crabs?





15. What is Hermaphroditism? Explain the different types of hermaphroditism exhibited by fishes with suitable examples?
16. Explain the hormones controlling reproduction in Fishes?
17. Explain the structural organisation of Sinus Gland complex and X organs in Teleosts? Elaborate upon the different hormones produced by the X-Organ Sinus Gland complex
18. Explain environmental control of reproduction in penaeid prawns?
19. Briefly explain Hypophysation in the induced breeding of fishes?
20. What is eyestalk ablation? Explain the principle and procedure of eyestalk ablation in prawns?
21. Explain Pelagic and Demersal eggs in teleosts? How are teleost eggs classified according to yolk content and arrangement of yolk?

(6×5=30)

Part C

*Answer any **two** questions.*

*Each question carries **10** marks.*

22. Explain the Classification of maturity stages of ovary and testes in fishes with suitable diagrams?
23. Explain the structure of the pituitary in fishes? Elaborate upon the different hormones produced by the pituitary and their functions?
24. Describe the structure and functions of the true endocrine organs in Crustacea?
25. Explain the different methods of spawning hormone administration in fishes. Discuss their advantages and disadvantages? Add a note on Ovaprim and Linpe method?

(2×10=20)

