



21102947

QP CODE: 21102947

Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATIONS, OCTOBER 2021

Fourth Semester

B.Sc Zoology Model II Aquaculture

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

2019 Admission only

365AACFC

Time: 3 Hours

Max. Marks : 60

Part A

*Answer any **ten** questions.*

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

1. How are male and female crabs distinguished by the shape of the abdomen?
2. Cite examples for viviparity in teleosts.
3. Distinguish between protandrous and protogynous hermaphroditism.
4. Distinguish between Platybasic and Leptobasic pituitary.
5. Distinguish between Nucleus Pre Opticus and Nucleus lateralis Tuberosus.
6. What is X- Organ Sinus Gland Complex?
7. What is the influence of temperature on gonad maturation in teleosts?
8. What is Puerperin?
9. What is Metomidate Hydrochloride?
10. What is the temperature of liquid nitrogen? What is liquid nitrogen used for?
11. What is an electrocautery apparatus? What is it used for?
12. What are the characters of pelagic eggs of teleosts?

(10×1=10)

Part B

*Answer any **six** questions.*

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





13. What is sexual dimorphism? Explain sexual dimorphism in teleost fishes?
14. Explain the classification of maturity stages of testes and ovaries in penaeid prawns.
15. Explain the different types of sex determination in fishes.
16. What is the Hypothalamus- Pituitary- Gonadal Axis in fishes? How is it involved in the control of maturation in fishes?
17. What is Parasitic Castration? Explain parasitic castration with reference to crabs?
18. Explain the different levels of hormonal control and induced maturation in fishes.
19. Explain the different methods of spawning hormone administration in fishes. Explain their advantages and disadvantages.
20. Briefly explain Hypophysation in the induced breeding of fishes.
21. Explain cleavage, morula and blastoderm formation in teleost egg and embryo.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. Explain the Male and Female reproductive systems in Penaeid prawns. Add a note of sexual dimorphism in prawns.
23. Explain the structure and functions of any 6 non neural endocrine organs in fishes.
24. Explain the endocrine control of reproduction and moulting in Crustacea. Add a note on the interaction between hormones controlling moulting and reproduction.
25. What is Sex Reversal? Explain different methods of sex reversal and its uses in aquaculture.

(2×10=20)

