Reg. No	Name	19P2024
Keg. No	Name	19P2024

## MSc DEGREE END SEMESTER EXAMINATION - MARCH/APRIL 2019 SEMESTER 2 : AQUACULTURE AND FISH PROCESSING

COURSE: 16P2AQCT06: BIOCHEMISTRY AND NUTRITION OF FIN FISH & SHELL FISH

(For Regular - 2018 Admission and Supplementary - 2017/2016 Admissions)

Time: Three Hours Max. Marks: 75

## Section A Answer any 8 (2 marks each)

- 1. what is meant by Osazone reaction?
- 2. What is Carboxymethyl cellulose?Explain.
- 3. What are Glycolipids?
- 4. Explain the formula 18:2 n-3.
- 5. What is Amino acid toxicity?
- 6. What is an Iso enzymes?
- 7. Differentiate between nucleoside and nucleotide.
- 8. What is metabolisable energy?
- 9. Mention mechanisms of heat loss in fishes.
- 10. Name five phytoplankton used in aquaculture
- 11. What is the significance of yolk sac in fish nutrition?
- 12. How productive protein value is calculated .

 $(2 \times 8 = 16)$ 

## Section B Answer any 7 (5 marks each)

- 13. Explain the Carbohydrate metabolism .
- 14. Briefly explain the fat digestion in fishes.
- 15. Differentiate between Globular and fibrous proteins.
- 16. Describe types of enzyme inhibition.
- 17. Write a short note about translation.
- 18. Describe the factors affecting energy requirements in fish.
- 19. Give an account on the protein deficiency diseases in fishes.
- 20. What is the significane of Probiotics in fish feeds?
- 21. Give an account on the different types of larval feeds used in aquaculture.
- 22. Which are the different Feeding methods for fishes.

## Section C Answer any 2 (12 marks each)

- 23. Give an account on the classification of lipids and its role in aquaculture.
- 24. Give a detailed account of DNA structure and replication.
- 25. Explain the significance of Micro and macro minerals in fish nutrition.
- 26. Explain different aspects of feed handling and storage for aquaculture.

 $(12 \times 2 = 24)$