



QP CODE: 25019892

Reg No	:	
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# B.Sc DEGREE (CBCS) ) REGULAR/ IMPROVEMENT/ REAPPEARANCE / MERCY CHANCE EXAMINATIONS, FEBRUARY 2025

### **Fourth Semester**

B.Sc Zoology Model II Aquaculture

## Vocational Course - ZA4VOT08 - MICROBIOLOGY, PATHOLOGY AND POST HARVEST TECHNOLOGY.

2017 Admission Onwards

2F303477

Time: 3 Hours Max. Marks: 60

#### Part A

Answer any **ten** questions.

Each question carries **1** mark.

- 1. Distinguish between Mesophilic and Psychrophilic bacteria.
- 2. Differentiate between Sterilisation and Pasteurisation.
- 3. Briefly explain Pour plate Technique.
- 4. What is rigor mortis?
- 5. What is Autolysis?
- 6. What is the principle of Freezing?
- 7. Comment on Slow freezing and quick freezing.
- 8. Comment on struvite formation.
- 9. What is Surumi?
- 10. Comment on Chitin and Chitosan. Mention its applications in various sectors.
- 11. Comment on EUS.
- 12. Write a brief note on Dactylogyrosis ,symptoms and treatment.

 $(10 \times 1 = 10)$ 

## Part B

Answer any six questions.

Each question carries 5 marks.



Page 1/2 Turn Over



- 13. Explain classification of bacteria based on Oxygen requirement. Give examples.
- 14. What is Gram Staining? Explain the principle and procedure of Gram staining.
- 15. What are indices of spoilage? Briefly explain the different indices of spoilage in fishes.
- 16. Distinguish between Immersion freezing and Cryogenic freezing methods.
- 17. Explain thawing and different thawing methods.
- 18. Give an account on Plate Freezers and explain the different types. Mention their advantages?
- 19. Elaborate common defects in cured products.
- 20. Explain bacterial diseases in fin fishes.
- 21. Describe major bacterial diseases of shrimp

 $(6 \times 5 = 30)$ 

#### Part C

Answer any two questions.

Each question carries 10 marks.

- 22. Give an account on important bacteria of sanitary significance and faecal indicator organisms?
- 23. Explain the procedure of canning and advantages of canning over other methods of preservation. Write notes on common defects in canning.
- 24. What is Curing? Explain common curing methods in preservation of fish. Write notes on common defects in curing.
- 25. Define Hazard. Give an account on the procedure of Hazard Analysis and Critical Control Points in sea food industry.

 $(2 \times 10 = 20)$ 

