



QP CODE: 20100968



20100968

Reg No :

Name :

B.Sc DEGREE (CBCS) EXAMINATION, MARCH 2020

Fourth Semester

B.Sc Zoology Model II Aquaculture

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

2017 Admission onwards

59554277

Time: 3 Hours

Marks: 60

Part A

*Answer any **ten** questions.*

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

1. Differentiate between Lag phase and Log phase in a bacterial growth curve.
2. Briefly explain Pour plate Technique.
3. Which are the stains used as Primary and counter stains in Gram's staining?
4. Write a note on NPN compounds of fish?
5. What is Organoleptic inspection?
6. Define Thermal arrest time.
7. Briefly explain any two thawing methods.
8. Briefly explain glazing and its importance.
9. What is masmin?
10. What is Fish oil? How is it prepared?
11. Comment on Argulosis.
12. What is biological hazard. Give example.

(10×1=10)

Part B

*Answer any **six** questions.*

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

13. Give an account on classification of bacteria based on temperature requirement





14. Explain the procedure of Total Plate Count Estimation.
15. Briefly explain enzymatic and biochemical spoilage of fishes.
16. Give an account on Slow freezing and quick freezing methods.
17. Give an account on Plate Freezers and explain the different types. Mention their advantages.
18. Explain the common defects found in canned products.
19. Explain Dry and Wet curing methods in fish preservation.
20. Elaborate on viral diseases of fin fishes with its symptoms and preventive measures.
21. Elaborate protozoan diseases of fishes, their symptoms and remedial measures.

(6×5=30)

Part C

*Answer any **two** questions.*

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

22. What is sterilisation? Give an account of different sterilisation techniques used in microbiological studies?
23. Explain the procedure of canning and advantages of canning over other methods of preservation. Write notes on common defects in canning.
24. Describe value addition. Give details on various value added products from fishery sector.
25. Explain bacterial diseases of fin fishes with its vital symptoms and remedial measures.

(2×10=20)

