

Reg. No

Name

19P4035

MSc DEGREE END SEMESTER EXAMINATION - MARCH/APRIL 2019

SEMESTER 4 : AQUACULTURE AND FISH PROCESSING

COURSE : 16P4AQCT14 : FISH MICROBIOLOGY AND QUALITY ASSURANCE

(For Regular - 2017 Admission and Supplementary - 2016 Admission)

Time : Three Hours

Max. Marks: 75

Section A

Answer any 8 (2 marks each)

1. What are thermophiles? Give examples.
2. Native microbial flora of fish
3. Explain the importance of *Aspergillus flavus*.
4. Explain Acid fast staining.
5. What are probiotics?
6. Define available chlorine
7. TMA
8. Peroxide value
9. BIS
10. Botulism
11. Define GMPs with examples
12. Critical Limit

(2 x 8 = 16)

Section B

Answer any 7 (5 marks each)

13. *Salmonella* in seafoods. Comment on it.
14. Elaborate on food intoxications.
15. Explain differences between gram positive and gram negative bacteria.
16. Elaborate on HACCP in sea food industry
17. Explain the quality of water and ice for seafood processing
18. Heavy metals in seafood
19. Write on physical hazards in fish
20. Explain different types of hazards in seafoods with examples
21. Elaborate on the international standards for fish and fish products
22. Explain the importance of personnel hygiene in seafood industry.

(5 x 7 = 35)

Section C

Answer any 2 (12 marks each)

23. Give an account of selective media used for the isolation of Salmonella.
24. Quality issues of fish and fishery products
25. Write on different methods available on quality evaluation of fish
26. Explain SSOP and its advantages.

(12 x 2 = 24)