

Reg. No

Name

18P435

MSc DEGREE END SEMESTER EXAMINATION- MARCH 2018
SEMESTER 4 : AQUACULTURE AND FISH PROCESSING
COURSE : 16P4AQCT14 ; FISH MICROBIOLOGY AND QUALITY ASSURANCE
(For Regular - 2016 admission)

Time : Three Hours

Max. Marks: 75

Section A
Answer any 8 (2 marks each)

1. How histamine is formed in scombroid fish?
2. What is spore stain?
3. What is pili and the importance of sex pili?
4. What is meant by Gram positive organisms and give two examples?
5. What are hypochlorites?
6. Differentiate quality assurance from quality control
7. Demerit scoring for organoleptic evaluation
8. Peroxide value
9. BIS
10. Botulism
11. FSSAI
12. Inprocess quality control

(2 x 8 = 16)

Section B
Answer any 7 (5 marks each)

13. What is the importance of total bacterial count in fish?
14. Effect of salt curing on bacteria.
15. Write briefly on bacterial reproduction.
16. Give an account of heavy metals in Seafood
17. Why water quality is important in Seafood industry?
18. Describe the common disinfectants used in sea food industries.
19. Explain different types of hazards in seafoods with examples
20. Write on EU 98/83 standards
21. Elaborate on GMP in seafood industries
22. Explain the importance of personnel hygiene in seafood industry.

(5 x 7 = 35)

Section C
Answer any 2 (12 marks each)

23. Describe the method for detection of total coliforms, faecal coliforms and *E.coli* in fish samples.
24. Quality issues of fish and fishery products
25. What is meant by hazard with respect to HACCP? Write on different hazards in seafoods.

26. Explain SSOP and its advantages.

(12 x 2 = 24)