

M.Sc. 4th Semester Examination, 2013

**AQUACULTURE MANAGEMENT AND
TECHNOLOGY**

(Food Safety and Quality Assurance)

PAPER—AMT - 402

Full Marks : 40

Time : 2 hours

The figures in the right-hand margin indicate marks

*Candidates are required to give their answers in their
own words as far as practicable*

Illustrate the answers wherever necessary

1. Answer any *four* of the following questions : 2 × 4

(a) What is the principle of fish freezing ?

(b) State the demerits of block Ice.

**(c) Differentiate between quality assurance and
quality control.**

(Turn Over)

(2)

- (d) What are the impacts of botulism on human health ?
- (e) State the characteristics of pre-rigor fish.
- (f) Write the proximate composition of *Penacus Indicus*.
- (g) Why fast freezing method is advantageous then slow freezing method ?
- (h) State the demerits of thawing.

2. Answer any *four* of the following : 4 × 4

- (a) Briefly illustrate the composition of HACCP team.
- (b) State the impact of freezing on bacteria of public health significance.
- (c) State the characteristics of spoiled fish.
- (d) Explain the post-mortem biochemical changes in fish tissues.

(3)

(e) How much ice would be required for preservation of 70 kg of tiger prawn.

(f) Briefly describe the process of protein denaturation.

(g) What is drip loss? State its impact on processing industry.

(h) Briefly describe the food intoxication.

3. Answer any *two* of the following : 8 × 2

(a) What is plate freezing? Briefly describe the process of plate freezing. Add a note on their advantages. 2 + 4 + 2

(b) What is thawing? Give an account on the different types of thawing methods employed in processing plant. 2 + 6

(c) State the principles of HACCP. Discuss about various steps in the HACCP study. 3 + 5

(4)

(d) Write short notes (any two) : 4×2

- (i) Organoleptic test
 - (ii) Storage of frozen products
 - (iii) Lipid oxidation
 - (iv) Transportation of fresh fish.
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