



Name :

Roll No. :

Invigilator's Signature :

**CS/B.Tech(FT)/SEM-5/FT-501/2009-10
2009**

**FOOD PROCESS TECHNOLOGY II
(FISH, MEAT & POULTRY)**

Time Allotted : 3 Hours

Full Marks : 70

The figures in the margin indicate full marks.

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

**GROUP – A
(Multiple Choice Type Questions)**

1. Choose the correct alternatives for the following :

10 × 1 = 10

- i) The protein which is responsible for the thickness of albumen of egg is
 - a) Ovalbumin
 - b) Conalbumin
 - c) Ovomucin
 - d) none of these.
- ii) The chief muscle pigment is a protein called
 - a) Collagen
 - b) Keratin
 - c) Myoglobin
 - d) Elastin.
- iii) In fresh water fish generally
 - a) TMA is present but TMAO is absent
 - b) TMA is absent but TMAO is present
 - c) both are present
 - d) both are absent.

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GROUP – B

(Short Answer Type Questions)

Answer any *three* of the following.

$3 \times 5 = 15$

2. What is the purpose of curing ? Name different types of ingredients used for curing. Discuss the pickle curing method of meat.
3. Discuss about microbial and enzymatic spoilage of fish.
4. Ice is the ideal refrigerant for fresh fish. Discuss. What is the suitable icing method of wet fish ?
5. What is rigor mortis in meat ? Explain its effect on the quality of meat.
6. In ice-chilled storage, non-fatty fishes generally have longer shelf-life than the fatty ones. Why ? Draw and label a simple schematic diagram of an ice-flake maker. What is the full form of the abbreviation IQE, related to fish preservation.

$1 + 2 + 2$

$3 + 2$

$1 + 3 + 1$

GROUP – C

(Long Answer Type Questions)

Answer any *three* of the following.

$3 \times 15 = 45$

7. What is Bacon ? Give the classification of Sausages. Discuss about the steps involved in processing of Sausages. What is Bockwurst ?
8. a) Why is the storage life of egg more than fish under same storage condition ?
b) Why the spoilage of fish starts from belly and head ?
c) What do you mean by "belly burn" and "torn belly" ?
d) How is a fish judged as fresh or spoiled by sensory evolution.
e) What is the significance of rigor mortis in the context of spoilage ?
f) Give an example of each for lean fish and fatty fish.

$2 + 3 + 8 + 2$

$2 + 2 + 2 + 5 + 2 + 2$



9. What is fish protein concentrate ? How is it prepared ? What are the uses of FPC ? Distinguish between different types of FPC with their characteristics ? What is the difference between FPC and fish meal ? 2 + 6 + 2 + 3 + 2
10. a) What is stunning ? Describe briefly the different methods of stunning. What is the method applied normally in the slaughtering of poultry ? How is bleeding in the slaughtering process related with stunning ? 5
- b) How are eggs stored ? What are the methods applied to prolong the storage life of eggs ? Which particular group of bacteria is found most in eggs ? Which steps are taken to prevent this bacterial contamination ? Why is it different to sterilize egg white ? How it can be sterilized successfully at a lower temperature ? 10
11. Describe the processing of spray dried whole eggs using a simple flow-diagram. Describe briefly egg preservation using water glass. Name two antimicrobial naturally occurring in egg albumin. 10 + 3 + 2
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