53 (FPT 813) FMPT

## 2018

## FOOD PRODUCT TECHNOLOGY-VI (FISH, MEAT AND POULTRY TECHNOLOGY)

Paper: FPT 813

Full Marks: 100

Time: Three hours

## The figures in the margin indicate full marks for the questions.

## Answer any five questions.

- 1. (a) What are pelagic and demersal fishes?
  What is the average protein content of fish?

  2+1=3
  - (b) Discuss the availability of SAFA, MUFA and PUFA in fresh water fish and marine water fish.
  - (c) Why ice is used as refrigerant for fish? What type of ice is suitable for chilling of fish? Discuss an ideal icing method for transport and distribution of fish. What is RSW storage? 2+2+6+1=11

- 2. (a) What do you understand by improved catching and handling of fresh fish? How fish quality is affected by catching and handling? How delay in icing suitably affects the fish quality?
  3+3+3=9
  - (b) Discuss the role of TMAO as spoilage indicator of fish. What are the reasons for spoilage of fresh fish? Mention the availability of vitamins and minerals and their roles in fish. 5+4+2=11
- 3. (a) What are the fish freshness criteria?

  Define fish freshness index and mention how it influences fish quality. 3+3=6
  - (b) Describe briefly the quality characteristics of fish assessment. 6
  - (c) Discuss the different methods for freezing of fish. What do you understand by IQF method of freezing fish?

    6+2=8
- 4. (a) Describe the CPD technology of commercial production of IQF prawn. Why glazing is necessary for frozen fish?

- (b) Discuss the process for canning of sardines. What type of can is suitable? 6+2=8
- (c) Describe the commercial manufacture of fish sausage.
- 5. (a) What is smoking of fish? What is fish ensilage? What is rigor mortis? 2+2+1=5
  - (b) Describe fish curing process. What is collagen? 6+1=7
  - (c) What do you understand by PSE and DFD meat? What are these? Discuss the factors affecting post mortem glycolysis of meat.

    2+1+5=8
- 6. (a) Describe different types of meat curing techniques. Discuss the effect of curing salt on the color of meat. 5+5=10
  - (b) What is tenderization of meat ? Mention some meat tenderization techniques.

    1+2=3
  - (c) Discuss poultry meat processing technology with the layout and importance of stunning process. 7

- 7. Write short notes on the following: (any five) 4×5=20
  - (a) Meat sausage
  - (b) Fish protein concentrate
  - (c) Desugarisation of egg
  - (d) Fish liver oil
  - (e) Ageing of meat
  - (f) Salami
  - (g) Fish soluble
  - (h) Meat by-products and their utilization.

(b) What is terror or or or area? ? Menuos