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B.Tech
6th Sem
2022

Roll No.



Department of Food Technology
School of Interdisciplinary Sciences and Technology
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END SEM EXAMINATION

Paper Title: **Meat, Fish and Poultry Technology**
Time allotted: 3Hrs.

Paper Code: **BFTC – 601**
Max Marks: 75

Q1. Choose the correct answer (10)

- i. Which of the following is a common sanitizer used in meat industry. (1)
 - a. Sodium hypochlorite
 - b. Sodium chloride
 - c. Magnesium chloride
 - d. Ferric chloride
- ii. _____ is used to determine the condition of the air cell, yolk, and white. (1)
- iii. The organisms of great importance in poultry are (1)
 - a. *Cladosporium and mucor*
 - b. *Salmonella* spp. and *Campylobacter jejuni*
 - c. *B. thermosphacta* and *Salmonella* spp
 - d. *Campylobacter jejuni* and *Thamnidium*
- iv. The two distinct reactions in fish lipids of importance for quality deterioration are: (1)
 - a. Fermentation and oxidation
 - b. Non-enzymatic browning & oxidation
 - c. Maillard reaction and hydrolysis
 - d. Oxidation and hydrolysis
- v. The biological value of fish protein: (1)
 - a. 50
 - b. 60
 - c. 80
 - d. 100
- vi. The primary causes of poultry products spoilage are as follows: (1)
 - a. Prolonged distribution or storage time
 - b. Inappropriate storage temperature
 - c. High initial bacterial counts
 - d. High post-rigor meat pH

(a) and (c)
(a), (b) and (c)
(a), (b), (c) and (d)
(b) and (d)

vii. The increase in the ratio of inosine and hypoxanthine to the total quantity of ATP and its related substances corresponds to the decline of the fish's freshness well. This ratio is called as (1)

- a. F value
- b. T value
- c. K value
- d. Z value

viii. The proteolytic enzymes involved in meat tenderization (1)

- a. Calpain & Cathepsins
- b. Calpain & Lipase
- c. Cathepsins & Lipase
- d. Calpain, Cathepsins & lipase

ix. The process of coating surface of meat products with edible materials is known as (1)

x. Define marbling (1)

Section B

Q2. Discuss any three of the following

- a. Principles of meat hygiene? (5)
- b. Steps involved in poultry processing in detail (5)
- c. Post-mortem pH decline and its effect on water holding capacity (5)
- d. Stunning methods (5)

Q3. Answer any three of the following

- a. Differentiate between broilers and layers? (5)
- b. Do processed egg products have several advantages over unprocessed eggs? Justify (5)
- c. Emulsification & Factors affecting the stability of emulsion. (5)
- d. What points should be considered while designing and constructing poultry processing plant? Enumerate 6 points. (5)

Q4. Write Short note on (any one)

- a. What are enzymes that help in the process of Autolysis of fish? What are the important physical changes occurring during spoilage of fish? (5)
- b. Pre- slaughter and post-slaughter factors affecting the tenderness of meat. (5)

Section C

Answer any three questions

Q5. How long do eggs last? Suggest some processing methods with flow chart, to create value added products with improved shelf life. (10)

Q6. Explain in detail the post-mortem biochemical changes. (10)

Q7. Discuss the overall design of the modern abattoirs. (10)