



LOYOLA COLLEGE (AUTONOMOUS) CHENNAI – 600 034

M.Sc. DEGREE EXAMINATION – FOOD CHEMISTRY AND FOOD PROCESSING



THIRD SEMESTER – NOVEMBER 2024

PFP3MC01 – MEAT, POULTRY AND SEAFOOD PROCESSING

Date: 07-11-2024

Dept. No.

Max. : 100 Marks

Time: 01:00 pm-04:00 pm

SECTION A – K1 (CO1)

Answer ALL the questions

(5 x 1 = 5)

1 Definitions

- a) Evisceration
- b) Emulsification capacity
- c) Stick water
- d) Chalazae
- e) Scalding

SECTION A – K2 (CO1)

Answer ALL the questions

(5 x 1 = 5)

2 True or False

- a) Stunning is making animals unconscious prior to slaughter.
- b) A special equipment called a 'bowl chopper' is used for preparation of emulsion.
- c) Hot-smoked fishes can be used for immediate consumption.
- d) Colour of the eggshell determines the nutritional quality of an egg.
- e) Pneumatic shears aids in removing the neck and head of the poultry.

SECTION B – K3 (CO2)

Answer any THREE of the following

(3 x 10 = 30)

- 3 Discuss the antemortem care of animals prior to slaughter.
- 4 Explain the various factors that affects the shelf life of meat and meat products.
- 5 Enumerate the specifications and processing operations of fish protein concentrate.
- 6 Diagrammatically represent a hen's egg and briefly explain the chicken - egg first theory.
- 7 Explain the various poultry processing equipments used in an industry.

SECTION C – K4 (CO3)**Answer any TWO of the following****(2 x 12.5 = 25)**

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| 8 | Illustrate sliding filament theory with a neat diagram. |
| 9 | Comment on the methods adopted for artificial meat tenderization. |
| 10 | Discuss briefly on canning, smoking and drying of fish. |
| 11 | Highlight the nutritional composition of a hen's egg. |

SECTION D – K5 (CO4)**Answer any ONE of the following****(1 x 15 = 15)**

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| 12 | Summarize the concept of irradiation and its impact on meat and meat products. |
| 13 | Discuss in detail the egg formation process with a suitable illustration. What are the different grading systems adopted to categorize the quality of an egg? |

SECTION E – K6 (CO5)**Answer any ONE of the following****(1 x 20 = 20)**

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| 14 | Compile the biochemical changes involved in Rigor Mortis and its effect on the quality attributes of meat. |
| 15 | Give a detailed account of the poultry processing operations employed in an industry with the aid of suitable flowchart. Write a brief note on the requirements of a packaging label for the processed poultry products. |
