



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – APRIL 2018

16PFP3MC02- LIVESTOCK PROCESSING

Date: 26-04-2018
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

Part A

Answer all the questions.

10 x 2 = 20 marks

1. How can animal meat sources a potential risk for food poisoning?
2. Differentiate stale and fresh eggs.
3. List the causes of the high perishability of fish.
3. Give the differences between scalding and defeathering in poultry processing.
4. Define the following: a. Yolk index b. Albumin Index
6. Diagrammatically represent the role of calcium in muscle contraction.
7. What is Halal meat? Give two differences between ritualistic and conventional slaughter methods.
8. Give the grading of eggs based on their sizes.
9. What are the two specialized systems of meat sources for processing?
10. Mention any two stunning methods adopted for poultry processing.

Part B

Answer any eight questions.

8 x 5 = 40 marks

11. Describe the requirements of a plant layout for a poultry processing unit.
12. What is curing of meat? Give a brief account on the role of nitrites in the curing process.
13. Illustrate the changes that take place at the neuromuscular junction.
14. Diagrammatically represent an egg of a hen and label its parts.
15. Give a brief account on the ritualistic animal slaughter practices across the world.
16. What are the characteristics adopted in identifying the freshness of fish.
17. What is Fish Protein Concentrate? Illustrate its manufacturing process with a flowchart.
18. Highlight the requirements of a packaging label for processed poultry?
19. Write a brief note on Bovine Spongiform Encephalopathy (BSE) that infects the cattle.
20. Classify fishes based on the depth of water and the habitat.
21. Briefly explain the processing of powdered egg powder with a suitable flow diagram.
22. Justify smoking of meat? Mention the functional properties of smoke used in processing.

Part C

Answer any four questions.

4 x 10 = 40 marks

23. Enumerate the formation of a poultry egg with a suitable diagram. (8 marks)
Highlight the nutritional significance of the proteins present in an egg. (2 marks)
24. Discuss in detail the processing of poultry from the farm to the table.

25. What is sliding filament theory in muscle? (3 marks)

Explain the changes that occur during the onset of rigor mortis using suitable diagrams. (7 marks)

26. Explain in detail the cold temperature preservation of fish. (4 marks)

What are the factors to be considered while freezing fish? (6 marks)

27. Give a brief account on the following:

a. Dehydration of egg (5 marks) b. Pasteurization of egg yolk and egg white (5 marks)

28. Discuss the post mortem changes observed in meat. (6 marks)

Give the significance of the acidification of the meat muscle. (4 marks)
