



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

THIRD SEMESTER – NOVEMBER 2019

18PFP3MC02 – LIVESTOCK PROCESSING

Date: 31-10-2019

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

Part A

Answer ALL the questions.

(10 x 3 =30 marks)

1. Grade the eggs based on their weight in grams.
2. What are the natural barriers of an egg to protect it from microbes?
3. Write a brief note on mechanical and electrical tenderization of meat
4. Mention the advantages of a designer egg.
5. What is desugaring of an egg? Give any one method.
6. Write a brief note on the changes during fish spoilage
7. How is consumption of meat linked to the onset of cancer?
8. Briefly explain the nutritional composition of fish.
9. List the types of spoilages encountered in an egg.
10. Discuss briefly on meat extension and TVP.

Part B

Answer ALL the questions.

(5 x 8 = 40 marks)

- 11 a. Diagrammatically describe an egg. Give the formulae for assessing the physical nature of eggs.
OR
b. Justify the painless ritualistic system of animal slaughter.
- 12 a. What are the internal quality assessment parameters for commercially grading eggs according to the USDA standards?
OR
b. Discuss the action potential in a muscle system during the contraction.
- 13 a. Write a detailed note on the criteria of meat selection and grading of beef.
OR
b. Explain the formation of an hen's egg describing the various stages.
14. a. Discuss the nutritional composition of an egg.
OR
b. What are the key differences between Halal and Kosher systems of processing food?

15. a. Enumerate in detail the packaging details on a processed poultry product. Give an example to support your answer.

OR

b. Explain the factors affecting the post-mortem changes of meat.

Part C

Answer ANY TWO questions.

(2 x 15 = 30 marks)

16. Explain the following in detail:

- a. Effect of radiation on fish muscle component
- b. individual quick freezing of fish

17. a. Explain in detail the processing operations employed for poultry meat from the farmhouse to the factory.

b. In your opinion, what measures will you adopt to improve the sanitation conditions in the facilities available in your locality?

18. Discuss in detail the following:

- a. Structure of a muscle fiber (5)
- b. Sliding filament theory of muscle contraction (10)

19. Give a detailed account of the various egg production systems.
