



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FOURTH SEMESTER – APRIL 2019

FP 4805– FOOD FROM ANIMAL SOURCES & PROCESSING TECHNIQUES

Date: 04-04-2019

Dept. No.

Max. : 100 Marks

Time: 09:00-12:00

Part A

Answer ALL the questions.

10 x 2 =20 marks

1. Mention any four causes of food biodeterioration.
2. What is texturised meat? Give any two advantages.
3. Differentiate Halal and Kosher with any four suitable examples.
4. Give the classification of aquaculture.
5. What are designer eggs?
6. Illustrate a muscle organ.
7. Classify fishes based on the depth of water.
8. Illustrate a Sarcomere with a suitable diagram.
9. Mention any two advantages of extensive aquaculture.
10. List the colour pigments present in meat.

Part B

Answer any EIGHT questions.

8x5=40 marks

11. Briefly describe the following unit operations
a. Disintegration b. Forming
12. How many kg of 40 % cream and 5 % milk will be required to make 600 kg of a mixture testing 4 % fat?
13. Explain the reasons for the high perishability of fishes.
14. Write a note on the following:
a. Procurement of fish (2 marks)
b. Nutritive value of fish (3 marks)
15. What are the different stunning operations of animal processing?
16. Highlight the advantages of cage culture in fish farming.
17. Justify the high perishability of fishes.
18. What are the advantages and disadvantages of the pen culture of fish farming?
19. Explain the effect of artificial tenderization on meat?
20. Describe freezer burn. Give its effect and method of prevention.
21. What is the role of nitrosamines in cancer progression?
22. Discuss the steps involved in the preparation of condensed milk with a suitable flow chart.

Part C

Answer any FOUR questions.

4x 10=40 marks

23. Elaborate the poultry processing operations in an industry.
24. i) Enumerate the sliding filament theory of muscle contraction with a suitable diagram.(7marks)
ii) What is aging of meat? (3 marks)
25. i) What are the preservation techniques used in egg processing? (4 marks)
ii) Give an account on the different types of pasteurization processes to preserve eggs. (6 marks)
26. i) What is the role of curing ingredients in meat preservation? (6 marks)
ii) Write a short note on 'green cure' in the curing process. (4 marks)
27. Discuss in detail the processing sequence of milk from the farm to the table
28. Describe the significance of ante-mortem treatment of animals before slaughter.
