



LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034

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

FOURTH SEMESTER – APRIL 2015

FP 4805 - FOOD FROM ANIMAL SOURCES & PROCESSING TECHNIQUES

Date : 15/04/2015

Dept. No.

Max. : 100 Marks

Time : 09:00-12:00

Part A

Answer all the questions.

10 x 2 =20 marks

1. Mention any two desirable food changes brought about by microorganisms.
2. What is margarine? Give any two health implications of Trans fat.
3. Give any two significant features of Halal meat.
4. Classify bacteria based on their requirement of oxygen.
5. How many parts by weight of 40% cream and 5% milk must be mixed to make milk testing 4% fat?
6. Differentiate Kefir milk and Kumiss milk.
7. Draw the structure of a sarcomere and label its parts.
8. Diagrammatically represent the role of calcium in muscle contraction.
9. List the different market forms of fishes.
10. What is integrated aquaculture?

Part B

Answer any eight questions.

8 x 5= 40 marks

11. Explain briefly any two food borne infections.
12. How does moisture and oxygen affect the contamination of food?
13. Write a brief note on milk production practice and the factors that lead to the compositional variation in cow's milk.
14. Describe the following unit operations in poultry processing:
A. Scalding B. Defeathering C. Evisceration
15. Draw the structure of an egg and label its parts.
16. How can one prevent egg spoilage by pasteurization using the heat plus hydrogen peroxide method?
17. Calculate the yield of cream from the following data:
 $M = 420 \text{ kg}$ $F_m = 6\%$ $F_s = 1.5\%$ $F_c = 28\%$
18. Illustrate the events that occur during a muscle contraction using a suitable flow diagram.
19. Illustrate the process of preparing fish meal with a flow chart.
20. Write short notes on the following:
a. Growth hormones and milk production
b. Pasteurization temperature and milk quality
21. Classify seafoods and distinguish the characteristics of each based on its composition.
22. Write short notes on surimi processing.

Part C

Answer any four questions.

4 x 10 =40 marks

23. What are the consequences of “Food Deterioration”? Differentiate Food poisoning and Food Spoilage and explain briefly the role of microbes in food contamination with suitable examples.
24. What are the sequence of events that occur on the onset of Rigor Mortis? Briefly explain the various methods of artificial tenderization.
25. “Halal is a painless method of slaughtering”. Justify the statement. Explain in detail the requirements of a ritualistic slaughter of an animal.
26. Explain in detail the events that occur during the formation of an egg in a hen with a suitable diagram.
27. Discuss in detail the canning of fish with an illustrative flow chart.
28. Explain in detail the processing of milk from the farm to the table.
