LOYOLA COLLEGE (AUTONOMOUS), CHENNAI - 600 034

Sc. DEGREE EXAMINATION - FOOD CHEMISTRY AND FOOD PROCESSING FOURTHSEMESTER - APRIL 2018

P 4805- FOOD FROM ANIMAL SOURCES & PROCESSING TECHNIQUES

Date: 27-04-2018 Dept. No. Max. : 100 Marks

Time: 09:00-12:00

Part A

Answer all the questions.

 $10 \times 2 = 20 \text{ marks}$

- 1. What is the function of a cuticle in the egg structure?
- 2. What is autolysis in food deterioration?
- 3. What is Trans fat? Give any two adverse health implications of margarine.
- 4. Differentiate 'Halal' and 'Haram' with suitable examples.
- 5. Classify microbes based on their oxygen requirement.
- 6. How many parts by weight of 45% cream and 6% milk must be mixed to make milk testing 3% fat?
- 7. What is fermented milk? Give its types.
- 8. Diagrammatically represent a sarcomere in a muscle.
- 9. Classify fishes based on the depth of water.
- 10. What is aquaculture? List the types.

Part B

Answer any eight questions.

 $8 \times 5 = 40 \text{ marks}$

- 11. How are eggs graded? Give the requirements of an "AA" and "A" grade eggs.
- 12. How does moisture and oxygen affect the contamination of food?
- 13. Give the composition of cow's milk and write a brief note on the effect of pasteurization on milk quality.
- 14. What are scalding and defeathering in poultry processing operation?
- 15. Diagrammatically represent 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:

$$M = 420 \text{ kg Fm} = 6\%$$
 Fs = 1.5% Fc = 28%

- 18.Illustrate the events that occur during a muscle contraction using a suitable flow diagram.
- 19. Give a brief account on fish procurement operations adopted in industries.
- 20.Explain the nutritional significance of fish highlighting its fat content.
- 21. Discuss briefly the legal standards adopted in a milk processing unit.
- 22. Write a brief note on the ritualistic slaughter practices adopted in the meat industry.

Part C

Answer any four questions.

 $4 \times 10 = 40 \text{ marks}$

- 23. What is "Food Deterioration"? Briefly discuss the causes and consequences of food deterioration.
- 24. Describe the journey of milk from the farm to the table.

25. Explain the manufacturing process of poultry. Write a short note on poultry meat products.
26. Enumerate the sequence of events in the making of cheddar cheese.
27. Discuss the natural and artificial methods of tenderizing meat.
Diagrammatically represent the changes that occur during the onset of Rigor Mortis.
28. What are the events that occur during the formation of an egg in a hen? Explain with a suitable diagram.
