



**LOYOLA COLLEGE (AUTONOMOUS), CHENNAI – 600 034**

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

**THIRD SEMESTER – APRIL 2019**

**17PFP3MC01– DAIRY AND BEVERAGE PROCESSING**

Date: 05-04-2019  
Time: 09:00-12:00

Dept. No.

Max. : 100 Marks

**Part A**

**Answer ALL the questions.**

**10 x 2 = 20 marks**

1. Diagrammatically represent the gross composition of milk and its major constituents.
2. List four salient features of the second wave of the dairy revolution.
3. What are dye reduction tests?
4. Define double toned and standardized milk.
5. Mention the types of yeast used in beer fermentation.
6. Name the mechanical methods used for the treatment of dairy effluents.
7. List any four fermented milk products
8. What is packaged water? Give its advantages.
9. Define wine. Give its classification.
10. What is Chlorogenic acid? Highlight its benefits.

**Part B**

**Answer any EIGHT questions.**

**8 x 5 = 40 marks**

11. Write short notes on specific gravity and density of milk.
12. Elaborate on electrical conductivity and thermal properties of milk.
13. Comment on the factors affecting composition and yield of milk.
14. What is the uniqueness of milk? Give the various factors affecting the composition of milk.
15. Write the protocol for testing milk fat and solid non fat.
16. Discuss the effect of growth hormones on milk production
17. What are nonalcoholic beverages? Give its classification.
18. What are the main distinguishing features between the types of tea?
19. Describe reuse system of CIP cleaning.
20. Write short notes on dairy by products.
21. Write a brief note on the legal standards adopted for milk production.
22. Explain the wine press mechanisms used in wine manufacture.

## Part C

Answer any **FOUR** questions.

**4 x 10 = 40 marks**

23. Discuss freezing point of milk and its significance in detecting milk adulteration.
24. Describe redox potential in milk.
25. Comment on milk collection as one of the important activities in dairy processing.
26. Explain the manufacturing process of chocolate bar from its raw material.
27. Explain the processing sequence of milk. What are the tests employed to evaluate the completion of pasteurization?
28. Give a detailed account on the journey of coffee berries from the plantation to the table.

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