

# KAMARAJ COLLEGE (Autonomous)

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(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

(3 Pages)

Reg. No:.....

Question Code: 26E00305

Course Code : 24USCH21/25USCH21

UG Degree - End Semester Examinations, April 2026

Second Semester

B.Sc., CHEMISTRY

Dairy Chemistry

(For those who joined in July 2024 and June 2025 onwards)

Time : 3Hours

Maximum : 75 Marks

## PART - A (10 × 1 = 10 Marks)

Answer ALL Questions

Choose the correct answer :

- CO:1 1. The calorific value of 100 gram protein of milk is  
K:1 (a) 170 (b) 740  
(c) 65 (d) 230
- CO:1 2. Identify the milk protein from the following  
K:1 (a) lactose (b) biotin  
(c) glucose (d) casein
- CO:2 3. In which method of pasteurization milk is heated at a low  
K:1 temperature for a long time.  
(a) Batch (b) Bottle  
(c) Vacuum (d) Ultra high temperature
- CO:2 4. Pasteurization of milk under reduce pressure by direct steam is  
K:1 called  
(a) HTST pasteurization (b) Vaccum pasteurization  
(c) UTHT pasteurization (d) Batch pasteurization
- CO:3 5. The test for vanaspathi in ghee is known as  
K:3 (a) Baudouin Test (b) Valenta Test  
(c) Rosalic acid test (d) Borax test
- CO:3 6. Rancidity can be prevented by adding \_\_\_\_\_  
K:3 (a) paraffin oil (b) furfural  
(c) vanaspati (d) carotene

- CO:4 7. Condensed milk has  
K:1 (a) High fat content (b) Low SNF  
(c) Low moisture content (d) High total milk solid
- CO:4 8. Vitamin added milk is called as  
K:3 (a) Toned milk (b) Recombined milk  
(c) Standardized milk (d) Fortified milk
- CO:5 9. The stabilizer used in ice cream is  
K:1 (a) Milk powder (b) Glucose  
(c) Alcohol (d) Gelatin
- CO:5 10. The milk is fermented by using  
K:1 (a) Microorganism (b) Sugar  
(c) Catalyst (d) Salt

**PART - B (5 X 5 = 25 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 250 words.**

- CO:1 11. (a) How will you estimate the fat of milk by volumetric Gerber  
K:1 method?

**(OR)**

(b) Discuss the physical properties of milk.

- CO:2 12. (a) What are the factors affecting the processing of milk?  
K:2

**(OR)**

(b) Explain the factors influencing the bacterial growth.

- CO:3 13. (a) Give a brief account on rancidity.  
K:1

**(OR)**

(b) Write notes on cream.

- CO:4 14. (a) Write notes on irritated milk.  
K:2

**(OR)**

(b) Describe homogenized milk.

- CO:5 15. (a) Give the flowchart of manufacture of cultured butter milk.  
K:1

**(OR)**

(b) Write notes on yoghurt.

**PART - C (5 X 8 = 40 Marks)**

**Answer ALL Questions choosing either (a) or (b).**

**Answer should not exceed 500 words.**

CO:1 16. (a) Define milk. Give the constituents and composition of milk

K:3

**(OR)**

(b) Give a brief account on milk adulterants.

CO:2 17. (a) Explain in detail the microbiology of milk.

K:2

**(OR)**

(b) What is pasteurization? Explain the methods of pasteurization.

CO:3 18. (a) How will you estimate fat by centrifugal method and gravity method?

K:1

**(OR)**

(b) Write down the common adulterants added to ghee and their detection.

CO:4 19. (a) Describe toned milk and its types.

K:2

**(OR)**

(b) How are flavoured milk and condensed milk prepared? Explain.

CO:5 20. (a) Explain:

K:2

i) Cultured milk ii) Acidophilous milk

**(OR)**

(b) Write notes on:

i) Khoa ii) milk powder