

# **KAMARAJ COLLEGE (Autonomous)**

Accredited with A+ Grade by NAAC

(Affiliated to Manonmaniam Sundaranar University, Tirunelveli)

THOOTHUKUDI – 628 003

**(5 Pages)**

**Reg. No: .....**

**Question. Code No : 25E00302**

**Sub Code : 24USCH21**

**UG Degree - End Semester Examinations, April 2025**

**Second Semester**

**B.Sc. CHEMISTRY**

**SEC - Dairy Chemistry**

**(For those who joined in July 2024 onwards)**

**Time : 3 Hours**

**Maximum : 75 Marks**

**PART - A (10 × 1 = 10 Marks)**

**Answer ALL Questions**

**Choose the correct answer :**

1. \_\_\_\_\_ is the major constituent present very large excess in the milk.  
(a) fat (b) protein  
(c) carbohydrates (d) water
2. . The sweet taste of milk is due to

- (a) minerals (b) lactose  
(c) casein (d) colostrum
3. Milk is the better medium for the growth of  
(a) bacteria (b) fungus  
(c) enzyme (d) insects
4. The boiling temperature of milk is.  
(a) 90.2°C (b) 97.2°C  
(c) 100°C (d) 100.17°C
5. The most common adulterant in ghee is \_\_\_\_\_  
(a) coconut oil (b) vanaspati  
(c) lard (d) oil
6. A portion of milk is rich in milk fat called  
(a) cream (b) semi solid  
(c) emulsion (d) aerosol
7. By the mixing of skim milk with butter oil or butter by use of homogeniser is known as  
(a) toned milk (b) reconstituted milk  
(c) imitation milk (d) filled milk
8. Milk consisting of a very little amount of solid usually forms  
(a) Vitaminised milk (b) sterilized milk  
(c) soft curd milk (d) homogenised milk

9. The milk is fermented by using
- (a) Microorganism (b) catalyst  
(c) Salt (d) Sugar
10. \_\_\_\_\_ is a yoheer indigenous product.
- (a) khoa (b) ice cream  
(c) milk powder (d) cream

**PART - B (5X5=25 Marks)**

**Answer ALL Questions choosing either (a) or (b).  
Answer should not exceed 250 words.**

11. (a) Explain the factors which affecting the composition of milk.

**(OR)**

- (b) What is meant by lipids? Give its composition in milk.

12. (a) Explain the factors influencing the bacterial growth.

**(OR)**

- (b) What are the physico chemical changes that takes place in milk deering processing?

13. (a) How would you estimate acid content of desibutter?

**(OR)**

- (b) Write notes on antioxidants.

14. (a) What is standardized milk? What are its merits?

**(OR)**

(b) Give a method for the preparation of vitaminised milk.

15. (a) Discuss the need for making milk powder.

**(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.**

16. (a) Outline any one method for the estimation of fat in milk.

**(OR)**

(b) Write notes on adulteration of milk.

17. (a) Explain the methods of pasteurization.

**(OR)**

(b) Write notes on the microorganism present in the milk.

18. (a) Explain the factors influencing quality of cream.

**(OR)**

(b) List out the common adulterants added to ghee. Explain the methods of their detection.

19. (a) What is condensed milk? Explain its composition and nutritive value.

**(OR)**

(b) Give the preparation of flavoured milk.

20. (a) Write notes on: i) Khoa ii) Milk powder

**(OR)**

(b) Explain the role of stabilizers and emulsifier in milk.