

**STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI - 86**  
**(For candidates admitted during the academic year 2016 – 17 & thereafter)**

**SUBJECT CODE: 16VF/VM/DP36**

**B.Voc. DEGREE EXAMINATION, NOVEMBER 2019**  
**FOOD PROCESSING AND QUALITY CONTROL**  
**THIRD SEMESTER**

**COURSE : MAJOR CORE**  
**PAPER : DAIRY PROCESSING**  
**TIME : 5 HOURS**

**MAX.MARKS : 100**  
**(Theory: 50 marks + Practical: 50 marks)**

**SECTION- A**

**ANSWER ALL QUESTIONS:**

**(20 X 1 = 20)**

**I Fill in the blanks:**

1. The heat treatment to destroy microorganisms in milk is \_\_\_\_\_.
2. The device used to separate cream from milk \_\_\_\_\_.
3. The major protein present in milk is \_\_\_\_\_.
4. A test used to indicate effective pasteurization is \_\_\_\_\_.
5. The process of adding air to improve the volume of ice cream is called \_\_\_\_\_.

**II Choose the correct answer**

6. Which of the following is used for coagulation of milk in cheese production?  
(a) Vinegar                      (b) Lemon juice                      (c) Rennet                      (d) Panner
7. The biological value of milk is  
(a) 84.5                      (b) 100                      (c) 97.5                      (d) 105.8
8. The test to indicate effective pasteurization  
(a) Alkaline phosphatase test                      (b) Methylene Blue Reductase test  
(c) Alcohol test                      (d) Coagulation test
9. The technique that is used to separate cream and milk is  
(a) Salting out                      (b) centrifugation                      (c) Distillation                      (d) Sedimentation
10. The material used to maintain the homogeneity of a milk product is  
(a) Stabilizer                      (b) Anti-caking agent                      (c) Decolorizer                      (d) Deodorizer

**III State whether True or False:**

11. Homogenized milk cannot form whipped cream.
12. Churning involves agitation that breaks fat globule membranes so the emulsion breaks, fat coalesces and water.
13. Freezing must be quick to prevent the growth of large ice crystals in ice cream production.
14. Fat separation in evaporated milk during storage is a major defect.
15. A lower freezing point makes ice cream easier to scoop and eat, although the addition of too much sugar can make the product too soft.

**IV Answer in a sentence:**

16. Expand and define SNF.
17. Define syneresis.
18. Write a note on Gerber tubes
19. Mention any 3 types of cheese.
20. Write a note on cream separator.

**SECTION - B****ANSWER ANY SIX QUESTIONS:****(6×3=18)**

21. How is quality of milk assessed?
22. Elaborate on Sensory evaluation for milk
23. Briefly explain the waste disposal procedure followed in a dairy industry.
24. What are the common milk-borne diseases? Mention the respective causative organisms.
25. What are the factors affecting the composition of milk?
26. Write a brief note on the following milk components: Milk protein and Milk fat.
27. List down the major differences between an ice cream and a frozen dessert.
28. What is Toned milk?
29. Differentiate processed cheese and cheese spreads.
30. Define Pasteurisation

**SECTION - C****ANSWER ANY TWO QUESTIONS:****(2×6=12)**

31. Describe the sanitary practises followed in a dairy industry.
32. Bring out the significance of ETP (Effluent Treatment Plant) in a milk processing unit.
33. What are fermented dairy products? How is yoghurt and cheese produced?
34. Explain the process of manufacture of Kulfi and Milk powder.

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