

Sardar Patel University  
MSc. HSc. III Semester (FN/FBT)(New CBCS)  
External Theory Examination  
CBCS : PH03EFDN02/PH03EFBT02: Advanced Food Processing Technology  
Date : 7/12/2012 (Friday)  
Time: 2:30 – 5:30 P.M

Total Marks: 70

- I. Multiple Choice Questions (Select the correct answer) (8)
- Whipped cream is used in the preparation of:
    - Cakes
    - Cakes and ice cream
    - Butter
    - None of the above
  - Pasteurization temperature is determined according to this criteria:
    - Killing of TB germs
    - Inactivation of phosphatase enzyme
    - Cream line reduction
    - All of the above
  - FFS machine stands for:
    - Float, fill and seal machine
    - Fill, float and seal machine.
    - Form, fill and seal machine.
    - None of the above
  - Toned milk should have a fat content of:
    - 1.5%
    - 3.0%
    - 4.5%
    - 6.0%
  - Specific gravity of milk \_\_\_\_\_ when cream is added to it.
    - Increases
    - Decreases
    - Increases and then decreases
    - Does not change
  - Second grade cream may be described as follows:
    - Sour, coagulated
    - Sweet or slightly sour
    - Extremely sour, fermented
    - None of the above
  - Stabilizer is added to cocoa-flavored milk for:
    - Proper mixing of cocoa particles
    - Proper mixing of cream with the milk

(P.T.O.)

- c) Both a. & b.
- d) None of the above

8. Weighing of milk by volume is not followed because:

- a) It is not accurate
- b) It is affected by temperature
- c) It is affected by foam formation
- d) All of the above.

II. Explain briefly (any seven)

(14)

1. Bactofugation of milk.
2. Ripened cream butter.
3. Cleaning and sanitization of dairy equipment.
4. Types of condensed milk.
5. Manufacture of sterilized cream.
6. 'Developed' acidity of milk.
7. Pigments present in milk.
8. Isolation of starch from corn.
9. Canning of vegetables.

III. QA is compulsory. Answer any one from Q. B.

- A) Name the various quality control tests carried out for market milk giving their purpose. (6)
- B) Give the flow chart for the manufacture of market milk and explain the following terms:  
'Clarifier slime' and 'standardization' of market milk. (6)

OR

- B) What is cream? What are the two main methods for the separation of cream? Explain and give the formulas for their calculation. Also compare the characteristics of both methods of separation. (6)

IV. QA is compulsory. Answer any one from Q. B.

- A) Give the flow chart for the preparation of butter from cream. (4)
- B) Describe the following steps in butter preparation:  
Aging, ripening and churning (8)

OR

- C) Describe the following steps in butter preparation:  
Neutralization of cream, salting and working (8)

V.

- A) Give the flow - diagram for the manufacture of Indian Dairy products from Whole milk. (6)
- B) Give the flow - chart and explain very briefly the production of 'Dahi' by the standardized method. (6)

OR

(P.T.O.)

V.

A) What is cheese? Give the classification of cheese. Give the flow - chart for the manufacture of cheese. (6)

B) Describe the following steps in cheese preparation: (6)

i) Rennetting

ii) Cheddaring

(6)

VI. Short notes (any four)

1. Grading of milk for various milk product preparation. (12)

2. Vaccination

3. Different types of butter.

4. Processing for potato chips manufacture.

5. Processing for chocolate and candy manufacture.

6. Soft drink preparation.

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