

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2017

(CUCBCSS—UG)

Food Technology

FTL 6B 16—DAIRY TECHNOLOGY

Time : Three Hours

Maximum : 80 Marks

(A) Fill in the blanks. Each question carries 1 mark :

- 1 ——— are the constituents in milk essential for muscle building and repair.
- 2 Double toned milk contains ——— % fat.
- 3 The specific gravity of cow milk varies from ——— to ———.
- 4 All tests performed to check the quality of incoming milk on receiving platform are called ———.
- 5 The shortened form of the word ultra-pasteurization is ———.
- 6 ——— Is the principal flavouring material in vanilla.
- 7 ——— refers to holding ice-cream mix at low temperature for definite time before freezing.
- 8 As per Indian standards the maximum permissible moisture content in infant milk foods is ——— %.
- 9 ——— and ——— are two types of industrial casein.
- 10 ——— are substances used in dairy-plant cleaning capable of destroying all pathogenic and almost all non-pathogenic micro-organisms.

(10 × 1 = 10 marks)

(B) Answer any five questions. Each carries 2 marks :

- 11 Differentiate between pasteurization and UHT processing.
- 12 What is clarification in dairy processing ?
- 13 Define standardised milk.
- 14 What does mix stability refer to ? Name two stabilizers used in ice-cream industry.
- 15 Explain uses of cream.
- 16 What does the term packing mean in the context of cheddaring.
- 17 What are the factors affecting yield of milk powder.

(5 × 2 = 10 marks)

(C) Answer any six questions. Each carries 5 marks :

- 18 Define sterilized milk. Explain UHT Processing.
- 19 What are sources of abnormal flavour in milk ?

Turn over

- 20 How do the speed of bowl, rate of milk inflow and size of fat globules affect fat loss in skim milk ?
- 21 Differentiate between clotted cream and sour cream. Explain effects of freezing on ice cream.
- 22 Explain causes and methods of prevention of crumbly, soggy and weak body in ice cream.
- 23 Describe the food and nutritive value of cheese.
- 24 What is curing of cheese ? Explain Physico-chemical changes during ripening of cheese.
- 25 Explain the principle of spray drying and its advantages over drum drying.

(6 × 5 = 30 marks)

(D) Answer any *two* questions. Each carries 15 marks :

- 26 What are Probiotic foods ? Explain the health benefits of fermented dairy Products.
- 27 Explain the processing methods and standards for Whole milk powder and Skim milk powder.
- 28 Explain various steps in manufacture of ice-cream.
- 29 Explain different methods of pasteurization and sterilisation of milk.

(2 × 15 = 30 marks)