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MFT-007

Total No. of Questions : 7]

[Total No. of Printed Pages : 3

**POST GRADUATE DIPLOMA IN  
FOOD SCIENCE AND TECHNOLOGY (PGDFT)**

**Term-End Examination**

**June, 2014**

**MFT-007 : DIARY TECHNOLOGY**

Time : 3 Hours]

[Maximum Marks : 70

**Note** :-Attempt *Five* questions in all. All questions carry equal marks.

1. (a) Explain the important features of Anand Pattern of Dairy Cooperative structure existing in the country. 4
- (b) Why chilling of milk is necessary ? Describe different methods used for chilling of milk. 5
- (c) Explain the salient characteristics of milk proteins. 5
2. (a) Enumerate important methods of procurement of milk. Which of these is most widely used ? Explain its characteristics and advantage. 5
- (b) What is homogenization ? What are the advantages and disadvantages of homogenization process ? Explain the design and operation of homogenizer with the help of diagram. 5

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- (c) Describe the working of vapour compression refrigeration system with the help of a diagram. 4
3. (a) Define UHT milk. Explain the principle and processes involved in manufacture of UHT milk. 7
- (b) Explain HTST pasteurization with the help of a diagram. 7
4. (a) Define the soft serve Ice cream (softy) and give its average composition. Describe the steps involved with purpose for preparation of soft serve ice cream. 7
- (b) Define Evaporated milk and give its average composition. Describe important storage defects and give the causes and remedial measures for these defects. 7
5. (a) What is purpose of drying of milk ? Give the important features of spray drying process with operational parameters. 7
- (b) Explain the importance of the following properties of dried milks : 7
- (i) Particle size distribution
  - (ii) Bulk density
  - (iii) Insolubility index

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6. (a) What is chemical composition of human milk ? Explain the virtues of human milk. 4
- (b) Give the principle and process for manufacture of acid casein. 5
- (c) Give the BIS requirements of table butter and explain the principle and process of butter making with proper processing parameters. 5
7. (a) Explain the principle of manufacture of Ghee. Give the average composition of Ghee from buffalo milk. Explain the important for constants of Ghee which could be the basis for determining the quality of Ghee. 7
- (b) Give the principle and process of making cheddar cheese. Describe the various body and texture defects observed in cheese. Give their causes and remedial measures. 7