

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

**Term-End Examination**

**December, 2014**

00820

**MFT-007 : DAIRY TECHNOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

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*Note : Attempt any five questions. All questions carry equal marks.*

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1. (i) Explain Anand Pattern of co-operative and its role in dairy development in India.

$$2\frac{1}{2} + 2\frac{1}{2} = 5$$

(ii) List the values for various physical properties of Cow and Buffalo milk. Which of these properties are used in the detection of adulteration and freshness of milk ?

$$2\frac{1}{2} + 2\frac{1}{2} = 5$$

(iii) Define BOD and COD of waste water.  $2+2=4$

2. (i) List the different milk collection systems and explain which of these is best, and why.  $2 \frac{1}{2} + 2 \frac{1}{2} = 5$
- (ii) What are the criteria for the selection of an appropriate detergent for dairy plant? 5
- (iii) Explain the difference between the reconstituted and recombined milk. 4
3. (i) What is cool-ageing of the ice cream mix? Explain its role in the whipping ability of the mix and quality of the finished product.  $1+4=5$
- (ii) Explain the role and method of seeding the condensed milk with lactose.  $2 \frac{1}{2} + 2 \frac{1}{2} = 5$
- (iii) Discuss the criteria for the classification of dried milk and explain the merits and demerits of high heat whole milk powder.  $2+2=4$
4. (i) Explain the basis for the classification of casein. How is edible casein different from industrial casein?  $2+2=4$
- (ii) What are the steps taken to prevent lactose crystallisation during the manufacture of whey powder? 5
- (iii) What are the common starter cultures used in the preparation of fermented dairy products? 5

5. (i) Describe the method of manufacture of Mishti Dahi from buffalo milk. 4
- (ii) Define cheese. How is it classified on the basis of rheology and method of ripening ?  $1+4=5$
- (iii) Give the standard for hard cheese as per erstwhile PFA. 5
6. (i) Which milk, cow or buffalo, is better suited for chhana and paneer and why ?  $2+2=4$
- (ii) Give the BIS standards for Khoa-based Burfi. 5
- (iii) Explain the role and extent of neutralization, ripening and cool-ageing of cream during the manufacturing of Table butter. 5
7. (i) Give the AGMARK Standard of ghee on all India basis. 5
- (ii) List the three factors which decide the marketing quality of ghee. Describe the factors which influence the granulation of ghee.  $2+2=4$
- (iii) What do you understand by Marketing and Sales ? Discuss the 4 Ps of marketing mix.  $2+3=5$
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