

00502

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

**Term-End Examination**

**June, 2016**

**MFT-007 : DAIRY TECHNOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

*Note : (i) Attempt any five questions.*

*(ii) All questions carry equal marks.*

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1. (a) Explain the following :
- (i) Present status of Dairy Industry in India. 3
  - (ii) Role of cooperatives in growth of Dairy Industry. 3
  - (iii) Important interventions to augment the growth of the Dairy Sector. 3
- (b) What is the average composition of cow and buffalo milk? Describe the activities carried out at Dairy Dock. 5
2. (a) What is the importance of "chilling of milk"? Describe different methods used for chilling of milk. 7

- (b) What is a steam boiler ? Describe the important components of a steam boiler. Write the disadvantages of using hard water in the boiler. 7
3. Explain the following (any four) : 3.5x4=14
- (a) Bactofugation
  - (b) Standardization of milk
  - (c) Merits and demerits of Homogenization of milk
  - (d) Principle and operation of HTST Pasteurizer
  - (e) Types of UHT plants and important features
4. (a) What are the causes of following defects in ice-cream ? 4
- (i) rancid flavour
  - (ii) crumbly body
  - (iii) sandiness and
  - (iv) foamy meltdown
- (b) How soft ice-cream differs from regular ice-cream ? Explain in detail. 3
- (c) Explain the purpose of following processing operations.
- (i) Seeding in preparation of concentrated milk. 3.5
  - (ii) Pilot sterilization test in preparation of Evaporated milk. 3.5

5. Explain the following (any four) : 3.5x4=14
- (a) Atomization
  - (b) Roller drying
  - (c) Bulk density of dried milk products
  - (d) Reconstitution properties of milk powders
  - (e) Dairy whitener
6. Describe the principle and procedure for manufacture of following dairy products. 14
- (a) Table Butter
  - (b) Cheddar Cheese
7. (a) Describe various inputs required for a successful business plan. 5
- (b) Explain important sources of short term finance for running an enterprise. 5
- (c) List important Khoa and Chhana based sweets. 4
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