

AMFT07 DAIRY PROCESS TECHNOLOGY

UNIT-1 PROPERTIES OF MILK

- 1.1 Milk-Types- Composition- Physical-Chemical and Thermal Properties- Heat Capacity,
- 1.2 Density Freezing- Boiling point- Expansion- Agitation-Viscosity
- 1.3 Classification of milk Market and Special Milk Handling-
- 1.4 Effects of Merits on Milk- toxicity of metals.

UNIT-2 PROCESSING AND QUALITY PARAMETERS OF MILK

- 2.1 Processing of Milk Pasteurization- HTST, UHT, sterilization, Homogenization,
- 2.2 Filtering and Clarification of Milk-cream separation-
- 2.3 Methods and Equipment's-Emulsification- Fortification, packaging of milk and milk products,
- 2.4 Judging and grading of milk, national and international standards of milk and milk products.

UNIT-3 MILK PRODUCTS

- 3.1 Traditional dairy products,
- 3.2 Manufacturing of Yogurt, Cheese, Butter, Ghee, Ice-cream, malted products,
- 3.3 Evaporated milk products- properties,
- 3.4 Classification processing Methods, Equipment used standards and quality parameters.

UNIT-4 MILK POWDER PROCESSING AND MILK SUBSTITUTES

- 4.1 Processing of Milk Powder- Composition- Properties- methods of drying,
- 4.2 Substitutes for milk and milk products
- 4.3 Casein, lactose and other by-products, weaning foods, therapeutic foods,
- 4.4 Fortification and enrichment.

UNIT-5 STORAGE SANITATION AND EFFLUENT TREATMENT

- 5.1 Storage of Milk in Tanks-Storage of ice cream and other milk products- in cold storage
- 5.2 Cleaning and Sanitation Importance- Detergents- Properties
- 5.3 Cleaning procedures- Cleaning in place- Dairy effluent treatment and disposal.

References Books

1. Tufail Ahmed., "Dairy Plant Engineering and Management", KitabMahal Publishers, Allahabad, 1997.
2. Lampert, Lincoln M. "Modern Dairy Products: Composition, Food Value, Processing, Chemistry, Bacteriology, Testing, Imitation Dairy Products". Chemical Publishing Company, 1998.