

LPT-311: Milk and Milk Products Technology (1+1)



SYLLABUS

THEORY

Milk industry in India. Layout of milk processing plant and its management, Composition and nutritive value of milk and factors affecting composition of milk. Physico – chemical properties of milk, microbiological deterioration of milk and milk products. Collection, chilling standardization pasteurization, homogenization, bactofugation. Principles of dehydration. Preparation of butter, paneer/channa. Ghee, khoa, lassi. Dahi, ice – cream, cheddar chesses and dairy byproducts. Good manufacturing practices. Implementation of HACCP. Toxic/pesticides residues in milk and milk products. Packaging, transportation, storage and distribution of milk and milk products. Organic milk food products. Legal and BIS standard of milk and milk products. Sanitation in milk plant.

PRACTICAL

Sampling of milk, estimation of fat, solid not fat (S.N.F) and total solids. Platform tests cream separation. Detection of adulteration of milk. Determination of efficiency of pasteurization. Microbiological quality evaluation of milk and milk products. Preparation of milk products like curd, ghee, paneer/channa, khoa, ice-cream, milk beverages. Visit to modern milk processing and milk manufacturing plants.