SUMMARY

Milk as it is synthesized by the mammary glands, the fat, proteins, lactose and mineral salts becomes constituents of the milk. These constituents contribute to the physical properties of the milk. The buffering capacity of milk is estimated by determining its titratable acidity. The casein and phosphates account for the major part of the titratable acidity of fresh milk. In the milk processing industry, the measurement of the physical properties of the milk and milk products are important fordesigning of the processing equipments, to determine the concentration of components, or to assess the extent of a chemical or physical change. The refractive index which is a measure of scattering of light helps in designing the instrument such as Milco-Scanner for estimation of milk fat. The freezing point helps in determining the added water in the milk. Lactose plays important role not only giving sweet taste to the milk, but also gives caramel flavor and brown color to the milk products due to maillard reaction during heat treatment given to milk. Viscosity is the resistance to flow. Viscosity increases with increasing concentration of fat and solids-not -fat, but consistent general relationship could not be established. Homogenization increased the viscosity of the milk due to increase in number of fat globules in the milk.The redox potential is very important property which is helps in determining the microbial quality of the milk. Methylene blue and Resazurin are the dyes used in estimating microbial quality of milk.