

SYLLABUS :-

Particle size analysis and energy requirement in comminution; High pressure homogenization of milk and the measurement of fat-globule size before and after homogenization; Milling of rice/wheat/pulses; estimation of milling yield and performance characteristics of equipment used; Rheological properties of Newtonian and non-Newtonian liquid food; Estimation and measurement of flow rate, power requirement and pressure developed in single screw extruder; Establishing the relationship between performance index and mixing time in a planetary mixer; Estimation and measurement of cut-off size of milk fat-globules in a disk type centrifugal separator; Measurement of cake resistance, filter medium resistance and compressibility factor in constant pressure filtration; Determination of flow pattern, port arrangement and flow rate-pressure drop relationship in a plate heat exchanger; Failure mechanics of biological tissues; Saturation vapor pressure-temperature relationships for pure solvent and dilute solutions; Thermal bactericide to achieve commercial sterility of food in sealed containers; Dehydration of vegetables in cabinet tray dryer.