FST 202 Principles of Food Processing and Preservation (3 Units)

Traditional methods of food processing and preservation as applicable to different food products. Winnowing, sun drying, smoking, salting, fermentation, oil extraction, etc. Basic scientific methods of food processing and preservation including fermentation, dehydration, concentration and thermal processes. Basic principles of drying constant and falling rate drying. Thin and deep layer drying. Heat and mass transfer during drying process. Solar dryer: mode of heat collection, flat plate collector and concentrator, inclination of collectors, heat storage in solar dryers, heat distribution in the drying chamber, lagging of the walls of solar dryer. Basic equipment essential for food processing and preservation.