Course code	Course Name	L-T-P - Credits	Year of Introduction
FT233	Food Chemistry Lab	0-0-3 - 1	2016

Prerequisite : FT203 Food chemistry

Course Objectives

To gain knowledge in detection and estimation of chemical constituents in food.

List of Exercises/Experiments :

1. Analysis of water for potable and food purposes
2. Moisture content in foods in relation to their stability
3. Non-enzymatic browning reactions and its determinations
4. Qualitative tests for carbohydrates & proteins - distinguishing reducing from non-reducing sugars and keto from aldo sugars
5. Determination of rate/ extent of hydrolysis of sucrose/starch
6. Determination of free fatty acid content in fats and oils
7. Detection and estimation of oxidative rancidity in fats/oils
8. Determination of heat stability of vitamin c
9. Study of some reactions of proteins
10. Study of some processing changes in proteins
11. Study of some functional properties of proteins
12. Detection / Estimation of some additives in foods
13. Detection/Estimation of adulterants in some foods
14. Estimation of antioxidant(s) / polyphenol(s) in food sample
15. Analysis of lysine content in animal /vegetable sources
16. Preparation and measurement of pH of standard buffers
17. Gelling properties of starch
18. Acid hydrolysis and action of salivary amylase on starch

Expected outcome .

Students will be able to know the chemical constituents in food by experimental methods.

Text Book:

1. Morris B. Jacobs , *The chemical analysis of foods and food products,* III Edition, CBS Publishers and distributors New Delhi.
2. *ISI hand book of food analysis*
3. Ranganna S , *Hand book of analysis and quality control for fruit and vegetable products,* II Ed., Tata McGraw Hill Publishing Co. New Delhi.
4. *Official Method of analysis of AOAC*