

**SKILL ENHANCEMENT COURSE**  
**CHSEC246(T+P) – Analysis of Food**

**Credit – (1T+1P), Theory Hours – 15, Practical Hours – 30**

**Course outcomes:**

At the end of the course the student will be able to:

CO-1. Gain the basic knowledge of the importance of Nutrition value of different foods.

CO-2. Understand the basic concepts about various methods of food processing and food preservation.

CO-3. Gain the skill of different tests for the food adulteration.

CO-4. Analyse and classify the different types food and their importance in health.

CO-5. Evaluate how to identify food adulteration.

CO-6. Create and design food adulteration kit.

**CO-PO mapping (connecting COs with PSOs)**

CO	PSO-1	PSO-2	PSO-3	PSO-4	PSO-5	PSO-6
CO-1	3	3	2	3	3	3
CO-2	3	3	2	2	3	3
CO-3	2	3	3	2	3	2
CO-4	3	2	3	2	2	3
CO-5	3	2	3	2	3	3
CO-6	3	2	3	2	3	3

**UNIT – I:**

**Analysis of Food**

**[25 Marks]**

**[15 Hours]**

Introduction, Nutrition value of food, Nutrition value of carbohydrate, Nutrition value of protein foods, Healthy fats and dairy foods, Fruit and vegetable benefits, Food processing, Advantages of food processing, Disadvantages of food processing, Methods of food processing, Food adulteration, Food preservative and colouring

matter, Advantages of food preservation, disadvantages of food preservation, Some traditional preservation techniques, Some modern industrial techniques.

## **UNIT-II:**

### **PRACTICAL: Food adulteration practical**

**[25 Marks]**

**[30 Hours]**

- (1) Tests for adulteration in milk and milk products.
- (2) Tests for adulteration in oils and fats.
- (3) Tests for adulteration in sugars and confectionery.
- (4) Tests for adulteration in food grains and its products.
- (5) Tests for adulteration salt, spices and condiments.
- (6) Tests for adulteration in fruits and vegetables.
- (7) Tests for adulteration in coffee and tea.

### **REFERENCE BOOKS**

1. Analytical Chemistry by Krishna Chattopadhyay, Manas Mandal, 2022, CBS Publishers and Distributors Pvt Ltd, NEW Delhi.
2. Detect Adulteration with rapid test (DART) by Food Safety and Standards Authority of India (FSSAI), Ministry of Health and Family Welfare, Government of India.
3. Food Science by Srilakshmi B, 7<sup>th</sup> Edition, 2018 New Age International Ltd, Delhi.
4. Textbook Nutrition: A lifecycle Approach by Chadha R and Mathur P, (Eds.), 2015, Orient Blackswan, ISBN 978-8125059301.