

# DISCIPLINE SPECIFIC (CORE) COURSES

## Semester –I

### HSC120C2: FOOD AND NUTRITION

(CREDITS: THEORY-4, PRACTICAL-2)

#### THEORY (4 CREDITS)

##### Unit I Basic Concepts in Food and Nutrition

- Basic terms used in study of food and nutrition
- Understanding relationship between food, nutrition and health
- Functions of food-Physiological, psychological and social

##### Unit II Nutrients

Functions, dietary sources and clinical manifestations of deficiency/ excess of the following nutrients:

- Carbohydrates, lipids and proteins
- Fat soluble vitamins-A, D, E and K
- Water soluble vitamins – thiamin, riboflavin, niacin, pyridoxine, folate, vitamin B<sub>12</sub> and vitamin C
- Minerals – calcium, iron and iodine

##### Unit III Food Groups

Selection, nutritional contribution and changes during cooking of the following food groups:

- Cereals
- Pulses
- Fruits and vegetables
- Milk & milk products
- Eggs
- Meat, poultry and fish
- Fats and Oils

##### Unit IV Methods of Cooking and Preventing Nutrient Losses

- Dry, moist, frying and microwave cooking
- Advantages, disadvantages and the effect of various methods of cooking on nutrients
- Minimising nutrient losses

#### PRACTICAL (4 CREDITS)

1. Weights and measures; preparing market order and table setting
2. Food preparation, understanding the principles involved, nutritional quality and portion size
  - **Beverages:** Hot tea/Coffee, Milk shake/ lassi, fruit based beverages
  - **Cereals:** Boiled rice, pulao, chapatti, parantha, puri, pastas
  - **Pulses:** Whole, dehusked
  - **Vegetables:** curries, dry preparations
  - **Milk and milk products:**Kheer, custard
  - **Meat, Fish and poultry preparations**
  - **Egg preparations:** Boiled, poached, fried, scrambled, omelettes, egg pudding
  - **Soups:** Broth, plain and cream soups
  - **Baked products:** Biscuits/cookies, cream cakes, sponge cake preparations, tarts and pies
  - **Snacks:** pakoras, cutlets, samosas, upma, poha, sandwiches
  - **Salads:** salads and salad dressings.

#### RECOMMENDED READINGS

- *Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). The Art and Science of Cooking: A Practical Manual, Revised Edition. Elite Publishing House Pvt Ltd.*
- *Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic Food Preparation: A Complete Manual, Fourth Edition. Orient Black Swan Ltd.*
- *Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3<sup>rd</sup> edition. Oxford and IBH Publishing Co. Pvt. Ltd.*
- *Srilakshmi (2007). Food Science, 4th Edition. New Age International Ltd.*
- *Wardlaw and Insel MG, Insel PM (2004). Perspectives in Nutrition, Sixth Edition. Mosby.*
- *Chadha R and Mathur P (Eds). Nutrition: A Lifecycle Approach. Orient Blackswan, Delhi. 2015.*