



PRINCIPLES OF FOOD SCIENCE, NUTRITION AND DIETETICS

Credits: 2

Subject Code: G18FS1T

Semester: III

No. of Lecture hours: 30

Objective: To impart the knowledge of food science, nutrition and dietetics.

Outcomes:

CO1: The students will classify food in relation to health as a source of nutrition.

CO2: Students will identify various principles and methods of presentation.

CO3: Students will be able to create knowledge on energy value of foods.

CO4: Students will be able to identify various deficiency disorders due to imbalance of nutrition.

CO5: Students will be able to construct various diet plans.

UNIT-I

Introduction to Food Science

6Hrs

- Definition of food and importance, classification of food in relation to health and as a source of nutrients. Objectives and importance of cooking. 2
- Preliminary preparations, processing and preservation. 2

UNIT-II

Principles and methods of preservation

6Hrs

- Principles and methods of preservation. 3
- Preservation by high temperature, low temperature, syringing, brining, carbonation, preservation by chemicals, irradiation. 3

UNIT-III

Nutrition and nutrients

6Hrs

- Basic definition of nutrition, health, nutrients, proximate principles. 2
- Classification of food based on nutritive value and functions. 2
- Energy value of foods and energy requirements. 2

UNIT-IV

Nutrients and deficiency disorders

6Hrs

Importance of carbohydrates, proteins, lipids, vitamins and minerals. 4

Disorders due to deficiency or imbalance of nutrients. 4

UNIT-V

Diet Planning

6Hrs

Explanation of various terms used in dietetics 2

Food guide and food group systems. 2

Principles in planning diets. 2

SUGGESTED READING

1. Meyer LJ (1989). Food Chemistry (1st ed.), New Delhi : CBS Publisher

2. Swaminathan M (1997). Food Science and Experimental Foods. Madras : Ganesh & Co.

3. Maney Shakuntala (1987). Foods, Facts and Principles. New Delhi: Wiley Eastern.