

# **Basic Nutrition Course**

**Name of subject:** Nutrition foundation course

## **OBJECTIVES**

1. The course enables the students to understand the functions of food and the role of various nutrients and the effects of deficiency and excess
2. To learn about the composition and nutritional contribution and selection of different food stuff
3. To be familiar with different methods of cooking, their advantages and disadvantages
4. To develop the ability to improve the nutritional value of food

## **COURSE CONTENT**

### **Unit I**

- a. Concept of nutrition
- b. Definition of food, diet, nutritional status and malnutrition
- c. Signs of good and poor nutrition

### **Unit II**

Functions of food

- a. Energy yielding, body building and protective foods

### **Unit III**

Macronutrients: Classification, digestion, absorption, metabolism, sources, functions, RDA, deficiency and excess (in brief)

Micronutrients: Classification, digestion, absorption, metabolism, sources, functions, RDA, deficiency and excess (in brief)

- a. Carbohydrates
- b. Protein
- c. Fat
- d. Vitamins
- e. Minerals

- f. water

#### **Unit IV**

Energy – Fuel and energy, energy yielding food factors, the energy value of food, energy units, determination of energy value using bomb calorimeter, direct and indirect calorimeter, basal metabolism, factors affecting BMR, BEE, recommended allowances for calories

#### **Practicals**

1. To study weight and measure
2. To plan and prepare Carbohydrate rich recipe
3. To plan and prepare Protein rich recipe
4. To plan and prepare Fat rich recipe
5. To plan and prepare VitaminB1 rich recipe
6. To plan and prepare VitaminB2 rich recipe
7. To plan and prepare Vitamin C rich recipe
8. To plan and prepare Calcium rich recipe
9. To plan and prepare Iron rich recipe
10. To plan and prepare Cereal pulse supplements recipe
11. To plan and prepare Germinated and fermented recipe

#### **TEACHING LEARNING STRATEGIES**

- The content of the syllabus may be taught by using lecture method, discussion method, quiz method, educational videos, charts and assignment method depending upon the resources and facilities available at the University/Institute/ Department/Colleges.

#### **MODE OF TRANSACTION**

- Laboratory Work/Field Work/Outreach Activities/Project Work/ Vocational Training/Viva/ Seminars/ Term Papers/Presentations/Self- Learning Instructional Material etc.

#### **ASSESSMENT RUBRICS**

- End Course Exam

**Marks: 100**

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**Grading:**

- Once the marks of the final examinations for each of the courses are available, they will be added. The marks thus obtained will then be graded as per the below table:
- Grades / Divisions shall be awarded as follows:

|                      |   |                          |             |
|----------------------|---|--------------------------|-------------|
| 1.- 80% and above    | - | Distinction              | Distinction |
| 2.- 70% to below 80% | - | 1 <sup>st</sup> Division | (A Grade)   |
| 3.- 60% to below 70% | - | 2 <sup>nd</sup> Division | (B Grade)   |
| 4.- 50% to below 60% | - | 3 <sup>rd</sup> Division | (C Grade)   |
| 5- below 50 %        |   |                          | (D Grade)   |

**Fee Structure:**

- | S.No | Description                     | Fee in Rupees  |
|------|---------------------------------|----------------|
| 1    | Tuition Fees                    | 2500 /-        |
| 2    | University Examination Fee      | 900 /-         |
| 3    | University Examination form Fee | 25 /-          |
|      | <b>TOTAL</b>                    | <b>3425 /-</b> |

**Award of Certificate in Fundamentals of Nutrition:**

- A candidate shall be awarded Certificate in Fundamentals of Nutrition by the University on successful completion of the course and having passed in both theory and practical separately by securing at least 50% marks in each subject / practical.

**SUGGESTED READINGS**

1. Sumati R. Mudambi S and M.V Rajagopal
2. Human Nutrition - Neelam Buddhdev, Bhavana Vaid
3. Prayukta Poshan – R. Rajlaxmi
4. Modern Cookery – Thangam E. Philip Vol. I
5. Food Science, Chemistry and Experimental Foods \_ M. Swaminathan
6. Diet Therapy – F.P. Antia

