

## **I SEMESTER**

I Year B.A. Home Science As One Option

### **FOOD AND NUTRITION**

Paper – I

Objectives: -

- 1) Understand the vital link between nutrition and health.
- 2) Gain knowledge on functions, metabolism and effect of deficiency of nutrients.

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### **CONTENTS – THEORY**

Unit I: Definition – Health, Nutrient, Food and Nutrition, Balance diet, Malnutrition. Importance and functions of food, Classification of Nutrients.	15 h
Unit II: Nutrients - Classification, sources, functions and deficiency of carbohydrates, protein and fat.	15 h
Unit III: Minerals -Classification:	15 h
a) Macro minerals -Calcium, Phosphorous, Sodium, Potassium & Chlorine.	
b) Micro Minerals - Iron and Iodine.	
c) Trace Elements – Zinc	
Unit IV: Vitamins:	15 h
a) Introduction, Classification	
b) Functions, Sources, Requirement and deficiency of fat soluble vitamins (Vit A, D, E & K) and water-soluble vitamins (B <sub>1</sub> , B <sub>2</sub> , B <sub>3</sub> , folic acid, B <sub>12</sub> , and Vitamin C)	
c) Importance of sprouted pulses in diet.	
d) Incorporation of pulses and oil seeds to improve the nutritive value of food.	
Unit V: Water: a) Functions, requirements, deficiency, sources.	15 h
b) Dehydration and ORS	
Energy: BMR, factors affecting BMR. Determination of energy value of foods, gross value & physiological value of foods, Total energy requirement.	

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### **References:**

- 1) Robinson. C.H. and R.N. Lawer, Normal and Therapeutic Nutrition, Mac Millan Pub. Co. N.Y. 1986.
- 2) Krause M.Y. and Huscher M.A. Food, Nutrition and Diet therapy, W.B. Saunders Company, Philadelphia, London, Toronto, 1983.

- 3) Davidson, S. Passmore, R. Book, J.P. and Truswell. Human Nutrition and Dietetics. The English Language Book Society, Livingstone 9th Edition, 1993.
- 4) Swaminathan, M. Essentials of Food and Nutrition. Vol, I & II. Ganesh and Co, Madras 1984. Latest Edition.

## II SEMESTER

1 Year B.A. Home Science As One Option

### DIETETICS

Paper-2

Objectives:

1. Understand the planning, selection and preparation of food in Health and deficiency
2. Gain knowledge in planning and preparation of therapeutic diets.

#### CONTENTS – THEORY

Unit – 1	15h
R.D.A. - Definition, factors to be considered in R.D.A. Meal Planning - Balance diet, Basic five food groups, Factors to the considered while planning adequate diet.	
Unit- II	15h
Principles of Diet Therapy; Modification of normal diet for therapeutic purpose – Soft diet, fluid diet, and bland diet.	
Unit –III	15h
1. Diet in gastro intestinal disorders: a. Diarrhea b. Constipation c. Peptic ulcer.	
Unit –IV	15h
Diet in Metabolic disorder: - Diabetes mellitus: Type and Causes, Signs and Symptoms, Dietary Management Etiology and Dietary Management in cardiovascular diseases: Hyper tension, Athero sclerosis	
Unit – V	15h
Malnutrition - Causes and preventive measures. Diet in Deficiency disorders a) Anemia                      b) PEM                      c) Kwashiorkar	

**References:**

1. Robinson C.H. Normal and Therapeutic Nutrition 17\* Edition. Mac Millan Publishing co.Inc N.Y.1994.
2. Sri Lakshmi V. Dietetics. New Age International Private Lid., N.D. 1995.
3. Antia, F.P. Clinical Nutrition and Dietenes, Oxford University Press. Delhi 1989.
4. Krause M.V. and Mahan L. K.Food, Nutrition and Diet Therapy, 6" Ed. W.B. Saunders Company, Philadelphía 1994.

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