## F.Y.B.A. (Home-Science) Semester-I Principles of Food and Nutrition (CORE Compulsory – CC 101)

Objectives:-

- 1. To understand basic concept of Food Nutrition Nutrients, Health, Nutritional Status and role of Nutrition in Maintain Health.
- 2. To get familiar with the various function of all Nutrients and their deficiency and its remedy.
- 3. To get knowledge about different food groups.

Unit - 1

- Definition of food, Nutrition, Mal Nutrition, Nutritional status, Balance diet.
- Function of food-Physiological function, psychological and social function.
- Inter-relationship between Nutrition and health, factors affecting on Nutrition and health, factors affecting on nutrition and health,
- visible symptoms of good health and bad health.
- Seven basic food groups.

Unit - 2 Classification of Nutrients according to their function.

- 1. Nutrients that furnish energy.
- A. Carbohydrates composition of carbohydrates, classification and function of carbohydrates, sources of carbohydrates, deficiency and excess of carbohydrates. Recommended daily allowances of carbohydrates.
- B. Fat :- composition classification function of fat, deficiency and excess of fat, sources of fat, fatty acids, its classification, sources of fat and recommended daily allowances.

Unit - 3

- A. Nutrients that build body E.g. Protein composition of protein, classification of protein Amino acids its types, function of protein sources of protein, deficiency diseases occurs due to protein. Recommended daily allowances of protein.
- B. Protective Nutrients and Regulating Nutrients

Fat soluble vitamins.Vitamin-A, Vitamin-D, Vitamin-E and Vitamin-K their functions sources deficiency diseases and excess, recommended daily allowances of fat soluble vitamin.

## Unit-4

- A. Water soluble vitamins :- vitamin- $B_1$  (Thiamine ), vit-  $B_6$  (riboflavin ), Niacin, vit -B6 (pyridoxine), folic acid cynocobal mine , vitamin-C (Ascorbic acid) etc. their composition, classification function sources and deficiency diseases, recommended allowances.
- B. Minerals:- Calcium, Phosphorus, Iron iodine, Fluorine, Sodium, Potassium, Magnesium their function, sources deficiency diseases and excess effect, Recommended daily allowances.
- C. Water:- importance of water in human life its function, requirement of water and effect of deficiency of water.

References:-

- 1. Applied Nutrition: By Rajlaxmi
- 2. Swaminathan M. :- "Human Nutrition and Diet" Banglore Printing and Publishing Co.
- 3. Essential of Food and Nutrition volume I and volume -II By M. Swaminathan.
- 4. Basic elements of food and Nutrition By Sushila I. Patel, Devine Publication.
- 5. Fundamental of Food and Nutrition by Mudanubi and Rajgopal, Wiley Eastern Limited.