

# **HOME SCIENCE**

## (DEGREE STANDARD)

**SUBJECT CODE: 340** 

### **UNIT- I: FOOD SCIENCE**

Food groups, Composition, nutritive value and cooking of cereals, millets, pulses, vegetables, fruits, milk and milk products, flesh foods, fats and sugars.

## **UNIT - II: MACRO NUTRIENTS**

Energy – Definition, Unit, Estimation of energy expenditure- direct and indirect calorimetry. Factors affecting total energy requirements, Determination of total energy requirement. Energy requirements for different age groups and physiological conditions. Classification, functions, digestion, absorption, metabolism, disorders of carbohydrates, fats and proteins. Dietary fibre - definition, role of dietary fibre in health and disease.

### <u>UNIT – III: MICRONUTRIENTS</u>

Functions, sources, deficiency of fat soluble and water soluble vitamins. Functions, sources and deficiency of minerals - calcium, phosphorus, sodium, potassium, iron, zinc, iodine and fluorine. Water - functions, dehydration, water balance. Functional foods — sources, classification and significance. Role of antioxidants in human nutrition.

### **UNIT - IV: COMMUNITY NUTRITION**

Assessment of nutritional status – Direct and Indirect methods - advantages and disadvantages. Malnutrition - causes, prevention and measures to alleviate malnutrition - Feeding programmes in action in the state. Fortification and enrichment of foods in India. Food security - definition, factors influencing food security in the household and community. Nutrition education - methods and use of audio visual aids.

#### **UNIT -V: INTERIOR DESIGN**

Elements and principles of design, colour - qualities and colour schemes. Furniture and furnishings - selection and arrangement in interiors. Types of accessories - functional and decorative, selection and arrangement, use and care. Lighting in the home - Importance and principles of home lighting. Types of lighting - Lighting needs for different activities.

#### **UNIT – VI: RESOURCE MANAGEMENT**

Management process, values and goals - Decision making - Importance, types and process. Resources - classification, characteristics, factors affecting the use of resources, time, money and energy management. Work simplification – Mundel's classes of change. Arrangement of kitchen - work centres and work triangle.

## **UNIT - VII: FAMILY DYNAMICS**

Family - Types, Family structure in India, functions and characteristics. Sex education - Guidance and counselling - role of family, school and community in education and vocational counselling. Critical family situations and their impact on children. Problems of adolescents. Population education - causes and effects of population explosion in India - Remedial measures.

#### **UNIT – VIII: TEXTILES AND CLOTHING**

Fibres and yarns - classification, processing and properties of fibres. Fabric construction and finishes - basic weaves and variations- plain, twill, satin and fancy weaves. Need for finishing - classification of basic and applied finishes. Factors affecting the selection of clothing for the family.

#### **UNIT – IX: LIFE SPAN NUTRITION**

Nutrient requirement and balanced diets from infancy to elderly. Nutritional requirements for special conditions - pregnancy and lactation, Importance of breast feeding and weaning foods. Principles of meal planning for different income levels and age groups.



# **UNIT – X: DIET THERAPY**

Principles and classification of therapeutic diets, Special feeding methods. Symptoms, clinical features and modification of diets in gastro intestinal and renal diseases, obesity, diabetes and cardio vascular disorders. Modification of diet in cancer and AIDS. Diet counselling.

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Dated: 22.12.2017