

## HOME SCIENCE

### Chapter 1 – BASIC NUTRITION

1. Definition and Dimensions of health
2. Optimum and malnutrition
3. Classifications of
  - a. Carbohydrate
  - b. Protein
  - c. Lipids
  - d. Minerals
  - e. Vitamins
4. Functions of
  - a. Carbohydrates
  - b. Proteins
  - c. Vitamin A
  - d. Calcium
  - e. Iron
5. Deficiency diseases
  - a. PEM
  - b. Vitamin A
  - c. Vitamin C
  - d. Ca/ Vitamin D
  - e. Iron
6. Significance of dietary fibre

### Chapter 2 - A GUIDE TO HEALTHY LIVING

1. Classification of Food
2. Objectives of Cooking Food
3. Methods of Cooking
  - Steaming
  - Pressure cooking
  - Electromagnetic waves
4. Conservation of nutrients
5. Junk foods
6. Advantages of
  - Germination
  - Fermentation
  - Fortification

### Chapter 3 – NUTRITION FOR SELF AND FAMILY

1. Importance of Meal Planning
2. Principles of Meal Planning
3. Factors affecting Meal Planning
4. Expand RDA, ICMR, RDI
5. Reference Man, Reference Woman
6. RDA for:
  - a. Adult Man moderate work

- b. Adult Woman moderate work
  - c. Pregnant Woman
  - d. Lactating Woman 0-6 months
7. Factors affecting RDA

#### **Chapter 4 – Diet Therapy**

1. Definition of Diet Therapy.
2. General Objectives of diet therapy
3. Modification of Therapeutic diets.
  - a. Qualitative modification (without examples)
  - b. Quantitative modification (without examples)
4. Diet in Common diseases
  - Causes and Types of Diarrhoea
  - Types of Fever
5. Diet in Nutrition Related Problems
  - a. Obesity - Causes
  - b. Anaemia – Classification
    - i) Morphological classification
    - ii) Aetiological classification

#### **Chapter 5 – FOOD PRESERVATION**

1. Definition of Food spoilage and Food Preservation
2. Meaning of Food spoilage
3. Causes of Food spoilage
4. Principles of Food preservation
5. Methods of Food preservation
  - a. Bacteriostatic methods
  - b. Bactericidal methods

#### **Chapter 6 – INTRODUCTION TO FIBRE SCIENCE**

1. Classification of fibres
2. Fibre Identification
3. Properties of Natural fibres.

#### **Chapter 7 – YARN – PRODUCTION AND PROPERTIES**

1. Types of Yarns
2. Conventional spinning
3. Chemical spinning
4. Yarn properties

#### **Chapter 8 – FABRIC CONSTRUCTION**

1. Parts of looms
2. Characteristics of woven fabrics
3. Basic weaves
  - Plain weave
  - Twill weave
  - Satin weave
4. Classification of Non-woven fabrics
  - Felts
  - Bonded fabrics
5. Other methods of Fabric Construction

- Braided fabrics
- Laces
- Nets
- Stitch bonded fabrics

**Chapter 9 – FABRIC FINISHING**

1. Importance of finishes
2. Classification of Finishes
3. Common fabric finishes
  - Bleaching
  - Mercerization
  - Singeing
  - Parchmentization
  - Sizing
  - Calendaring

**Chapter 10 – FINISHING WITH COLOUR**

1. Stages of Dyeing
2. Designing using Dyeing and Printing

**Chapter 11 – INTRODUCTION TO EXTENSION EDUCATION**

1. Definition Extension education
2. Objectives of Extension education
3. Principles of Extension education
4. Difference between formal and extension education
5. Extension teaching methods
6. Characteristics of Home science extension

**Chapter 12 – COMMUNICATION**

1. Objectives of communication
2. Elements of communication
3. Types of communication
4. Cone of experience