

# **SYLLABUS**

## **I PRE UNIVERSITY COURSE**

### **HOME SCIENCE**

Theory: 4 hrs / week  
Practicals: 2 hrs / week

Total Number of Theory Hours: 120  
Number of Practical: 20  
Maximum Marks: 100  
Theory: 70  
Practical: 20  
Internal Assessment: 10

1. CONCEPT AND SCOPE OF HOME SCIENCE
  - 1.1 Introduction
  - 1.2 Scope of Home Science Education
  - 1.3 Disciplines of Home Science
2. RESOURCES
  - 2.1 Introduction
  - 2.2 Classification of Resources
  - 2.3 Characteristics of Resources
3. FUNDAMENTALS OF MANAGEMENT
  - 3.1 Introduction
  - 3.2 Management Process
  - 3.3 Decision Making
  - 3.4 Types of Decisions
  - 3.5 Process of Decision Making
4. MANAGEMENT OF TIME, ENERGY AND MONEY
  - 4.1 Time Management
  - 4.2 Energy Management
  - 4.3 Money Management
5. CONCEPT OF FOOD AND NUTRITION
  - 5.1 Introduction
  - 5.2 Terms Related to Food and Nutrition
  - 5.3 Functions of Food
  - 5.4 Food Habits
6. BASICS OF NUTRITION
  - 6.1 Introduction
  - 6.2 Carbohydrates
  - 6.3 Proteins
  - 6.4 Fats (Lipids)
  - 6.5 Energy
  - 6.6 Vitamins
  - 6.7 Minerals
  - 6.8 Water
  - 6.9 FIBRE
7. PRINCIPLES AND METHODS OF PREPARATION OF FOOD
  - 7.1 Introduction

- 7.2 Selection of Foods
- 7.3 Preliminary Preparation of Food
- 7.4 Principles of Cooking
- 7.5 Methods of Cooking
- 7.6 Effect of Cooking on Nutritive Value
- 7.7 Methods of Enhancing Nutritive Value

## 8. HUMAN GROWTH AND DEVELOPMENT

- 8.1 Introduction
- 8.2 Concept of Growth and Development
- 8.3 Stages of Human life span
- 8.4 Domains of Human Development
- 8.5 Factors Influencing Growth and Development

## 9. BIOLOGICAL BEGINNINGS OF LIFE

- 9.1 Introduction
- 9.2 Reproduction
- 9.3 Menstruation
- 9.4 Fertilization
- 9.5 Pregnancy
- 9.6 Stages of Pre-Natal Development
- 9.7 Child Birth Process
- 9.8 Types of child birth

## 10. INFANCY

- 10.1 Introduction
- 10.2 Neonate
- 10.3 Adjustments of a Newborn
- 10.4 Newborn's Reflexes
- 10.5 Care of a Neonate
- 10.6 Touch Therapy
- 10.7 Importance of Breast Feeding
- 10.8 Infancy
- 10.9 Developmental domains during infancy
- 10.10 Immunization Schedule
- 10.11 Complementary Feeding

## 11. INTRODUCTION TO TEXTILE FIBRES

- 11.1 Introduction
- 11.2 Textile Terminologies
- 11.3 Properties of Fibres
- 11.4 Classification of Fibres
- 11.5 Elementary Study of Fibres

## 12. FABRIC CONSTRUCTION

- 12.1 Spinning
- 12.2 Steps in Yarn Construction (Cotton System)
- 12.3 Yarn Twist
- 12.4 Yarn Count
- 12.5 Types of Yarns
- 12.6 Weaving
- 12.7 Loom
- 12.8 Classification of Weaves

## 13. CARE OF CLOTHING

- 13.1 Introduction
- 13.2 Hand Washing and Finishing of Various Fabrics

14. EXTENSION EDUCATION AND COMMUNICATION .

- 14.1 Introduction
- 14.2 Classification of Teaching and Learning Process
- 14.3 Definition of Extension Education
- 14.4 The Concept of Extension Education
- 14.5 Objectives
- 14.6 Principles of Extension Education
- 14.7 Extension Teaching Methods
- 14.8 Extension Education and Community Development

15. COMMUNICATION FOR HOME SCIENCE EXTENSION

- 15.1 Introduction
- 15.2 Elements of Extension Communication System
- 15.3 Types of Communication

## PRACTICALS

**Number of classes: 20**

**Duration: one class= 2 hours**

1. Observe and list the human, non-human/shared resources available at home and in your neighborhood 1 class
2. Visit a bank and collect information on opening an account 2classes
  - a. Collect information of various accounts- savings account, fixed deposit, recurring deposit, current account
3. Plan a family budget for the following income groups- low, middle, high 1 class
4. Identification:
  - a. of Equipment in the nutrition laboratory
  - b. of Food groups
  - c. Weights & measures 2 classes
5. Planning and preparation of nutrient rich recipes- 2 classes
  - a. Energy, protein
  - b. Calcium, iron
6. Observe an infant for developmental milestones of: 2 classes
  - a. Physical development
  - b. Motor development
7. Prepare an activity/ module/ teaching aid to promote physical/ motor development for an infant. 2 classes
8. Identification of fibers- cotton, silk, wool, rayon, nylon 2 classes
  - a. Physical appearance
  - b. Microscopic tests
  - c. Burning tests
9. Basic stitches 2 classes
  - a. Tacking, running, back stitch, hemming, slip stitch, overcasting, whipping
10. Plan and prepare the audio-visual aids to be used for extension education and communication. 4 classes

## SCHEME OF VALUATION FOR I PUC

### Practical examination

Subject: Home science

Duration of practical examination 2hrs

Maximum marks allotted 30marks

- a) Practical Record 06 marks
- b) Viva 04 marks
- c) Conducting the experiments 20 marks

Instructions: All experiments are compulsory

- 1. Plan and prepare a family budget for low/middle/high income group (04)
  - a. Write the percentage for various budget items 2 marks
  - b. Calculation of percentage 2marks
- 2. Plan and prepare a receipt using any one method of cooking (04)
  - a. Write the percentage for various budget items 02 marks
  - b. Calculation of percentage 02 marks
- 3. Sew any one basic and one decorative stitch (12)
  - a. Back stitch/ hemming/ stem stitch/ fly stitch 02 marks
- 4. Plan an activity to foster physical development/ language/ cognitive development of an infant
  - a. Planning an activity 02 marks
  - b. Writing educational outcome 02 marks
- 5. Prepare an visual aid on any current topic (04)
  - a. Planning 01 marks
  - b. Preparation 03 marks