SYLLABUS
I PRE UNIVERSITY COURSE
HOME SCIENCE

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

Total Number of Theory Hours: 120
Number of Practicals: 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, overcastting, 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