HOME SCIENCE (Code No. 064)

(CLASS – XI AND XII)
(2021-2022)

Preface

The course in Home Science encompasses five areas namely, Foods and Nutrition, Human Development and Family Studies, Fabric and Apparel, Resource Management and Communication and Extension. All these domains have their specific content in focus that contributes to the study of the individual and the family in Indian social cultural context.

The purpose of Home Science is the creation of an environment and outlook to enable learner to live a richer and more purposeful life, become future ready and develop 21st century life skills for work, livelihood and careers. All the domains within the home science discipline provide ample scope for professional avenues of higher education and career opportunities. They range from professions catering to various health and service institutions/agencies, educational organizations, industry and business houses of textiles, garments, food industry, teaching learning materials, ergonomically appropriate equipment and work situations. The subject integrates the application of various sciences and humanities to improve Human Environment, Family Nutrition, Management of Resources and Child Development.

In class XI, the “Self and family” and the “Home” are focal points for understanding the dynamics for individual lives and social interactions.

In class XII, the emphasis is on “Work and careers” through the life span.

Learning Objectives:

The Home Science curriculum at senior secondary level has been framed to enable the learners to:

1. develop an understanding of the self and one’s role and responsibilities as a productive individual and as a member of family, community and society.
2. integrate learning across diverse domains and undertake a critical analysis of issues and concerns specific to family, community and society.
3. appreciate the discipline of Home Science for professional careers.
4. acquaint learners with the basic knowledge specific to five domains

namely, Foods and nutrition, Human Development and Family studies, Fabric and Apparel, Resource Management and Communication and Extension.

5. develop functional skills in the five domains for career and employment.
6. equip learners for enrichment and higher studies.

Learning outcomes:

After undertaking the course students will:

1. function as a productive and responsible individual in relation to self, family, community and society.
2. able to apply the basics of human development with specific reference to self, family and community.
3. able to utilize the skills of judicious management of various resources.
4. will be sensitized to fabric and apparel, their selection and care.
5. inculcate healthy food habits and lifestyle to enable prevention and management of diseases.
6. become alert and aware consumer.
7. appreciate the potential of entrepreneurship and other varied professional opportunities to make informed career choices.

Class XI

Introduction:

In class XI, the “Self and family” and the “Home” are focal points for understanding the dynamics for individual lives and social interactions. The curriculum is divided in five units. Unit I introduces the concept of home science. Unit II begins with the stage of adolescence and related concerns. Unit III deals with the expanding interactions of the adolescent with others in family, school, community and society, and the needs emerging from each of these contexts. Unit IV and V focus on childhood and adulthood respectively.

Course Structure: Theory & Practical

Time: 3 Hrs.

Theory: 70 Marks
Practical: 30 Marks

No.	Units	Marks	No.of Pd.
1.	Introduction to Home Science	02	05
2.	Understanding oneself: Adolescence	20	50
3.	Understanding Family, Community and Society	15	40
4.	Childhood	15	40
5.	Adulthood	18	45
	Total	**70**	**180**
	Practical	**30**	**40**
	Grand Total	**100**	**220**

Class XI

Theory: 70 Marks Total Periods 180

Unit I Introduction to Home Science

Unit II: Understanding oneself: Adolescence

Ch.- Understanding the Self.

A. 'Who am I'?

B. Development and Characteristics of the Self(Development characteristics and needs of adolescents)

C. Influences on Identity

Ch.- Food, Nutrition, Health and Fitness

Ch. - Management of Resources
Ch.- Fabric Around us
Ch-Media and Communication Technology
Ch-Effective Communication Skills

Unit III: Understating family, community and society

Ch.- Relationships and interactions with 'Significant Others'.
Ch. - Concerns and needs in diverse contexts:

a. Nutrition, Health and Hygiene

b. Resources Availability and Management

Unit IV: Childhood

Ch.-Survival, Growth and Development
Ch.- Nutrition, Health and Wellbeing
Ch-Care and Education
Ch.- Our Apparel

Unit V: Adulthood

Ch.- Health and Wellness
Ch.- Financial Management and planning
Ch.- Care and Maintenance of fabrics
Ch- Perspective in Communication
Ch- Individual Responsibilities and Rights

HOME SCIENCE CLASS XI

REFERENCE POINTS

UNIT I: INTRODUCTION TO HOME SCIENCE

- What is Home Science
- Areas of Home Science
- Home Science is important for both boys and girls
- Career options of Home Science

UNIT II: UNDERSTANDING ONESELF: ADOLESCENCE

Unit II focus on the stage of adolescence – the stage of life to which you belong at present. This unit deals with understanding your own self in terms of your personal and social identity, your nutritional and health requirements, management of basic resources of time and space, fabrics around you, and your communication skills. The last chapter of the unit situates the adolescent in the context of the family and larger society, thereby linking it to the next unit that deals with the individual in relation to her/his family, school, community and society.

CHAPTER : UNDERSTANDING THE SELF

- What is Self?
  - Personal dimension
  - Social dimension
  - Self- concept
  - Self esteem

- What is Identity?
  - Personal identity
  - Social identity

- Self during Infancy: characteristics
- Self during early childhood: characteristics
- Self during middle childhood: characteristics
- Self during adolescence: characteristics
  - Identity development
  - Identity crisis

- Real vs Ideal self

- Influences on identity
    - Developing a sense of self and identity
    - Influences on formation of identity
        - Biological and physical changes
        - Socio-cultural context
        - Emotional changes
        - Cognitive changes

CHAPTER : FOOD, NUTRITION, HEALTH AND FITNESS

- Introduction
- Definition of
    - Food
    - Nutrition
    - Nutrients
- Balanced diet
    - Definition
    - RDA
- Health and Fitness
- Using Basic food Groups for planning Balanced Diets
    - Food guide pyramid.
- Vegetarian food Guide
- Dietary patterns in Adolescence
        - Irregular meals and skipping meals
        - Snacking
        - Fast foods
        - Dieting
- Modifying diet related behaviour
        - Diet journal
        - Exercise
        - Substance use and abuse
        - Healthy eating habits
        - Snacks
        - Drinking water
- Factors influencing eating behaviour

- Eating disorders at adolescence

- Key terms and their meaning

CHAPTER : MANAGEMENT OF RESOURCES

- Introduction
- Classification of resources
    - Human /non-human resources
    - Individual / shared resources
    - Natural / community resources
- Human and non-human resources
    - Human resources
        - Knowledge
        - Motivation/ interest
        - Skills/ strength/ aptitude
        - Time
        - Energy
    - Non-human resources
        - Money
        - Material resources
- Individual and shared resources
    - Individual resources
    - shared resources
- Natural and community resources
    - Natural resources
    - community resources
- Characteristics of resources
    - Utility
    - Accessibility
    - Interchangeability
    - Manageable
- Managing Resources
    - Management process
    - Planning
        - Steps in planning
    - Organising
    - Implementing
    - Controlling
    - Evaluation

CHAPTER : FABRIC AROUND US

- Definition of yarns, fibres, textile products, finishing.
- Introduction to fibre properties
- Classification of textile fibres
  - Filament/staple fibres
  - Natural/Manufactured (manmade) fibres
- Types of Natural Fibres
  - Cellulosic fibres
  - Protein fibres
  - Mineral fibres
  - Natural rubber
- Types of Manufactured Fibres
  - Regenerated cellulosic fibres
  - Modified cellulosic fibres
  - Protein fibres
  - Non-cellulosic fibres
  - Mineral fibres
- Some Important fibres and their properties
  - Cotton
  - Linen
  - Wool
  - Silk
  - Rayon
  - Nylon
  - Polyester
  - Acrylic
  - Elastomeric fibres
- Yarns
- Yarn processing
  - Cleaning
  - Making into a sliver
  - Attenuating, drawing out and twisting
- Yarn terminology
  - Yarn number
  - Yarn twist
  - Yarn and thread
- Fabric production
  - Weaving

- Knitting
- Braiding
- Nets
- Laces

- Textile Finishing
  - Finishing with colour
  - Printing

CHAPTER-MEDIA COMMUNICATION TECHNOLOGY

- Communication and Communication Technology
  - What is Communication
  - Classification of communication
  - How does communication takes place
- What is media
  - Media classification and functions
- What is communication technology
  - Classification of communication technologies
  - Modern communication technologies

CHAPTER-EFFECTIVE COMMUNICATION SKILLS

- Meaning of communication skills
- Types of communication skills
  - Thinking
  - Reading
  - Writing
  - Listening
  - Speaking
  - Non verbal communication

UNITIII: UNDERSTANDING FAMILY, COMMUNITY AND SOCIETY

The chapters in Unit II were all addressed to you for the understanding of self and of the factors that influence your decision making. Let us now move on to understanding the family, the community and the society that you are a part of. In the first section- the focus will be on relationships and interactions with significant others, i.e. those important to you in these contexts. The second section- will discuss concerns and needs, such as those of health, work, resources, education and textile tradition in the adolescent's diverse social contexts.

CHAPTER : RELATIONSHIPS AND INTERACTIONS WITH SIGNIFICANT OTHER'S

Family: Basic unit of society

- Definition of family
- Importance of family
- Types of family
    - Patrilineal family
    - Matrilineal family
    - Nuclear family
    - Joint family
    - Extended family
- Functions of the family
    - Providing nurturance
    - Socialization
    - Conferring a status and role to individuals
    - Economic function
    - Fulfilling the need for psychological support
    - Recreational function
    - Religious function
- Family life cycle
- Family developmental tasks
- Family dynamics
- Handling situations
- Support and strength to members
- Communication in the family
    - Styles of communication

        - Clear and direct communication
        - Clear and indirect communication
        - Masked and direct communication
        - Masked and indirect communication
- Keys to building effective family communication
    - Communicate frequently
    - Communicate clearly
    - Be an active listener

School Peers and Educators

- Role of school in developing new relationships
    - Peer relationships
        - During infancy
        - During preschool years
        - During middle childhood years
        - During adolescence
            - Clique
            - Crowd
    - The importance of friendships
        - Feel accepted
        - Emotional security
    - Peer pressure
- Influence of education and teachers on student's development and achievement

Community and Society

- Concept of community and society
- Types of communities: neighbourhood, village, city, town,
- Functions of communities
- Society and culture
    - Significance of society in the lives of individuals and families
    - Relationship of society to culture
- Role of media: television, newspaper, radio, internet
- The individual child, community and society: Responsibilities of individuals towards community.

CHAPTER : CONCERNS AND NEEDS IN DIVERSE CONTEXTS

A. NUTRITION, HEALTH AND HYGIENE

- Health and its Dimensions
    - Social health
    - Mental health
    - Physical health
- Health care Indicators of Health
- Nutrition and Health
- Importance of nutrients
- Factors affecting nutritional well being
    - Food and nutrient security
    - Care for the vulnerable
    - Good health for all
    - Safe environment
- Nutritional Problems and their consequences
    - Malnutrition
    - Under nutrition
    - Over nutrition
- Hygiene and Sanitation
    - Personal Hygiene
    - Environmental Hygiene
    - Food Hygiene
    - Water safety

B. RESOURCES AVAILABILITY AND MANAGEMENT

- Time Management
    - Definition of time plan
    - How good is your time management (Activity)?
    - Steps in making time plan
    - Tips for effective time management
    - Tools in time management---Peak load period, Work curve, Rest /break periods, Work simplification
- Space Management
    - Space and the home
    - Principles of space planning

UNIT IV: CHILDHOOD

The theme of this unit is 'Childhood'. You may wonder why did the book address the adolescent years first and childhood later. Well, it is because if you as an adolescent understand issues about yourself first, it would be easier to grasp the issues that are concerned with the stage of childhood, and later with adulthood. In this unit you will be studying about children's growth and development, critical concerns about their health and nutrition, education and clothing. As we would like children with disabilities to be an inclusive part of our society, the chapters provide us important information on their needs and ways to meet them.

CHAPTER : SURVIVAL GROWTH AND DEVELOPMENT

- The meaning of survival
- Growth and development
- Areas of development
    - Physical development
    - Motor development
    - Cognitive development
    - Sensory development
    - Language development
    - Social development
    - Emotional development
- Good Nutrition
- Stages in development
    - Neonate
        - Reflexes
        - Sensory capabilities
- Development across stages from infancy to adolescence
    - Physical and motor development
    - Language development
    - Socio –emotional development
    - Cognitive development
        - Mental processes involved in thinking
        - Stages of cognitive development
            - ❖ Sensory motor stage

- ❖ Pre-operational stage
- ❖ Concrete operational stage
- ❖ Formal operational stage

CHAPTER : NUTRITION, HEALTH AND WELL-BEING

- Introduction
- Nutrition, Health and Well-being during infancy (birth – 12 months)
    - Dietary requirements of infants
    - Breast feeding
        - Benefits of breast feeding
    - Feeding the low birth weight infants
    - Complementary foods
    - Guidelines for complementary feeding
    - Immunization
    - Common health and nutrition problems in infants and young children
- Nutrition, Health and well-being of preschool children (1-6 years)
    - Nutritional needs of preschool children
    - Guidelines for healthy eating for pre-schoolers
    - Planning balanced meals for preschool children
    - Some examples of low-cost snacks
    - Feeding children with specific needs
    - Immunization
- Nutrition, Health and well-being of school-age children (7-12 years)
    - Nutritional requirements of school children
    - Planning diets for school-age children
    - Factors that influence diet intake of preschool-age and school-age children
    - Healthy habits
    - Health and nutrition issues of school age children

CHAPTER:CARE AND EDUCATION

- Introduction
- Infancy and Early Childhood years
    - Meaning of care and education
    - Who provides ECCE

- Why provide ECCE services
- The nature of ECCE

➢ Care and Education during Middle Childhood Years

- Difficulties in children's primary education
- The nature of primary education

CHAPTER: OUR APPAREL

➢ Clothing functions and the selection of clothes
- Modesty
- Protection
- Status and prestige
- Adornment

➢ Factors affecting selection of clothing in India
- Age
- Climate and season
- Occasion
- Fashion
- Income

➢ Understanding children's basic clothing needs
- Comfort
- Safety
- Self help
- Appearance
- Allowance for growth
- Easy care
- Fabrics

➢ Clothing requirements at different childhood stages
- Infancy (birth to six months)
- Creeping age (6 months to one year)
- Toddlerhood (1-2 years)
- Preschool age (2-6 years)
- Elementary school years (5-11 years)
- Adolescents (11-19 years)
- Clothes for children with special needs

UNIT V: ADULTHOOD

With the advent of adulthood, the adolescent passes through the portal of what may be termed as the "real world". One enters the world of higher education, work and marriage, and gets involved in establishing one's own family. Hence responsibilities of the individual increases manifold. In this unit you will learn about the major factors that play a role in determining the quality of adult life, these being health and wellness, financial planning and management, maintenance of fabrics and apparel that one uses personally as well as in the home, and appreciation of different perspectives in communication. The unit concludes with the chapter on individual responsibilities and rights, not only for one's own self, but also in relation to the family and larger society.

CHAPTER : HEALTH AND WELLNESS

- Importance of health and fitness
- Healthy & Unhealthy diet
- BMI
- Do's and Don'ts for health promoting diets
- Fitness
- Importance of exercise and physical activities in adulthood
- Wellness
- Qualities of a person who is rated high on wellness
- Dimensions of wellness
  - Social aspect
  - Physical aspect
  - Intellectual aspect
  - Occupational aspect
  - Emotional aspect
  - Spiritual aspect
  - Environmental aspect
  - Financial aspect
- Stress and coping with stress
- Simple techniques to cope with stress
  - Relaxation
  - Talking with friends/family
  - Reading
  - Spirituality
  - Music
  - Hobby

- Yoga

CHAPTER : FINANCIAL MANAGEMENT AND PLANNING

- Financial management
- Financial planning
- Management
- Money and its importance
- Family Income
    - Money income
    - Real income: Direct and Indirect income
    - Psychic income
- Income management
- Budget
- Steps in making budget
- Advantages of planning family budgets
- Control in money management
    - Checking to see how well the plan is progressing
        - Mental and mechanical check
        - Records and accounts
    - Adjusting wherever necessary
    - Evaluation
- Savings
- Investment
- Principles underlying sound investments
    - Safety to the principle amount
    - Reasonable rate of interest
    - Liquidity
    - Recognition of effect of world conditions
    - Easy accessibility and convenience
    - Investing in needed commodities
    - Tax efficiency
    - After investment service
    - Time period
    - Capacity
- Savings and investment avenues
    - Post office
    - Banks

- Unit Trust of India
- NSC
- Mutual funds
- Provident funds
- Chit fund
- Life insurance and medical insurance
- Pension scheme
- Gold, house, land
- Others (new schemes)

- Credit
- Need of credit
- 4C's of credit: character, capacity, capital means, collateral,

CHAPTER : CARE AND MAINTENANCE OF FABRICS

- Mending
- Laundering
  - Stain removal
    - Vegetable stains
    - Animal stains
    - Oil stains
    - Mineral stains
    - Dye bleeding
  - Techniques of stain removal
    - Scraping
    - Dipping
    - Sponging
    - Drop method
  - Reagent for stain removal
  - Common stains and method of removing
- Removal of dirt: the cleaning process
  - Soaps and detergents
  - Methods of washing: friction, kneading & squeezing, suction, washing by machine
- Finishing
  - Blues and optical brighteners
  - Starches and stiffening agents
- Ironing
- Dry cleaning
- Storage of textile products

- Factors affecting fabric care
    - Yarn structure
    - Fabric construction
    - Colour and finishes
- Care label

CHAPTER :PERSPECTIVES IN COMMUNICATION

- Introduction
    - Age
    - Education
    - Culture
    - Gender
    - Exposure to new knowledge

CHAPTER:INDIVIDUAL RESPONSIBILITIES AND RIGHTS

- Introduction
- Do responsibilities and rights differ from individual to individual
- How to protect rights and promote the sense of responsibility

NOTE:

- **Wherever required latest data/figures to be used.**
- **Latest RDA's to be used.**

PRACTICALS FOR CLASS XI Pd.40

1. Understanding oneself with reference to:

   a) Physical development in terms of age, height, weight, hip and chest circumference.

   b) Sexual maturity (Age at menarche ,Development of breasts : girls).

   Growth of beard, change in voice:boys)

2. Observe developmental norms: (Physical, Motor, Language and social - emotional) birth to three years.

3. List and discuss 4-5 areas of agreement and disagreement with

   a) Mother

   b) Father

   c) Siblings/ Friends

   d) Teacher

4. a) Record own diet for a day

   b) Evaluate qualitatively for adequacy

5. Preparation of different healthy snacks for an adolescent suitable in her/his context.

6. a) Record one day's activities relating to time use and work

   b) Prepare a time plan for yourself

7. Plan a budget for a given situation/purpose.

8. a) Record the fabrics and apparel used in a day

   b) Categorize them according to functionality

9. Relationship of fibre properties to their usage:

   a) Thermal property and flammability
   b) Moisture absorbency and comfort

10. (a) Analyze label of any one garment with respect to: Clarity, fiber content, size and care instructions.

    (b) Prepare one care label of any garment.

    (c) Analyze two different fabric samples for color fastness.

Scheme for practical examination — 30 Marks

1. Observe developmental norms: (Physical, Motor, Language and social emotional) birth to three years.

   5 marks

   OR

   List and discuss 4-5 areas of agreement and disagreement with

   a) Mother
   b) Father
   c) Siblings/ Friends
   d) Teacher

2. Preparation of healthy snacks for an adolescent. 7marks

3. Plan a budget for a given situation/purpose. 3 marks

4. Prepare a time plan for yourself. 3 marks

5. Relationship of fibre properties to their usage: 5 marks

   a) Thermal property and flammability
   b) Moisture absorbency and comfort

   OR

   Prepare one care label of any garment.

6. File 5 marks

7. Viva 2 marks

Prescribed textbook: Human Ecology and Family Sciences(For class XI): Part I and Part II