

## **HOME SCIENCE (Code No. 064)**

**(CLASS – XII)**

**(2023-2024)**

### **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 21<sup>st</sup> 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 be able to:

1. function as a productive and responsible individual in relation to self, family, community and society.
2. apply the basics of human development with specific reference to self, family and community.
3. utilize the skills of judicious management of various resources.
4. 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.

## Home Science (2023-24)

Class XII

### **Introduction:**

In class XII, the emphasis is on “Work and careers” through the life span. Within the curriculum the significance and scope of each domain (Foods and Nutrition, Human Development and Family Studies, Fabric and Apparel, Resource Management and Communication and Extension), the multiple thrust areas emerging within them have been emphasized. The units spell out the basic concepts, requisite knowledge and skills in each thrust areas and delineate the career avenues and the preparation required for them in order to make informed career choices.

### **Course Structure:**

**Theory and practical**

**Time-3 Hours**

**Theory: 70 marks**

**Practical: 30 marks**

<b>No.</b>	<b>Units</b>	<b>Marks</b>	<b>No. of Periods</b>
1	Work, Livelihood and Career	05	10
2	Nutrition, Food Science and Technology	23	33
3	Human Development and Family Studies	10	24
4	Fabric and Apparel	17	28
5	Resource Management	10	24
6	Communication and Extension	05	07
	<b>THEORY</b>	<b>70</b>	<b>126</b>
	<b>PRACTICAL</b>	<b>30</b>	<b>28</b>
	<b>GRAND TOTAL</b>	<b>100</b>	<b>154</b>

## **CLASS XII**

**THEORY: 70 Marks**

### **UNIT I: Work, livelihood and Career**

Ch. Work, livelihood and Career

### **UNIT II: Nutrition, Food Science and Technology**

Ch. Clinical Nutrition and Dietetics

Ch. Public Nutrition and Health

Ch. Food Processing and Technology

Ch. Food Quality and Food Safety

### **UNIT III: Human Development and Family Studies**

Ch. Early Childhood Care and Education

Ch. Management of Support Services, Institutions and Programmes for Children, Youth and Elderly

### **UNIT IV: Fabric and Apparel**

Ch. Design for Fabric and Apparel

Ch. Fashion Design and Merchandising

Ch. Care and Maintenance of Fabrics in Institutions

### **UNIT V: Resource management**

Ch. Hospitality Management

Ch. Consumer Education and Protection

### **UNIT VI: Communication and Extension**

Ch. Development Communication and Journalism

Prescribed textbook: Human Ecology and Family Sciences (For Class XII): Part I and Part II

## **CLASS XII HOME SCIENCE REFERENCE POINTS**

### **UNIT I WORK, LIVELIHOOD AND CAREER**

#### **Chapter: WORK, LIVELIHOOD AND CAREER**

- Introduction
  - Work and meaningful work
  - Work, careers and livelihood
- Traditional occupation in India
  - Agriculture
  - Handicrafts
  - Indian cuisine
  - Visual arts
- Work ,Age and Gender
  - Gender issues in relation to work
  - Issues and concerns related to women and work
    - ✓ KGBV
    - ✓ Beti bachao ,Beti Padhao Yojana
- Attitudes and approaches to work and life skills for livelihood
  - Attitudes and approaches to work
  - Life skills for livelihood
  - Essential soft skills at workplace
- Ergonomics
  - Definition and need for ergonomics
  - Benefits of Ergonomics
- Entrepreneurship
  - Definition and characteristics

## **UNIT II NUTRITION, FOOD SCIENCE AND TECHNOLOGY**

### **Chapter: CLINICAL NUTRITION AND DIETETICS**

- Introduction
  - Nutrition
  - Clinical Nutrition
- Significance
- Basic concepts
- Diet therapy
- Types of diets: Regular Diet and Modified diets
  - Changes in consistency
  - Feeding routes
  - Prevention of chronic diseases
- Preparing for career
- Scope

### **Chapter: PUBLIC NUTRITION AND HEALTH**

- Introduction
- Significance
- Basic concept
  - Public health nutrition
  - Nutritional Problems of India
    - Protein energy malnutrition
    - Micronutrient deficiencies
- Iron deficiency anemia
- Vitamin A deficiency
- Iodine deficiency disorders
- Strategies/Intervention to tackle Nutritional problems
- Diet or food based strategies
- Nutrient based strategies
- Nutrition programmes operating in India
- ICDS
- Nutrient Deficiency Control Programmes
- Food Supplementation Programmes
- Food Security Programme
- Health Care
- Scope

## **Chapter: FOOD PROCESSING AND TECHNOLOGY**

- Introduction
- Significance
- Basic Concepts
  - Food Science
  - Food Processing
  - Food Technology
  - Food Manufacturing
- Development of food processing and technology
- Importance of Food processing and Preservation
- Classification of food on the basis of extent and type of processing
- Preparing for a career
- Scope

## **Chapter: FOOD QUALITY AND FOOD SAFETY**

- Introduction
- Significance
- Basic Concepts
  - Food safety (Toxicity & Hazard)
  - Hazards (Physical, chemical and biological)
  - Food infection
  - Food poisoning
  - Food quality
- Food standards regulation in India-FSSA (2006)
- International Organization and agreements in the area of Food Standards, Quality, Research and Trade
  - Codex Alimentarius Commission
  - International Organization for Standardisation
  - World Trade Organization
- Food Safety Management Systems
  - Good manufacturing practices (GMP)
  - Good handling practices (GHP)
  - Hazard Analysis Critical Control Points (HACCP)
- Scop

## **UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES**

### **Chapter: Early Childhood Care and Education**

- Significance
- Basic concepts
- Preparing for a career
- Scope

### **Chapter: Management of support services, Institutions and programmes for children, youth and elderly**

- Significance
- Basic concepts
- Why are children vulnerable?
- Institutions, programmes and initiatives for children
  - ICDS
  - SOS Children's Village
  - Children's Homes run by the Government
  - Adoption
- Why are Youth vulnerable?
- Youth programmes in India
- Why are the elderly vulnerable?
- Some programmes for the elderly
- Preparing for a career
- Scope



## **UNIT IV FABRIC AND APPAREL**

### **Chapter: Design for Fabric and Apparel**

- Introduction
- Basic concepts (Design: Structural & Applied)
- Elements of design
  - Colour
  - Texture
  - Line
  - Shapes or form
- Principles of Design
  - Proportion
  - Balance
  - Emphasis
  - Rhythm
  - Harmony
- Preparing for career
- Scope

### **Chapter: Fashion Design and Merchandising**

- Introduction
- Significance
- Basic Concepts
  - Fashion terminology –Fashion ,fads, style, classic
- Fashion Development
  - France-The centre of fashion
  - Fashion Evolution
- Fashion Merchandising
- Fashion Retail Organization
- Preparing For a career
- Scope

### **Chapter: Care and maintenance of fabrics in Institution**

- Introduction
- Basic concepts
  - Washing equipment
  - Drying equipment
  - Ironing/pressing equipment
- Institutions
- Preparing for a career
- Scope

## **UNIT V RESOURCE MANAGEMENT**

### **Chapter: Hospitality Management**

- Introduction
- Significance
- Basic concepts
- Departments involved in hospitality management of an organization
- Scope

### **Chapter: Consumer Education and Protection**

- Introduction
- Significance of consumer education and protection
- Basic concepts
  - Consumer product
  - Consumer behaviour
  - Consumer forum
  - Consumer footfalls
  - Consumer problems
  - Consumer rights
  - Standardized marks (ISI, Wool Mark, Hall Mark, Silk Mark)
  - Protection Councils
  - Consumer Responsibilities
- Scope

## **UNIT VI COMMUNICATION AND EXTENSION**

### **Chapter: Development communication and Journalism**

- Introduction
- Significance
- Basic concepts
  - Development
  - Development journalism
  - Development Communication
- Methods of communication
  - Campaign
  - Radio and television
  - Print media
  - Information and communication technologies
- Knowledge and skills required for a career in this field
- Scope and career avenues in development communication

## **PRACTICALS FOR CLASS XII**

### **UNIT II NUTRITION, FOOD SCIENCE AND TECHNOLOGY**

1. Modification of normal diet to soft diet for elderly person.
2. Development and preparation of supplementary foods for nutrition programme.
3. Planning a menu for a school canteen or mid-day meal in school for a week.
4. Design, prepare and evaluate a processed food product.
5. Qualitative test for food adulteration in: pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafoetida.

### **UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES**

1. Preparation and use of any one teaching aid to communicate socially relevant messages for children/ adolescents /adults in the community.

OR

Preparation of any one toy for children (age appropriate) using locally available and indigenous material

### **UNIT IV FABRIC AND APPAREL**

1. Preparation of any one article using applied textile design techniques; tie and dye/ batik/block printing
2. Remove different types of stains from white cotton cloth –Ball pen, curry, grease, ink, lipstick, tea and coffee.

### **UNIT V RESOURCE MANAGEMENT**

1. Evaluate any one advertisement for any job position.
2. Develop a leaflet/pamphlet for Consumer Education and Protection on any one of the following-
  - a) Consumer Protection Act (CPA)
  - b) Consumer responsibilities
  - c) Consumer organization
  - d) Consumer Problem

## **PROJECT**

**ANY ONE OF THE FOLLOWING PROJECT MAY BE UNDERTAKEN AND EVALUATED-**

1. Study of an integrated community based, nutrition/health programme being implemented in own area, with reference to-
  - a) Programme objectives
  - b) Focal Group/Beneficiaries
  - c) Modalities of implementation
2. Visit to the neighboring areas and interview two adolescents and two adults regarding their perception of persons with special needs.

3. Profile any two person (child/adult) with special needs to find out their diet, clothing, activities, physical and psychological needs.
4. Planning any five messages for nutrition, health and life skills using different modes of communication for different focal groups.
5. Market survey any five processed foods with their packaging and label information.

#### **SCHEME FOR PRACTICAL EXAMINATION**

**30 Marks**

1. Project (5 marks)
2. Modification of any one family meal for elderly person. Preparing any one of the modified dish. (5 marks)

OR

Development and preparation of any one supplementary food for preschooler (2-6 years) nutrition programme.

OR

Planning a menu for school canteen and preparing any one nutritious dish.

3. Identify adulterant using chemical test in any one of the following- pureghee, tea leaves, whole black pepper, turmeric powder, milk, asafoetida. (2 marks)
4. Prepare a sample using applied textile design techniques tie and dye/batik/block printing. (4 marks)
5. Remove any one of the stain from white cotton cloth –Ball pen, curry, grease, ink, lipstick, tea, coffee. (2 marks)
6. Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following- (5 marks)
  - a) Consumer Protection Act (CPA)
  - b) Consumer responsibilities
  - c) Consumer organization
  - d) Consumer Problems
7. File (5 marks)
8. Viva (2 marks)

**QUESTION PAPER DESIGN 2023-24  
HOME SCIENCE (CODE NO. 064)  
CLASS-XII**

**TIME: 3 HOURS**

**Max. Marks: 70**

<b>S. No.</b>	<b>Typology of Questions</b>	<b>Total Marks</b>	<b>Weightage %</b>
1.	Knowledge and understanding based questions terms, concepts, principles, or theories; Identify, define, or recite interpret, compare, contrast, explain, paraphrase information)	28	40%
2.	Application - or knowledge/concepts based questions (Use abstract information in concrete situation, to apply knowledge to new situations. Use given content to interpret a situation, provide an example, or solve a problem)	21	30%
3..	Formulation, analysis, Evaluation and creativity based question (Appraise, judge, and /or justify the value or worth of a decision or outcome, or to predict outcomes) Classify, compare, contrast, or differentiate between different pieces of integrate unique piece of information from a variety of sources)	21	30%
	<b>TOTAL</b>	<b>70</b>	<b>100</b>

**NOTE:** Internal Choice of 30% will be given Easy- 20% Average- 60% Difficult- 20%