HOME SCIENCE (Code No. 064)

(CLASS 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.
- 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

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

No.	Units	Marks	No. of Periods
1	Work, Livelihood and Career	05	10
2	Nutrition, Food Science and Technology	18	45
3	Human Development and Family Studies	12	35
4	Fabric and Apparel	16	40
5	Resource Management	12	35
6	Communication and Extension	07	15
	THEORY	70	180
	PRACTICAL	30	40
	GRAND TOTAL	100	220

CLASS XII

THEORY: 70 Marks PERIODS: 180

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. Catering and Food Service Management

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. Special Education and Support Services

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. Production and Quality Control in the Garment Industry

Ch. Care and Maintenance of Fabrics in Institutions

UNIT V: Resource management

Ch. Human Resource Management

Ch. Hospitality Management

Ch. Consumer Education and Protection

UNIT VI: Communication and Extension

Ch. Development Communication and Journalism

Ch. Media Management Design and Production

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

CLASS XII

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: CATERING AND FOOD SERVICE MANAGEMENT

- Introduction
- Significance
- Basic concepts
 - Food service Industry
 - Food Service Management
 - Food Service
 - Food service Manager
 - Menu compiling
- Types of Catering Services
 - Welfare or non-commercial
 - Commercial Services
- Types of food service systems
 - Conventional food service system
 - Commissary food service system
 - Ready prepared food service system
 - Assembly service system
- Menu planning
- Management in food service
- Preparing for a career
- Scope
- Careers in the catering and food service industry

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)(Fruit and vegetable product order, Meat food product order and Vegetable oil products order are not included)
- 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)
- Scope

UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES

Chapter: Early Childhood Care and Education

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

Chapter: Special Education and Support Services

- Significance
- Basic Concepts
 - Disability and its classification
 - Causes of disabilities
 - Special education methods
- Knowledge and Skills
- Preparing for a career in special education
- Scope

<u>Chapter: Management of support services, Institutions and programmes</u> <u>for children, youth and elderly</u>

- 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: Production and Quality Control in the garment industry

- Introduction
 - Garment industry in India
 - Production
 - Importance of production
- Basic concepts
 - Fabric Inspection and Testing
 - Laying and cutting of fabric
 - Assembly of the product
 - Finishing and packaging
- Quality assurance in the garment industry
- 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: Human Resource Management

- Introduction
- Significance
 - Recruiting and staffing
 - Training and Developing employees

- Retention and redressal
- Preparing for a career

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

Chapter: Media Management, Design and Production

- Introduction
- Significance
- Basic concepts
 - Media
 - Media planning
 - Media designing and production
 - Media evaluation and feedback
- Scope

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

6. 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

- 7. Preparation of any one article using applied textile design techniques; tie and dye/batik/block printing.
- 8. Application of quality control techniques in garment industry(any one readymade garment)-
- a) Fabric inspection
- b) Quality of seams and fasteners/notions
- c) Size labels
- 9. Remove different types of stains from white cotton cloth –Ball pen, curry, grease, ink, lipstick, tea and coffee.

UNIT V RESOURCE MANAGEMENT

- 10. Evaluate any one advertisement for any job position.
- 11. 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 Problems

UNIT VI COMMUNICATION AND EXTENSION

12. Analysis and discussion of any one print/radio/electronic media with reference to focus, presentation, technology and cost.

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 neighbouring 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- pure ghee, 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 any one 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 2020-21 HOME SCIENCE (CODE NO. 064) CLASS- XI & XII

TIME: 3 HOURS Max. Marks: 70

S. No	Typology of Questions	Total Marks	% Weightage
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%
	TOTAL	70	100

Note: No Chapter wise weightage, care should be taken to cover all chapters.

Scheme of questions

Weightage to difficulty level of questions

S. No.	Estimated difficulty	Percentage
1	Easy	20
2	Average	60
3	Difficulty	20