

HOME SCIENCE (Code No. 064)
(CLASSES - XI AND XII)
(Human Ecology and Family Sciences)

The purpose of Home science is the creation of an environment and outlook to enable learner to live a richer and more purposeful life. The subject integrates the application of various sciences and humanities to improve human environment, family nutrition, management of resources and child development.

Objectives

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

1. Develop an understanding of the self in relation to family and society.
2. Understand one's role and responsibilities as a productive individual and as a member of one's family, community and society.
3. Integrate learning across diverse domains and form linkages with other academic subjects.
4. Develop sensitivity and undertake a critical analysis of issues and concerns of equity and diversity.
5. Appreciate the discipline of Home Science (HEFS) for professional careers.
6. Acquaint learners with the basics of human development with specific reference to self and child.
7. Develop skills of judicious management of various resources.
8. Enable learners to become alert and aware consumers.
9. Impart Knowledge of nutrition and lifestyles to enable prevention and management of diseases.
10. Inculcate healthy food habits.
11. Develop understanding of textiles for selection and care of clothes.

Home Science (2019-20)

Class XI

Course Structure: Theory & Practical

Time: 3 Hrs.

Theory: 70 Marks
Practical: 30 Marks

No.	Units	Marks	No.of Pd.
1.	Understanding oneself: Adolescence	22	60
2.	Understanding Family, Community and Society	15	30
3.	Childhood	15	40
4.	Adulthood	18	50
	Total	70	180
	Practical	30	40
	Grand Total	100	220

Class XI

Theory: 70 Marks

Total Periods 180

Unit I: Understanding oneself: Adolescence

Ch- 1 Understanding the self

22(4+6+6+6) Marks

A. 'Who am I'?

4 Marks

B. Development and Characteristics of the self

C. Influences on identity

- Biological and physical changes

- Socio-cultural contexts

- Emotional changes

- Cognitive changes

Ch-2 Food, nutrition, health and fitness

6 Marks

• Balanced Diet

• Food Groups

- Diet for Adolescent
- Factors influencing eating behaviours, Eating disorders.

Ch-3 Management of resources - time, money, energy and space-

6 Marks

- Human and Non-human Resources
- Managing Resources

Ch-4 Fabric around us-

6 Marks

- Classification
- Yarn Processing
- Fabric Production
- Textile Finishing
- Properties of Fibres

Unit II: Understanding family, community and society

15(9+6) Marks

Ch- 5 Relationships and interactions with 'significant others'.

9 Marks

- Family
- School – peers and educators
- Community and Society

Ch – 6 Concerns and needs in diverse contexts:

6 Marks

- Nutrition, Health and Hygiene
 - Social, Mental and Physical Health
 - Health Care
 - Indicators of Health
 - Factors affecting nutrition well being
 - Problems and Consequences - Under Nutrition
- Malnutrition
 - Hygiene and Sanitation
- Resources availability and management
 - Time management
 - Space management

Unit III: Childhood

15 (5+4+6 Marks)

Ch- 7 Survival, growth and development

5 Marks

- Areas of Growth & development
- Stages of Growth & development
- Types - Physical, Motor, cognitive, language, socio – emotional

4 Marks

Ch- 8 Nutrition, health and wellbeing

- From Birth to 12 months
 - Immunization
 - Health and Nutrition problems
- 1 to 6 years
 - Guidelines and planning of balanced meal
 - Low cost food
 - Feeding children with special needs
 - Immunization
- 7 to 12 years
 - Planning Diets
 - Healthy Habits

Ch- 9 Our apparel

6 Marks

- Functions and selection of clothes
- Clothing needs of children-Birth to adolescent and for CWSN.

Unit IV: Adulthood

18(4+7+7) Marks

Ch- 10 Health and wellness

4 Marks

- Aspects/Parameters of healthy person
- Achieving fitness

Ch- 11 Financial management and planning

7 Marks

- Planning
- Types of family income
- Budget
- Money management
- Saving and Investment

- Mending
- Laundry
- Stain removal
- Finishing
- Ironing
- Dry cleaning
- Storage
- Fabric care
- Care label

Practicals for Class XI

Pd.40

1. Study of physical self with reference to:
 - a) Age, height, weight, hip size, round chest/bust, round waist
 - b) Age at menarche: girls
 - c) Growth of beard, change in voice: boys
 - d) Colour of hair and eyes
2. Understanding oneself with reference to :
 - a) Development norms
 - b) Peers, both male and female
 - c) Health Status
 - d) Garment sizing
3.
 - a) Record own diet for a day
 - b) Evaluate qualitatively for adequacy
4.
 - a) Record the fabrics and apparel used in a day
 - b) Categorize them according to functionality
5.
 - a) Record one day's activities relating to time use and work
 - b) Prepare a time plan for oneself
6.
 - a) Record own emotions for a day in different contexts
 - b) Reflect on the "why" of these emotions and ways of handling them

7. List and discuss 4-5 areas of agreement and disagreement with
 - a) Mother
 - b) Father
 - c) Siblings Friends
 - d) TeacherHow would you resolve the disagreements to reach a state of harmony and mutual acceptance?
8. Relationship of fibre properties to their usage:
 - a) Thermal property and flammability
 - b) Moisture absorbency and comfort
9. Study one female adult and one male adult in the age range of 35 to 60 years with reference to:
 - a) Health and illness
 - b) Physical activity and time management
 - c) Diet behaviour
 - d) Coping with challenges
 - e) Media availability and preferences
10. Preparation of different healthy snacks for an adolescent suitable in her/his context.
11. Study of labels on:
 - a) Food
 - b) Drugs and cosmetics
 - c) Fabrics and apparel
 - d) Consumer durables
12. Plan a budget for self for a given situation/purpose.
List five problems faced by self or family as consumer. Suggest solutions to overcome the same.

CLASS XII (2019 – 20)
COURSE STRUCTURE (THEORY)

One Paper (Theory)
Time: 3 Hours

70 Marks
Periods: 220

Unit		No. of periods	Marks
I	Human Development: Life Span Approach (Part II)	40	30
II	Nutrition during life span	40	
III	Money Management and Consumer Education	40	35
IV	Apparel: Designing, Selection and Care	40	
V	Community Development and Extension (Part II)	20	5
VI	Career Options after Home Science Education	5	
	Total	185	70
	Practical	35	30
	Total	220	100

Unit I: Human Development: Life Span Approach (Part II)

40 Periods

- A. Adolescence (12 – 18 years)
- (i) Growth & Development – Domains and principles.
 - (ii) Meaning, characteristics and needs.
 - (iii) Influences on identity formation
 - (a) Biological and Physical changes-early and late matures. (Role of heredity and environment)
 - (b) by social, culture and media.
 - (c) Emotional changes.
 - (d) Cognitive changes.
 - (iv) Specific issues and concerns

- (a) Eating disorders-Causes, consequences and management – Anorexia Nervosa, Bulimia.
- (b) Depression
- (c) Substance Abuse
- (d) Related to sex
- (e) Handling stress and peer pressure

B. Adulthood:

- (i) Young & middle adulthood: Understanding and management of new responsibilities- career, marriage and family.
- (ii) Late Adulthood/Old age:
 - (a) Health and Wellness: physical, social, emotional, financial, recreational needs
 - (b) Care for elderly (at home and outside – old age home)
 - (c) Anger management

Unit II: Nutrition for Self, Family and Community

40 Periods

- (a) Meal Planning: Meaning and importance, principles and factors affecting meal planning;
Nutritional needs, food preferences and modifications of diets in different age groups: infants, children, adolescence, adults, elderly and in special conditions: pregnancy and lactation (including traditional foods given in these conditions)
 - (i) Use of basic food groups (ICMR) and serving size in meal planning
 - (ii) Factors influencing selection of food: culture, family food practices, media, peer group, availability of foods, purchasing power, individual preference & health.
- (b) Food safety and quality:
 - (i) Safe food handling (personal, storage, kitchen, cooking and serving).
 - (ii) Safety guards against food adulteration, definition and meaning of food adulteration as given by FSSAI (Food Safety and Standard Authority of India).
 - (iii) Common adulterants present in cereals, pulses, milk and milk products, fats and oils, sugar, jaggery, honey, spices and condiments.

- (iv) Effects of some of the adulterants present in the foods: kesari dal, metanil yellow, argemone seeds.
- (v) Food standards (FPO, Agmark, ISI).
- (c) Therapeutic modification of normal diet with respect to consistency, frequency, foodstuffs, nutrients and methods of cooking.
- (d) Modification of diet according to common ailments: diarrhoea, fever, jaundice, hypertension, diabetes and constipation. Physiological changes, clinical symptoms, requirements and dietary requirements in each condition.

Unit III: Money Management and Consumer Education

40 Periods

- (a) Family Income:
 - (i) Various sources of family income:
 - money income
 - real income (direct and indirect)
 - psychic income
 - (ii) Supplementing family income-need and ways; need and procedure for maintaining household accounts (daily, weekly and monthly).
- (b) Savings and Investment:
 - (i) Meaning and importance of savings.
 - (ii) Basis for selection of investment methods: risk, security, profit, tax saving.
 - (iii) Ways/methods of investment –
 - Bank schemes (saving, fixed, recurring);
 - Post Office schemes (savings, recurring deposit, monthly income scheme, National saving certificate, Senior citizen scheme);
 - Insurance schemes (whole life, medi claim);
 - Public Provident Fund (PPF), Provident Fund (PF).
- (iv) Consumer Protection and Education: Meaning, problems faced by consumer, Consumer Protection Amendment Act (2011); Consumer aids: labels, standardization marks, (ECO Mark, Hallmark, Wool mark, Silk mark), advertising, leaflets, and Consumer redressal forum, Internet.

Unit IV: Apparel: Designing, Selection and Care

40 Periods

- (i) Application of elements of art and principles of design in designing apparel.

- (ii) Selection and purchase of fabrics- purpose, cost, season, quality, durability, ease of maintenance and comfort.
- (iii) Selection of apparel- factors influencing selection of apparel- age, size, climate, occupation, figure, occasion, fashion, drape cost and workmanship.
- (iv) Care and maintenance of clothes:
 - (a) Cleansing agents: soaps and detergents (basic differences and their utility);
 - (b) Stain removal - General principles of stain removal, stain removal of tea, coffee, lipstick, ball pen, Grease, Curry and Blood.
 - (c) Storage of clothes.

Unit V: Community Development and Extension (Part II)

20 Periods

- (i) Water safety: Safe drinking water-importance of potable water for good health, and its qualities, simple methods of making water safe for drinking; boiling, filtering (traditional and modern technology), use of alum, chlorine.
- (ii) Salient features of income generating schemes
 - DWCRA (Development of Women and Children in Rural Area)
 - MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act, 2005)

Unit VI: Career Options after Home Science Education

05 Periods

Career options of self and wage employment in various fields of Home Science.

HOME SCIENCE
CLASS XII (2019 – 20)

PRACTICAL

Maximum Marks: 30
Periods: 35

1) Human Development: Life Span Approach (Part II)

Activities

- Identify the problems of adjustment of adolescents with the help of a tool (group activity) and make a report.
- Spend a day with an aged person and observe the needs and problems. Write a report.
- List and discuss at least 4 areas of agreement and disagreement of self with:-

- | | |
|-------------|------------|
| a) Mother | b) Father |
| b) Siblings | d) Friends |

2) Nutrition for Self, Family and Community Activities

- Record one day diet of an individual and evaluate it against principles of balanced diet.
- Plan a meal and modify for any one physiological condition – Fever, Diarrhoea, Constipation, Jaundice, Hypertension, Diabetes, Pregnancy, Lactations, Old age and Infants. Prepare a dish.
- Identify food adulteration: using visual and chemical methods; Turmeric, Chana Dal, Bura Sugar, Milk, Tea leaves, Coriander, Black Pepper Seeds, Desi-ghee.
- Prepare ORS Solution.

3) Money Management and Consumer Education

- Collect and fill savings account opening form in Post Office and Bank.
- Fill up the following forms and paste in file: Withdrawal slip, Deposit slips, Draft slip and cheque (bearer of A/c payee).
- Collect labels of any three products and compare them with mandatory requirements.
- Prepare one label each of any three items bearing ISI, FPO, Agmark.

4) Apparel: Designing, Selection and Care

- Illustrate principles of design or elements of art on a paper or cloth and evaluate them.
- Removal of different types of stains: tea, coffee, curry, grease, blood, lipstick, ball pen.
- Examine and evaluate readymade garments for their workmanship. [at-least two]
- Make sample of Hemming, Backstitch, Interlocking, and Press buttons, hooks and eye.

5) Community Development and Extension

- Visit any two places (home/restaurant/school/business centre, etc.) and observe its measure for safe drinking water and general conditions of hygiene around it.

Scheme for practical examination (Class XII)- 30 marks

1. Unit I-Human Development: Life Span Approach (Part II) Project Report- 5 marks

2. Unit II- Nutrition for Self, Family and Community-

- a) Plan a meal and modify and prepare a dish for any one physiological condition Fever, Diarrhoea, Constipation, Jaundice, Hypertension, Diabetes, Pregnancy, Lactations, Old age and Infants- **5 marks**
- b) Identify food adulteration: using visual and chemical methods; Turmeric, Chana Dal, Bura Sugar, Milk, Tea leaves, Coriander, Black Pepper Seeds, Desi-ghee- **2 marks**

3. Unit III-Money Management and Consumer Education

- a) Prepare one label each of any three items bearing ISI, FPO, Agmark.- **2 marks**
- b) Filling up of paying slip either to deposit cash or cheque- **2 marks**

4. Unit IV- Apparel: Designing, Selection and Care

- a) Removal of different types of stains- Tea, coffee, grease, blood, lipstick, ball pen (Any two)

OR

Readymade garment- Quality check – **2 marks**

- b) Make sample of hemming/backstitch/interlocking/fastener- **2 marks**

5. Unit V-Community Development and Extension- Survey Report- 4 marks

6. File Work- 4 marks

7. Viva Voce- 2 marks

Reference books for teachers:

1. Human Ecology and Family Sciences – Part I, Class- XII, NCERT Publication
2. Human Ecology and Family Sciences – Part II, Class- XII, NCERT Publication

QUESTION PAPER DESIGN 2019-20									
HOME SCIENCE			CODE NO. 064				CLASS- XI&XII		
TIME: 3 Hours					Max. Marks: 70				
S. No.	Typology of Questions	Learning outcomes and Testing Skills	Objective type Questions (1 mark)	Short Answer (SA) (2 marks)	Case study and picture based (3 marks)	Long Answer – II (LA-I) (4 marks)	Long Answer – II (LA-II) (5marks)	Total Marks	% Weig htag
01	Remembering (Knowledge based Simple recall questions, to know specific facts, terms, concepts, principles, or theories; Identify, define, or recite information)	Reasoning Analytical Skills Critical Thinking	4	1	1	1	1	18	26%
02	Understanding- (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)		5	1	-	-	1	12	17%
03	Application- (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)		5	2	1	1	1	21	30%

04	High Order Thinking Skills – (Analysis and Synthesis – Classify, compare, contrast, or differentiate between different pieces of information: Organize and / or integrate unique piece of information from a variety of sources)		1	1	-	1	1	12	17%
05	Evaluation – (Appraise, judge, and /or justify the value or worth of a decision or outcome, or to predict outcomes)		3	-	-	1	-	07	10%
	TOTAL		1x18= 18	2x5= 10	3x2=6	4x4=16	5x4= 20	70	100%
	ESTIMATED TIME		35 min.	25 min.	20 min.	35 min.	50 min.	165 min. + 15 min. For revision	

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

Scheme of questions

- Total number of questions = 33
- Weightage to difficulty level of questions

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