

12. HOME SCIENCE (Code No. 064) (CLASSES - XII)

Home Science as a discipline aims to empower learners by developing understanding of five different areas namely:

- Food and Nutrition
- Human Development, Childhood Studies
- Resource Management
- Fabric and Apparel Science
- Development Communications and Extension

The subject helps students to understand changing needs of Indian society, academic principles as well as develop professional skills.

This would make them competent to meet challenges of becoming a responsible citizen.

Objectives: The syllabus at Senior Secondary level develops an understanding in the learners that the knowledge and skills acquired through Home Science facilitates development of self, family and community. It endeavours to -

- Acquaint learners with the basics of human development with specific reference to self and child.
- Help to develop skills of judicious management of various resources.
- Enable learners to become alert and aware consumers.
- Impart knowledge of nutrition and lifestyles to enable prevention and management of diseases.
- Inculcate healthy food habits.
- Help to develop understanding of textiles for selection and care of clothes.
- Develop skills of communication to assist in advocacy and dissemination of knowledge to community.

CLASS XII (2017 - 18)
COURSE STRUCTURE
(THEORY)

One Paper (Theory)

70 Marks

Time: 3 Hours

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	
	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, carrier 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, mediclaim);
 - 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 of various fields of Home Science.

HOME SCIENCE CLASS XII (2017 - 18)

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
 - c) Siblings
 - d) Friends
 - e) Teacher

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, ballpen(Any two)

OR

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

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

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

6. File- 4 marks

7. Viva- 2marks

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 2017-18

HOME SCIENCE

CODE NO. 064

CLASS-XII

TIME: 3 Hours

Max. Marks: 70

S. No.	Typology of Questions	Learning outcomes and Testing Skills	Very Short Answer (VSA) (1 Mark)	Short Answer (SA) (2 Marks)	Case study and picture based (3 Marks)	Long Answer -I (LA-I) (4 Marks)	Long Answer - II (LA-II) (5 Marks)	Total Marks	% Weightage
01	Remembering- (Knowledge based Simple recall questions, to know specific facts, terms, concepts, principles, or theories; Identify, define, or recite, information)	<ul style="list-style-type: none"> Reasoning Analytical Skills Critical thinking 	2	2	1	1	1	18	26%
02	Understanding- (Comprehension -to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase information)		1	1	-	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)		1	2	1	2	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 pieces of information from a variety of sources)		1	1	-	1	1	12	17%
05	Evaluation- (Appraise, judge, and/or justify the		1	1	-	1	-	7	10%

	value or worth of a decision or outcome, or to predict outcomes based on values)								
	TOTAL	1×6=6	2×7=14	3×2=6	4×6=24	5×4=20	70	100%	
	ESTIMATED TIME	10 min.	35 min.	20 min.	50 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

- There will be no choice in the question paper.
- Weightage to difficulty level of questions

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