

HOME SCIENCE (Code No. 064)

(CLASSES - IX AND X)

Home science is a practical science that is essential for every individual to handle challenging responsibilities of the life. 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.

Objectives: The syllabus at 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.

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Class - IX (2019-20)

Course Structure: Theory & Practical

Theory : 70 Marks

Time: 3 Hrs.

Practical : 30 Marks

No.	Units	Marks	No. of Pd.
1	Concept and scope of Home Science Education and recent trends	03	05
2	Human growth & Development – I	08	25
3	Family and Values	08	20
4	Food, Nutrition and Health	15	45
5	Fiber and Fabric	15	34
6	Resource Management	14	34
7	Measures of Safety and Management of Emergencies	07	17
	Total	70	180
	Practical	30	40
	Grand Total	100	220

Unit I : Concept and scope of Home Science Education and recent trends 05 Pd

- a) Concept of Home science
- b) Fields of Home Science
- c) Relevance of study of Home Science and career options
- d) Recent trends

Unit II : Human Growth & Development – I

25 Pd

- a) Concept of growth and development
- b) Principles of growth and development
- c) Factors affecting growth and development (environmental and heredity)

- d) Age specific milestones (Birth to adolescence)

Unit III : Family and Values

20 Pd

- a) Concept and types of family
- b) Role of family in Holistic development of an individual (Physical, Social, Psychological and spiritual)
- c) Ethical and value based society (need for happy family, respect and care for each member of family, Dignity of labour, work distribution within the family)
- d) Importance of Girl Child.
- e) Influence of various factors on a family : Globalisation, urbanisation, migration, technology and media.

Unit IV : Food, Nutrition and Health

45 Pd

- a) Definition of food, nutrition, nutrient, Health and nutritional status.
- b) Food and its functions (Physiological, social and psychological)
- c) Nutrients : sources and functions
- d) Relationship of food, health and diseases
- e) Malnutrition : concepts and components (over nutrition and under nutrition)
- f) Concept of Balanced Diet
- g) Methods of cooking and processing
- Cooking methods : Dry methods, moist methods, combination methods
 - Processing methods : Germination, Fermentation, Mutual supplementation / Combination
 - Conservation of nutrients while cooking and processing

Unit V : Fibre and Fabric

34 Pd

- a) Definition of Fiber and Yarn
- b) Classification of fiber on the basis of origin and length
- c) Characteristics of fibers : feel, appearance, colour fastness, length, strength, absorbency, shrinkage, elasticity, effect of heat and sunlight.

- d) Methods of construction of fabric – brief description of weaving, knitting and felting.
- e) Selection of fabric : Factors affecting selection of fabric (age, purpose, occupation, fashion, figure, climate, comfort and cost).

Unit VI : Resource Management

34 Pd

- a) Resources : Definition and characteristics
- b) Types of resources (Human : Time, Energy, Knowledge and attitude
Non-Human : Money, materialistic goods and community resources)
- c) Waste Management – Need to refuse, reduce, reuse, repair and recycle waste.
- d) Proper disposal of kitchen waste (Biodegradable : Composting, Vermicomposting, biogas and bagass. Non Biodegradable : Inceneration, Land fills and recycle)

Unit VII : Measures of Safety and Management of Emergencies

17 Pd

- a) Accident prone / Unsafe Zones at home
- b) Need of safety at home
- c) Measures of safety against burns, electric shocks, cuts, fractures, bites, poisoning
- d) First Aid : Concept and Importance

Practicals

40 Periods 30 Marks

- 1) Observation of motor skills in three year old child.
 - 2) Behavioral changes in an adolescent through observation method among peer group.
 - 3) Role of family members: collage / chart etc.
 - 4) Design educational games specific to functions / sources of nutrients.
- } any two
(3x2=6 Marks)
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- 5) Weights and measures: Equivalentents / conversions of Ounce, gram, cup, teaspoon, tablespoon, how to use a kitchen weighing scale.
 - 6) Identification of fruits, vegetables, spices, oils, sugars, cereals, and lentils
 - 7) Food processing method demonstration: Germination and Fermentation.
- } 4 Marks
- 8) Collection and Identification of fabrics, physical and burning tests. 3 Marks
 - 9) Take a case study of a house for disposal of kitchen waste and encourage segregation of biodegradable and non-biodegradable waste, through creating slogans / posters etc. 5 Marks
 - 10) Prepare a first aid kit and practice giving first aid for burns, cuts, bites, fractures, electric shocks (group activity) 5 Marks
 - 11) File work 4 Marks
 - 12) Viva voce 3 Marks

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Class - X (2019-20)

Course Structure: Theory & Practical

Time: 3 Hrs.

Theory : 70 Marks

Practical : 30 Marks

No.	Units	Marks	No. of Pd.
1	Human Growth & Development – II	12	30
2	Management of Resources	12	30
3	Food and Personal Hygiene	08	18
4	Meal Planning	13	42
5	Food Safety and Consumer Education	12	30
6	Care and Maintenance of Fabrics and Apparel	13	30
	Total	70	180
	Practical	30	40
	Grand Total	100	220

Unit I : Human growth & development II

(30 periods)

- Play (0-5 years), role of play in growth & development of children. Types of play-active, passive, natural, serious and exploratory, selection of play material for children.
- Childhood. Adolescents and Adulthood : Special Features.
- Problems of Adolescents
- Old Age : Need of care

Unit II : Management of Resources : Time, Energy & Money

(30

periods)

- Time Management - Definition & Importance
- Time plans - Factors affecting time plan
- Energy Management : Definition and Importance

- d) Fatigue and work Simplification

- e) Family Income & Types : Expenditure & Importance of Saving and Investment Schemes (Only Listing)

Unit III : Food & Personal Hygiene (18 periods)

- a) Principles of hygienic handling of food, including serving of food.
- b) Hygiene in kitchen
- c) Personal hygiene of food handler
- d) Hygiene during food storage

Unit IV : Meal Planning (42 periods)

- a) Concept of Meal Planning
- b) Factors affecting meal planning : age, sex, climate, occupation, cost of food items, number of family members, occasion, availability of food, family traditions, likes and dislikes
- c) Basic food groups
- d) Use of food groups in planning balanced diet, in context of self. RDA Protein and Energy-ICMR (2010) and its uses in family diets

Unit V : Food Safety and Consumer Education (30 periods)

- a) Food Safety, mal-practices of traders, price variation, poor quality, Faulty weights and measures, non-availability of goods, misleading information, lack of standardized products
- b) Food adulteration : Concept, adulterants & harmful effects of adulteration, FSSAI Standards (2006)
- c) Consumer Rights and problems faced by consumer, redressal and rights (Listing)
- d) Sources of Consumer Education - Govt & Non-Govt. Agencies (Only listing)

Unit VI : Care and Maintenance of Fabrics and Apparel (30 periods)

- a) Cleaning and finishing agents used in routine care of clothes.
- b) Stain Removal
- c) Storage of cotton, silk, wool and synthetics
- d) Readymade garments, selection, need and workmanship

Practicals

40 Periods 30 Marks

1. Make suitable play material for children between 0-3 years (work in a pair)
2. Plan a balanced diet to self (only one meal).
Marks
3. Prepare a time plan to self for one day.
4. Prepare a report on any five malpractices you have observed in the market.
5. Undertake a market survey and collect five (5) food labels, analyze them and illustrate the labels. 3 Marks
6. Remove common stains of curry, paint, ball pen ink, grease, lipstick, tea and coffee 3 Marks

7. List five areas of agreement and disagreement each with parents, siblings and friends, and present the solutions to class. Project Report 5 Marks
8. Examine positive & negative qualities of one readymade and one tailor made garment. 3 Marks
9. Prepare a care label for a readymade garment according to its fabric and design. 3 Marks
10. Practical File. 4 Marks
11. Viva Voce. 3 Marks

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Class - IX & X (2019-20)

Design of the Question Paper

The weightage of the distribution of marks over different dimensions of the question paper for classes IX & X shall be as follows:

Time: 3 Hrs.

Theory: 70 Marks

Practical: 30 Marks

A. Weightage of Content-Unit-Class : IX (2019-20)

No.	Units	Marks
1	Concept and scope of Home Science Education and recent trends	03
2	Human growth & Development – I	08
3	Family and Values	08
4	Food, Nutrition and Health	15
5	Fiber and Fabric	15
6	Resource Management	14
7	Measures of Safety and Management of Emergencies	07
	Total	70
	Practical	30
	Grand Total	100

B. Weightage of Content-Unit-Class : X (2019-20)

Time: 3 Hrs.

Theory : 70 Marks

Practical : 30 Marks

No.	Units	Marks
1	Human Growth & Development – II	12
2	Management of Resources	12
3	Food and Personal Hygiene	08
4	Meal Planning	13
5	Food Safety and Consumer Education	12
6	Care and Maintenance of Fabrics and Apparel	13
	Total	70
	Practical	30
	Grand Total	100

QUESTION PAPER DESIGN 2019-20									
HOME SCIENCE			CODE NO. 064				CLASS- IX&X		
TIME: 3 Hours			Max. Marks: 70						
S. No.	Typology of Questions	Learning outcomes and Testing Skills	Objective type Questions (OTQ) (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) (5marks)	Total Marks	% Weig htag e
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		1	1	-	1	1	12	17%

	integrate unique piece of information from a variety of sources)							
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