

**HOME SCIENCE (Code No. 064)**  
**(CLASSES - IX AND X)**  
**(2020-21)**

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:

- | Foods and Nutrition
- | Human Development and Childhood Studies
- | Resource Management
- | Fabric and Apparel Sciences
- | Community Development 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 HomeScience 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.

## Home Science (Code No. 064)

### Class - IX (2020-21)

Course Structure: Theory & Practical

Time: 3 Hrs.

Theory : 70 Marks

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
	<b>Total</b>	<b>70</b>	<b>180</b>
	<b>Practical</b>	<b>30</b>	<b>40</b>
	<b>Grand Total</b>	<b>100</b>	<b>220</b>

**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**

**25Pd**

- 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 3 years)-Physical, motor, social, emotional, cognitive and language

### **Unit III : Family and Values**

**20Pd**

- 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**

**45Pd**

- 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**

**34Pd**

- 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**

**34Pd**

- 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**

**17Pd**

- 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 physical development in a child from birth to three years
2. Observation of motor skills in a child from birth to 3 years.
3. Role of family members: collage / chart etc.
4. Design educational games specific to functions or sources of nutrients.
5. Weights and measures: Equivalents / 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.
8. Collection and Identification of fibre: physical characteristics and burning tests.
9. Create a slogan or poster for proper disposal of domestic waste .
10. Prepare a first aid kit and practice giving first aid for burns, cuts, bites, fractures, electric shocks (group activity)

**SCHEME FOR PRACTICAL EXAMINATION  
CLASS IX HOME SCIENCE**

**M.M-30**

**I. LAB ACTIVITY-**

- |   |         |
|---|---------|
| a) Observation of physical development in a child from birth to three years             | 3 marks |
| OR  |         |
| Observation of motor skills in a child from birth to 3 years.                           |         |
| <br>  |         |
| b) Prepare and present a dish using germination OR fermentation(With fire/without fire) | 7 Marks |
| c) Identification of fibre using physical characteristics and burning tests.            | 3Marks  |
| <br>  |         |
| II. First Aid Kit   | 5 Marks |
| III. File Work  | 10Marks |
| <br>  |         |
| IV. Viva  | 2 Marks |

**Home Science (Code No. 064)**  
**Class - X (2020-21)**

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
	<b>Total</b>	<b>70</b>	<b>180</b>
	<b>Practical</b>	<b>30</b>	<b>40</b>
	<b>Grand Total</b>	<b>100</b>	<b>220</b>

**Unit I : Human growth & development II**

**(30 periods)**

- a. Play (birth-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.
- b. Childhood (3 to 11 years)- Age specific milestones- Physical, motor, social, emotional, cognitive and language
- c. Adolescents : Special Features- Physical and biological, motor, social, emotional, Cognitive and language
- d. Problems of Adolescents: Consequences and management-
  - i) Eating disorders (Anorexia Nervosa, Bulimia Nervosa)
  - ii) Substance abuse
  - iii) Issues related to sex
  - iv) Anti social behaviour

## **Unit II:Management of Resources:Time, Energy and Money (30 periods)**

- a) Time Management - Definition and Importance
- b) Time plans - Factors affecting timeplan
- c) Energy Management : Definition and Importance
- d) Fatigue and workSimplification
- e) Family Income and Types
- f) Expenditure and Importance of Saving

## **Unit III : Food and Personal Hygiene (18 periods)**

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

## **Unit IV :Meal Planning (42periods)**

- 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 given by ICMR
- d) Use of food groups in planning balanced meal for self and family.

## **Unit V : Food Safety andConsumer Education (30 periods)**

- a) Problems faced by Consumer- Price variation, poor quality, Faulty weights and measures, Non-availability of goods, Misleading information, Lack of standardized products
- b) Food adulteration : Concept, adulterants(Metanil yellow, Argemone ,Kesari dal) and harmful effects of these adulterants on human health,
- c) Food Safety Standards-FSSAI (2006)
- d) Consumer Education-Consumer Rights and Responsibilities

## **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 ,workmanship and care label.

## **Practicals**

**40 Periods**

**30 Marks**

1. Make a suitable play material for children between birth to 5 years (group activity)
2. Plan a balanced meal for yourself.
3. Make a time plan to self for oneday.
4. Write a report on any five malpractices you have observed in the market and write your responsibilities as a consumer in each context.
5. Prepare a slogan/poster to create awareness on consumer education
6. Remove stains from white cotton fabric: curry, grease, ball pen ink, lipstick, tea and coffee
7. List five areas of agreement and disagreement each with parents, siblings and friends, and give your suggestion to improve the relationships.
8. Examine positive and negative qualities of one readymade and one tailor made garment.
9. Prepare a care label for a readymade garment according to its fabric and design.

**SCHEME FOR PRACTICAL EXAMINATION  
CLASS X HOME SCIENCE**

**M.M-30**

I	LAB ACTIVITY	Marks
a)	Plan a balanced meal for yourself	3 Marks
b)	Prepare a time plan for self for oneday	4 Marks
c)	Remove one stain from white cotton sample- curry, grease, ball pen ink, lipstick, tea and coffee	3 marks
d)	Examine two positive and two negative qualities of one readymade and one tailor made garment.	4Marks
e)	Prepare a care label for a readymade garment according to its fabric and design	4Marks
II	Play Material	5 Marks
III	File Work	5 Marks
IV	Viva	2 Marks

**QUESTION PAPER DESIGN 2020-21**  
**HOME SCIENCE (CODE NO. 064)CLASS- IX& X**

**TIME: 3 HOURS**

**Max. Marks: 70**

<b>S. No</b>	<b>Competencies</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>

**Total no of question is 31**

**NOTE:** Internal Choice of 30% will be given

Easy- 20%

Average- 60%

Difficult- 20%