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 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.
Course Structure: Theory & Practical
Time: 3 Hrs.

<table>
<thead>
<tr>
<th>No.</th>
<th>Units</th>
<th>Marks</th>
<th>No. of Pd.</th>
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<tbody>
<tr>
<td>1</td>
<td>Concept and scope of Home Science Education and recent trends</td>
<td>03</td>
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<tr>
<td>2</td>
<td>Human growth &amp; Development – I</td>
<td>08</td>
<td>24</td>
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<td>3</td>
<td>Family and Values</td>
<td>08</td>
<td>15</td>
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<tr>
<td>4</td>
<td>Food, Nutrition and Health</td>
<td>15</td>
<td>24</td>
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<tr>
<td>5</td>
<td>Fiber and Fabric</td>
<td>15</td>
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<td>6</td>
<td>Resource Management</td>
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<td>28</td>
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<td>7</td>
<td>Measures of Safety and Management of Emergencies</td>
<td>07</td>
<td>12</td>
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<td><strong>Total</strong></td>
<td><strong>70</strong></td>
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<td></td>
<td><strong>Practical</strong></td>
<td><strong>30</strong></td>
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<td><strong>Grand Total</strong></td>
<td><strong>100</strong></td>
<td><strong>154</strong></td>
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Unit I: Concept and scope of Home Science Education and recent trends

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

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

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

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

Unit V: Fibre and Fabric

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.
Unit VI: Resource Management

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

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

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)
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.

   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. 3 Marks

II. First Aid Kit 5 Marks
III. File Work 10 Marks
IV. Viva 2 Marks
Home Science (Code No. 064)
Class - X (2020-21)

Course Structure: Theory & Practical
Theory: 70 Marks
Practical: 30 Marks

Time: 3 Hrs.

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<th>No.</th>
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<tr>
<td>1</td>
<td>Human Growth &amp; Development – II</td>
<td>12</td>
<td>20</td>
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<td>2</td>
<td>Management of Resources</td>
<td>12</td>
<td>20</td>
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<tr>
<td>3</td>
<td>Food and Personal Hygiene</td>
<td>08</td>
<td>16</td>
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<td>4</td>
<td>Meal Planning</td>
<td>13</td>
<td>30</td>
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<tr>
<td>5</td>
<td>Food Safety and Consumer Education</td>
<td>12</td>
<td>20</td>
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<tr>
<td>6</td>
<td>Care and Maintenance of Fabrics and Apparel</td>
<td>13</td>
<td>20</td>
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Unit I: Human growth & development II

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

a) Time Management - Definition and Importance
b) Time plans - Factors affecting time plan
c) Energy Management : Definition and Importance
d) Fatigue and work Simplification

Unit III : Food and Personal Hygiene

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

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 and Consumer Education

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)

Unit VI : Care and Maintenance of Fabrics and Apparel

a) Cleaning and finishing agents used in routine care of clothes.
b) Stain Removal
   c) Storage of cotton, silk, wool and synthetics
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 one day.
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.
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<tr>
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<tbody>
<tr>
<td>a)</td>
<td>Plan a balanced meal for yourself</td>
<td>5 Marks</td>
</tr>
<tr>
<td>b)</td>
<td>Prepare a time plan for self for one day</td>
<td>5 Marks</td>
</tr>
<tr>
<td>c)</td>
<td>Remove any two stain from white cotton sample- curry, grease, ball pen ink, lipstick, tea and coffee</td>
<td>5 marks</td>
</tr>
<tr>
<td>II</td>
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<td>8 Marks</td>
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<td>III</td>
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## QUESTION PAPER DESIGN 2020-21
### HOME SCIENCE (CODE NO. 064) CLASS - IX & X

**TIME: 3 HOURS**

Max. Marks: 70

<table>
<thead>
<tr>
<th>S. No</th>
<th>Competencies</th>
<th>Total Marks</th>
<th>% Weightage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Knowledge and understanding based questions terms, concepts, principles, or theories; Identify, define, or recite interpret, compare, contrast, explain, paraphrase information)</td>
<td>28</td>
<td>40%</td>
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<td>2.</td>
<td>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)</td>
<td>21</td>
<td>30%</td>
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<td>3.</td>
<td>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)</td>
<td>21</td>
<td>30%</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>70</strong></td>
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**NOTE:** Internal Choice of 30% will be given

- Easy - 20%
- Average - 60%
- Difficult - 20%