# **HOME SCIENCE (Code No. 064)**

(CLASSES - IX AND X) (2021-2022)

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.

#### Class - IX

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	03	05
	recent trends		
2	Human growth & Development – I		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 3 years)-Physical, motor ,social, emotional, cognitive and language

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

20 Pd

- a) Concept and types of family
- Role of family in Holistic development of an individual (Physical, Social, Psychological and spiritual)
- 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)
- 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
- Measures of safety against burns, electric shocks, cuts, fractures, bites, poisoning
- d) First Aid: Concept and Importance

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- 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 / 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 and burning tests.
- 9) Create a slogan/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 OR

3 marks

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 and burning tests. 3 Marks

II.First Aid Kit5 MarksIII.File Work10Marks

IV. Viva 2 Marks

#### Class - X

Course Structure: Theory & Practical Theory: 70 Marks

Time: 3 Hrs. Practical: 30 Marks

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

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(3years onwards)-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-

Eating disorders(Anorexia Nervosa ,Bulimia Nervosa)
Substance abuse
Issues related to sex

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

- a) Time Management Definition & Importance
- b) Time plans Factors affecting time plan
- c) Energy Management : Definition and Importance

- d) Fatigue and work Simplification
- e) Family Income & Types: Expenditure & Importance of Saving

#### **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
- 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 meal for self and family.

#### **Unit V : Food Safety and Consumer Education**

(30 periods)

- a) Problems faced by Consumer-Mal-practices of traders, price variation, poor quality, Faulty weights and measures, non-availability of goods, misleading information, lack of standardized products
- Food adulteration : Concept, adulterants (Metanil yellow, Argemone , Kesari dal) and harmful effects of adulteration,
- 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 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 stain from white cotton fabric : curry, paint, 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

a) Plan a balanced meal for yourself.

3 Marks

b) Prepare a time plan for self for one day.

4 Marks

- c) Remove one stain from white cotton sample-curry, paint, ball pen ink, lipstick, tea and coffee 3Marks
- d) Examine four each positive and negative qualities of one readymade and one tailor made garment.
- 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 2021-2022 HOME SCIENCE (CODE NO. 064) CLASS- IX and X

TIME: 3 HOURS Max. Marks: 70

S. No	Typology of Questions	Total Marks	% Weightage
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%
	TOTAL	70	100

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

## **Scheme of questions**

Weightage to difficulty level of questions

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