

HOME SCIENCE (68)

Aims:

1. To understand and appreciate the role of Home Science in the development and well-being of self, family and community.
2. To develop an understanding of the basic concepts of food and nutrition in order to lead a healthy life.
3. To understand human development with respect to early and middle childhood.
4. To develop skills to enable candidates to communicate effectively in various spheres of life.
5. To introduce candidates to the basics of Textiles and Clothing.
6. To develop skills for effective management and utilisation of resources available.
7. To create awareness regarding various developmental issues and concerns.

CLASS IX

There will be **one** written paper of **two** hours duration carrying **100** marks and Internal Assessment of **100** marks.

PART I: THEORY

The paper will be divided into **two** Sections, **A** and **B**.

Section A will consist of questions requiring short answers and will cover the **entire** syllabus. There will be no choice of questions.

Section B will consist of questions requiring longer answers. Candidates will be required to answer **four** questions. There will be a choice of questions.

1. Concept and Scope of Home Science

- (i) Introduction to the five streams in Home Science and how they integrate to form a meaningful whole.

Understanding that Home Science is a field of Applied Sciences, made up of five streams, i.e. Foods & Nutrition, Resource Management, Human Development, Textiles & Clothing and Communication & Extension.

- (ii) Significance of the study of Home Science in different spheres of life.

An understanding that Home Science is a multi-disciplinary subject which helps in development of life-skills to deal with various situations in different spheres of life.

2. Food and Health

- (i) Food and its functions. Basic Cookery Terms. Health benefits of common food items.

Definition of: food, nutrient, nutrition, balanced diet, health, malnutrition and optimum nutrition. Functions of food:

physiological, psychological and social functions.

Meaning of basic cookery terms: Cutting, chopping, grating, kneading, beating, peeling, stringing julienne, mashing, cut and fold in, blending, dusting.

Health benefits of common food items - to be done briefly:

- *Herbs: Mint, coriander, celery, basil, curry leaves, saffron, thyme, lemon grass;*
- *Spices: cardamom, cinnamon, cloves, turmeric, fenugreek, cumin, fennel, carrom, asafoetida, ginger, garlic.*

- (ii) Nutrients and their functions. Deficiency diseases.

Classification of nutrients according to their sources and functions:

- (a) *Energy giving: Fats and carbohydrates;*
- (b) *Body building: Proteins and minerals;*
- (c) *Protective: Vitamins (A, D, E and K, Vitamin B -Thiamine, Riboflavin and Niacin and Vitamin C); Minerals (calcium, iron and iodine);*
- (d) *Regulatory: Water and roughage.*

Deficiency diseases associated with the above nutrients.

3. Growth and Development of Children from Birth to Five Years

- (i) Principles of development; milestones of development.

*Meaning of the terms **growth** and **development**; difference between growth and development. Principles of development. Meaning of developmental milestones;*

Milestones of development: meaning and characteristics of physical, motor, social, emotional, cognitive and language development.

- (ii) Role and importance of play and play-school during early childhood.

The role of play with emphasis on holistic growth of the child. Considerations in choosing the kind of play (indoor/outdoor), play materials (indoor/ outdoor); types of play: constructive, fantasy, solitary, cooperative, creative: meaning only; types of play schools: Montessori, nursery, kindergarten - meaning only.

- (iii) Diseases and their prevention.

Common childhood diseases (0-5 years): Tuberculosis, mumps, measles, chickenpox, diphtheria, pertussis, tetanus, rubella, polio: names only and associated vaccines;

Definition and importance of immunisation.

4. The Home and its Maintenance

- (i) Colour and its application in the Home.

Dimensions of colour – hue, value and intensity. Prang colour wheel (primary, secondary and tertiary colours); neutral, warm cool and metallic colours.

Colour schemes: related (monochromatic/one hue colour, analogous /adjacent), contrasting (complementary, double complementary, split complementary, triad and tetrad) colour schemes and their applications in the home – drawing/living room, bed room, dining room and kitchen.

- (ii) Lighting in the Home.

Types of lighting (general and local or task, direct and indirect); sources of light: natural and artificial; choice of adequate lighting for different rooms.

- (iii) Sustainable utilisation of Fuel and Energy in the Home.

Sustainable use of fuel and energy with emphasis on the need and methods for the conservation of cooking gas, water and electricity in the house.

- (iv) Maintenance of Sanitation and Hygiene inside and outside the House

Role of sanitation and hygiene in the home and its environment;

Waste Management: Meaning of the term waste; basic concept of bio degradable and non-biodegradable wastes with examples.

Importance of segregation of waste: sorting of waste into biodegradable / non-biodegradable, organic / non-organic, plastic, metal and e-waste at domestic and community level.

Importance of the five Rs (reduce, refuse, reuse, recycle and reinvent) for environmental conservation.

5. Textile Science and Fabric Construction

- (i) Fibres: Properties and uses

Meaning of the term fibre; classification of fibres: natural, man-made and synthetic;

Natural fibres (cotton, silk and wool): brief idea of origin; man-made fibres (rayon: raw materials); synthetic fibres: nylon and polyester: raw materials;

Identification of fibres: microscopic appearance and burning tests. Properties of cotton, silk, wool, rayon, nylon, polyester and their uses.

- (ii) Fabric structure: woven, non-woven and knitted.

Meaning of the terms yarn, warp, weft, selvedge, fabric.

Woven fabrics: basic (plain and twill, satin, decorative (spot and pile - cut and uncut): construction method and end use;

Non-woven: e.g. felt;

Knitted (hand and machine): meaning and end use of non-woven and knitted.

6. Communication & Extension

Communication: meaning, functions and importance; elements of communication; interpersonal communication.

Meaning, functions and importance of communication; elements of communication (sender, message, medium, receiver, feedback: brief idea); meaning of interpersonal communication; acquiring interpersonal communication skills (listening, speaking, reading and writing).

PART II: INTERNAL ASSESSEMENT

Please note the guidelines for Internal Assessment as given for Class X.

INTERNAL ASSESSMENT IN HOME SCIENCE - GUIDELINES FOR MARKING WITH GRADES

Criteria	Planning Efficiency	Working to time plan	Manipulation	Quality produced	Appearance/Arrangement	Marks
Grade I	Follows the question set and systematically organises the work process.	Is successful in handling parts of the question set and fits them within required time.	Excellent display of manipulative skills - can deal with a laboratory situation efficiently.	With a special insight into the question, the quality developed is of a high standard.	A fine aesthetic sense and artistic ability conveyed in the complete arrangement.	4 marks for each criterion
Grade II	Follows the question set except that the step by step work shows slow operational skill.	Is successful in handling parts of the question, but the smooth work appears to slow down.	Good control of manipulative skills. Has been able to deal with each situation with ease.	The insight into the requirements of the question has been achieved and the quality is good.	The display of colour and equipment used gives an impression of sound organisation.	3 marks for each criterion
Grade III	Follows the question. Order of work process shows lack of co-ordination.	Is successful in handling the question, however the time link seems to break in some area.	Has been successful with the manipulative skills in parts, then gradually slows down.	The quality has been produced in part but the overall lacks some achievement.	The arrangement appears complete but some special details missing.	2 marks for each criterion
Grade IV	Follows a part of the question, work sequence appears disorganised.	Is able to work only a part of the question within the time stated and then seems confused.	Begins with a control of the skills and is unable to sustain the effort.	Only few areas of quality are visible, which affect the total result produced.	Part of the arrangement is represented but the total appearance lacks finish and composition.	1 mark for each criterion
Grade V	Has not been able to interpret the question into proper laboratory organisation.	Time and work sequence is most disorganised.	Is unable to control and manipulate the required skills.	No standard of quality has been achieved due to poor understanding.	There has been no achievement in either the appearance or arrangement.	0 marks for each criterion