

HOME SCIENCE

CLASS X

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. Home furnishing

- (i) Colour and its application.

Dimensions of colour – hue, value and intensity. Prang colour wheel (primary, secondary and tertiary colours). Colour schemes – related (monochromatic/one hue colour, analogous /adjacent) and contrasting (complimentary, double complimentary, split complementary and triad) colour schemes and their applications in the home- living room, bed room, dining room and kitchen.

- (ii) Fabrics for furnishing

Factors affecting selection of furnishing (curtains & draperies, carpets and upholstery) that can enhance the appearance of a room.

- (iii) Lighting in the home.

Types of lighting (general/local & direct/indirect) Choice of adequate lighting for different rooms.

- (iv) Space Organization in the kitchen.

Layout and planning of kitchens

An introduction to the design of kitchen space with respect to placement of work centres for preparation, cooking, washing, service and storage for the most efficient utilization of space and saving time and energy.

2. Management of Money

- (i) Importance of budgeting and savings.

Role of budgeting in the efficient management of money. Steps in making a budget and factors affecting a budget. An understanding of how budgeting helps in proper planning and judicious utilization of available resources. Need for saving, ways and means of saving.

- (ii) Fundamentals of banking.

Opening and operating a bank account, types of deposit accounts: savings, recurring, current and fixed deposit account, withdrawal and deposit of cash and cheque, writing a cheque, maintaining a pass book and use of ATM.

3. Growth and Development during Middle Childhood

Milestones of development

An introduction to the changes in growth and development that take place between 5 - 12 years of age with respect to physical, social, emotional, cognitive and language development in children between five and twelve years of age.

4. Growth and Development during Adolescence

- (i) Physical growth of adolescents, pubertal changes.

A brief introduction to the relationship of physiology and maturation during adolescence. The role of endocrine glands and their influence on physical and psychological changes during adolescence. Differences in physical maturity of boys and girls.

- (ii) Hygiene and Personal grooming during adolescence.

Awareness on issues such as body odour, appearance of facial and body hair, acne, pimples for both boys and girls.

- (iii) Emotional concerns and behavioural patterns of adolescents.

Introduction to the importance of emotions in influencing physical well-being and behaviour; means of dealing with emotions,

eating disorders – food fads, anorexia, bulimia and obesity. Significance of physical exercise.

- (iv) Role of the family, peer group and school in the life of an adolescent.

An introduction to the interaction of the family, peer group and school for the adolescent; issues of conflict between parental values and those of the peer group. Developing good communication skills with family and society.

5. Meal Planning

- (i) Concept of balanced diet.

Definition of a balanced diet, basic five food groups and their nutritional contribution in the diet.

- (ii) Meal planning for the family.

Planning of balanced meals keeping in mind the factors and food groups.

- (iii) Hygienic handling and storage of food - household methods of preservation of food.

Food hygiene at different stages – during purchasing, storage, preparation and serving. Storage of food - perishables, semi-perishables and non-perishables; Household methods of preservation of food – sun drying, freezing, use of salt, sugar, spices, oil and chemical preservatives.

6. Care of Textiles and Clothing

- (i) Laundering of clothes.

Steps involved in household methods of laundering of cotton, silk, wool and synthetics.

- (ii) Laundry material.

Use of detergents and soaps, starch, blue and optical brighteners.

7. Consumer Education

- (i) Meaning and need for consumer education

Role of consumer education in preparing children to be well informed consumers.

- (ii) Wise buying methods for aware consumers.

Basic understanding of what, where, when, how and how much to buy.

- (iii) Consumer Rights and responsibilities

Awareness of consumer rights as mentioned in Consumer Protection Act 1986; Making them aware that rights and responsibilities will go hand in hand.

- (iv) Food adulteration

Definition and health hazards of common food adulterants - metanil yellow, argemone seeds, kesari dal (lathyrus satyvus).

PART II: INTERNAL ASSESSMENT

To be assessed internally by the school - 100 Marks.

Practical Work

Candidates will be required to practice one or more aspects of household work or cookery or care of clothing. They may also undertake practical work on any of the topics suggested below. The teacher is free to assess the practical work either on the basis of continuous assessment or on the basis of periodical tests.

The minimum number of assignments for each academic year:

Class IX - Five practical oriented assignments as prescribed by the teacher.

Class X - Five practical oriented assignments as prescribed by the teacher.

Suggested Assignments

- Preparation of nutritious snacks and various kinds of sandwiches.
- Removal of common stains from clothes/ fabrics – oil/curry/turmeric, blood, dye, ink and grass.
- Demonstration of various cuts of vegetables and fruits like slice, chop, dice, mince, juliennes to make easy salads.
- Finding out from parents about planning of household budget and saving methods.

- Plan a system for recycling of waste produced by the school/home.
- Preparation of compost pits.
- Gardening – potted plants, planting of herbs and medicinal plants and their care.
- Layout of the plan of the Home Science lab with complete detailing of work centres, storage areas and placement of heavy and light equipment.
- Cookery: Preparation of food using simple cooking techniques such as boiling, frying, steaming, grilling, baking, stewing.
- Care of clothing: Laundering of cotton and silk.
- Simple first aid in the home. First aid box and its contents - band aids, burnol, disinfectant, simple home remedy medicines, e.g. pain killer and pain balm and paracetamol.
- Safety considerations in the home – the study of safety features in the home, e.g. floors and floorings, staircase, lighting (natural and artificial) installation and maintenance of electrical points, fittings and gadgets. Suggestions for changes in safety considerations for elderly people and children.
- Collect labels from packages of food, clothing and consumer durables; study and analyse the information given in these labels.
- Cleaning of glass panes, grills, sink (steel and ceramic), counter tops (marble, granite and sand stones) and wooden shelves and electrical appliances like refrigerator, oven and cooking stove.
- Tips for personal grooming – pedicure and manicure, care of acne and pimples with homemade remedies.
- List foods you have eaten on any one day and classify them into food groups, and analyse on the basis of nutrient content and appearance.
- Collect samples of fabrics and compare them on the basis of cost, durability, appearance and suitability. Testing of fibres – burning test.
- Food preservation – making of chutneys, pickles, and jam.
- Various innovative table layouts, napkin folding and creative decorations.
- Collect ten play materials and evaluate them in terms of their merits and demerits.
- Participate in eco-clubs and activities like debates, quizzes, exhibitions, essay competitions on the themes related to environmental concerns and problems. Synthesize information gathered from books, journals, magazines and the internet.
- Visit a water treatment plant, sewage treatment plant or garbage dumping or vermi composting site in the locality and study their working.
- Collect information about global environmental issues and problems and communicate your findings through appropriate modes of communication such as posters, charts, collages, cartoons, handouts, letters, street plays, etc. to all concerned.
- Identify economically and environmentally friendly alternatives in order to deal with the scarcity of resources such as fuels in the locality.

Final Test

In addition to the course work the candidate will be tested in one or more aspects of household work or cookery or care of clothing by the External Examiner.

EVALUATION

The assignments/project works are to be evaluated by the subject teacher and by an External Examiner. The External Examiner may be a teacher nominated by the Head of the school, who could be from the faculty, **but not teaching the subject in the section/class**. For example, a teacher of Home Science of Class XI may be deputed to be an External Examiner for Class X, Home Science projects.

The Internal Examiner and the External Examiner will assess the assignments independently.

Award of marks

Subject Teacher (Internal Examiner):	50 marks
External Examiner	: 50 marks

The total marks obtained out of 100 are to be sent to the Council by the **Head** of the school.

The Head of the school will be responsible for the entry of marks on the mark sheets provided by the Council.

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