

## HOME SCIENCE (864)

### **Aims:**

1. To develop an understanding of the terms, concepts and principles used in the study of Home Science.
2. To develop an understanding of the importance of proper storage and preservation of food and meal planning for the family.
3. To equip candidates with the necessary knowledge and skills for effective management of resources.
4. To foster an understanding of the changes that take place during different stages of life.
5. To familiarize candidates with traditional textiles and to equip them with the knowledge and necessary skills involved in the care and maintenance of textiles.
6. To create awareness regarding selected community development programmes and to develop effective communication skills.

## CLASS XII

There will be two papers in the subject:

**Paper I: Theory:** 3 hours ... 70 Marks

**Paper II: Practical:** ... 20 Marks

- Planning Session: 1 hour
- Examination Session: 3 hours
- Project Work ... 7 marks
- Practical File ... 3 marks

### PAPER I -THEORY

#### 1. Food Preparation

- (i) Principles of cooking; Methods of cooking (dry and wet/moist methods of cooking) and reasons for cooking; advantages and disadvantages of various methods employed in cooking. Some technologies used in cooking.

*Principles of cooking;*

*Methods: Wet/moist methods: boiling, simmering, steaming (direct and indirect), stewing, braising, pressure cooking. Frying: sautéing, shallow and deep frying.*

*Dry methods: baking, roasting, grilling/ broiling.*

*Technologies used in cooking: microwave, induction cooking, solar cooking.*

*Meaning, principle, advantages, disadvantages and examples of each of the above.*

- (ii) Preliminary treatment of foods before cooking.

*Common pre-cooking procedures such as: Cleaning/ washing, peeling, cutting, sieving, grinding, beating / whipping, soaking, mixing, kneading, grating.*

*Meaning and application of each of the above.*

- (iii) Culinary terms.

*Meaning and application of the following: garnish, season, blanch, marinate, braise, flambé, meringue, glaze, poach, puree, roux, pare, temper, prove, dredge.*

- (iv) Effects of cooking on food components.

*Effect of cooking on Carbohydrates (starch, sugar, pectin, cellulose); Proteins; Oils and Fats; Minerals and Vitamins. Internal and external changes in food components. Do's and don'ts in cooking to minimize loss of nutrients.*

- (v) Methods of increasing nutritive value of foods.

*Sprouting/ germination, fermentation, parboiling, combination of foods, supplementation, substitution.*

*Method and advantages of each of the above.*

#### 2. Meal Planning for the family

- (i) Objectives of meal planning. Nutritional adequacy.

*Self-explanatory.*

- (ii) Factors affecting food selection.

*An understanding of how food consumption varies from one family to another; how food selected by families is affected by various factors such as age, occupation, gender, physiological conditions, personal likes and dislikes, tradition, seasonal availability, economic considerations, religious beliefs, family size and composition.*

- (iii) Meal planning for various age groups.

*An understanding of the nutritional needs of pre-school children, school-age children, adolescents, adults and the elderly. Making meal plans for these age groups based on their nutritional requirements and the RDAs.*

- (iv) Eating disorders; developing good food habits.

*An understanding of the following: (a) Anorexia nervosa (b) Bulimia (c) Binge eating disorder or obesity; ways to control the above eating disorders.*

*Developing good food habits: importance of breakfast, following regular meal patterns, avoiding junk food and skipping of meals; Food fads – meaning and examples.*

(v) Special diets.

*Meaning and types; factors to be kept in mind while preparing special diets for: fever (of short duration), diarrhea, diabetes, obesity, hypertension. A day's menu plan for each of the above.*

### 3. Resource Management

(i) Savings and Investments.

*Importance of savings and investments.*

(ii) Avenues and schemes for savings and investments offered by different financial institutions.

*Banks:*

*Concept; function and types of accounts: savings, current, recurring and fixed deposit accounts in Banks: features, limitations; online banking: meaning, advantages and disadvantages. A brief understanding of NEFT.*

*Opening and operating a bank account, types of cheques, filling a deposit slip, procedure for making a demand draft, use of ATM, debit, credit cards and availing educational loans.*

*Post office:*

*Concept; function and types of accounts: savings, recurring and fixed deposit accounts: features, limitations.*

*Insurance (life and health); shares and debentures: concept only.*

### 4. Consumer Education

(i) Consumer Protection

*Importance of consumer education; rights and responsibilities of the consumer; advantages of consumer education. Consumer Protection Act (2019) - salient features.*

(ii) Consumer aids

*(a) Standard Marks: Creating awareness about standard marks for consumer protection: fssai, FPO, AGMARK, ISI, Woolmark, Ecomark, Silkmark, Hallmark, Handloom mark; vegetarian and non-vegetarian food.*

*(b) Labels: need for understanding labels on food items.*

*(c) Role of advertisements and their impact.*

(iii) Problems faced by consumers.

*Price variation, hoarding and black marketing, unfair means of measurement, misleading advertisements, deceptive packaging, sale of sub-standard goods.*

*Food adulteration: Definition of food adulteration as stated in Prevention of Food Adulteration Act (PFA); common adulterants present in food stores - stones, dust, dirt, argemone seeds and oil, metanil yellow, kesari dal, toxic colours, chicory powder and starch and their effects.*

### 5. Human Development

Growth and development during adolescence.

(i) Physical development.

*Physical Development during puberty and adolescence: role of the endocrine system - changes in body proportions and their effects; early and late maturers; influence of sports and exercise on physical fitness.*

(ii) Cognitive development

*Stages of cognitive development.*

(iii) Social and emotional development.

*Influences on adolescents:*

– *Family: parents, grandparents, siblings; Family and socialization; patterns of parenting; development of gender roles and stereotypes.*

– *School and teachers: role of school and teachers in the social and emotional development of the adolescent.*

– *Peers: development of peer relationships (positive and negative influences).*

(iv) Issues and concerns of adolescents.

*Peer pressure, substance abuse (meaning, symptoms and treatment), sexual abuse; anger management, depression and suicidal tendencies. Preparation for career. Influence of social media.*

(v) Perspectives on Adulthood.

*Adulthood: meaning and dimensions; Stages:*

- *Early adulthood - understanding and managing new responsibilities, career, marriage and family.*
- *Middle adulthood - physical and psychological changes.*
- *Late adulthood/ old age - (a) Health and wellness: physical, social, emotional, financial, recreational needs (b) Care for the elderly (at home and outside - old age homes); modification in lifestyle; preparation for retirement.*

*Increasing life expectancy and associated issues and concerns. Sensitising children towards the needs and care of the elderly.*

**6. Traditional Textiles**

Traditional textiles: Classification - embroidered, woven, dyed, printed and painted.

- (a) *Embroidered textiles: Chikankari, Phulkari, Kashidakari, Kantha, Kasuti, Kutch-Kathaiwar - origin, thread, colour, fabric, stitches, motifs, products.*
- (b) *Woven textiles: Baluchari, Chanderi, Kanjeevaram, Banarasi, Jamdani, Kani shawls - origin, characteristics, care and storage: origin, yarn, colours, motifs, products.*
- (c) *Dyed: Bandhini, Patola, Ikat - origin, fibre or fabric, colours, motifs, products.*
- (d) *Printed and painted: Kalamkari, Madhubani, Bagh, Dabu (Sanganer-Baghru print) - origin, technique, fabric, colours, motifs, products.*

**7. Communication and Extension**

(i) Water safety

*Importance of potable drinking water for good health; simple methods of making water safe for drinking: boiling, filtering (traditional and modern technology), use of alum and chlorine.*

(ii) Some National Programmes for Community Development.

*Scope and salient features of the Swachh Bharat Abhiyan and the Integrated Child Development Scheme (ICDS).*

**PAPER II**

**PRACTICAL – 20 Marks**

This practical paper will consist of **two** sessions:

- (i) The Planning Session (1 hour)
- (ii) The Examination Session (3 hours)
- (i) The Planning Session:** Candidates will be required to plan a **balanced menu** during the Planning Session, on any **one** from the two given options.
- (ii) The Examination Session:**
  - (a) Candidates will be required to cook any two dishes from the menu planned during the Planning Session.
  - (b) Candidates would also need to display the dishes prepared with a suitable table layout.

**NOTE: Candidates will be required to exhibit different methods of cooking during the practical examination.**

- (c) In addition, candidates will be required to design and develop a suitable label for a food item on **any one** of the two given options. **Candidates will be assessed on the design and content of the label.**

The label should include the following information: *nutritive content, net content, use of additives and preservatives if any, manufacturing and expiry date /best before dates, instructions of use, MRP, standardization marks, vegetarian/non-vegetarian, name and address of the manufacturer (any six points to be included).*

**The Practical Work will be evaluated by a Visiting Examiner appointed locally and approved by CISCE.**

**Distribution of Marks:**

Menu Planning	5 Marks
Cooking	10 Marks
Table display	2 Marks
Label Designing	3 Marks
<b>TOTAL</b>	<b>20 MARKS</b>

**Candidates will be required to complete the following Practicals during the year:**

1. Plan a **balanced menu** keeping in mind the specified age and sex variations for:
  - Special occasions (birthday party, marriage anniversary, family get-togethers, promotion at work, success in examinations, etc.)
  - Packed meals (picnic basket, short and long journeys...)
  - Therapeutic diets (hypertension, diabetes, obesity)

Prepare any **two** dishes from the planned menu, using different methods of cooking.

Make an appropriate display to complement the prepared dishes.

2. Design and develop suitable labels for food items.
3. Opening of a bank account, filling of cheques, deposit slips, withdrawal slips and demand draft forms.

**PROJECT WORK AND PRACTICAL FILE –  
10 Marks**

**Project Work – 7 Marks**

**Evaluation Criteria: material, content, presentation and innovation**

The project work is to be assessed by a Visiting Examiner appointed locally and approved by CISCE.

The candidate is to creatively execute **ONE** project/assignment on any one of the following:

1. Study the height and weight of at least 20 people from the same age group. Compare the data collected against the recommended norms to identify variations. Analyse the data and present your findings graphically.
2. Select any three States in India and study their traditional weaves, prints and costumes. Prepare a report on the same.
3. Select any one National Programme for community development in India and prepare a report on the same. Also prepare two communication aids to create awareness on this Programme.
4. Compare the interest rates offered by five different commercial banks on fixed deposits under general and senior citizens categories and the various time durations.

Also find out the procedure for: Opening a savings account and a fixed deposit account.

**Practical File – 3 Marks**

The Visiting Examiner is required to assess candidates on the basis of the Practical file maintained by them during the academic year.