

6. HOME SCIENCE

CLASS XI (THEORY)

One Paper (Theory)

Time: 3 Hours

70 Marks

Unit	Title	Marks
I.	Concept of Home Science	02
II	Know myself	17
III.	Nutrition for Self and Family	17
IV	My Resources	17
V.	My Apparel	17
Total		70

Unit I: Concept of Home Science and its Scope

Home Science, its scope.

Unit II: Know myself : Issues related to adolescents

Adolescence, meaning, early (12-15 years) and late (16 - 18 years) adolescence, early and late maturers.

Characteristics: Cognitive Development: Transition from concrete to formal operations; physical Development: Growth spurt, sexual development; Social and Emotional development: importance of peer group, interest in the opposite sex, varied and changing interests, concern about future; adolescence a period of strain and stress.

Important developmental tasks: accepting one's physique; achieving new and more matured relations with agetates of both sexes; achieving a masculine/feminine social gender role; achieving emotional independence from parents; preparing for career; reproductive health and prevention of anemia.

Individual differences: difference between same sex, differences across the two sexes, early and late maturers, role of heredity and environment (family, peers, school and neighbourhood).

Interpersonal Skills: with the family, peers and members of the community.

Special needs of adolescents - (i) Nutritional requirements: qualitative and quantitative;

(ii) exercise and entertainment; importance of physical activity in social development and prevention of obesity (iii) understanding from parents.

Some problems of adolescence: awkwardness due to growth spurt; freedom and control; depression; alcohol, drugs and smoking; delinquency; problem related to sex; ignorance and increased curiosity; prevention of HIV / AIDS and other sexually transmitted diseases;

Population Education: problems of over population; neglect of girl child: causes, prevention, legal and social laws, government incentives to improve status of girl child, desire for male child; small family norms.

Unit III : Nutrition for Self and Family

Definition and relationship between food, nutrition, health: nutritional status; classification of foods on the basis of nutrients and functions; nutritional status and calorie intake as a basis of poverty line.

Functions of food: body building, energy giving, protective, regulatory; physiological, psychological and socio-cultural; signs of good health; physical status, psychological status, mental ability, mortality and longevity.

Selection of foods for optimum nutrition and good health: basic knowledge of nutrients - sources, functions, deficiency and prevention; proteins, carbohydrates, fat, dietary fibre, vitamins - A, D, B 1, B2, niacin, folic acid, B 12 and vitamin C; minerals-calcium, iron and iodine. Basic food groups (ICMR) and their contribution; concept of balanced diet; food and nutritional requirements for family (ICMR tables); factors influencing selection of food: culture, family food practices, media, peer group and availability of foods.

Maximum nutritive value from food by proper selection, preparation, cooking and storage: Selection and storage of foods-perishable, semi-perishable, non-perishable; convenience foods; Reasons for spoilage; brief description of household methods of preservation-refrigeration, dehydration, use of chemicals and household preservatives. Preparation of food; loss of nutrients during preparation of food and their minimization; Cooking; principles of cooking; Methods of cooking-boiling, steaming, pressure cooking, deep and shallow frying, parboiling, sauteing, roasting and grilling; Effect of cooking on the nutritive value of food; Method of enhancing nutritive value-germination, fermentation, fortification and proper food combination.

Unit IV: My Resources

Resources: meaning, types: (i) human-knowledge, skills, time, energy, attitudes; (ii) material: oney, goods, property; (iii) community facilities; Schools, parks, hospitals, roads, transport, water, electricity, fuel, fodder; need to manage the resources; methods of conservation of shared resources.

Management: meaning and need for management; steps in management: planning, organizing, controlling, implementing and evaluation; decision making and its role in management.

Time and energy management: need and procedure for managing time for occupation and leisure; work simplification: meaning and methods; activities in the home: sleeping, studying, cooking, eating, bathing, washing, entertaining-need to organize space for these activities; use of colours and accessories to make these centres attractive; role of different members of the family in efficient running of a home.

Work ethics: meaning and importance; discipline at work place; reaching on time, staying in seat, knowing the job, using polite language.

Unit V: My Apparel

Fibre Science: types of fibres: (i) natural-cotton, silk and wool; (ii) man-made pure rayon nylon and polyester) and blend (terrycot, terrysilk, terrywool,).

Fabric Construction: Basic procedure of any yarn making (spinning, mechanical spinning, chemical spinning, weaving: plain, twill & satin, other methods-knitting and nonwoven, effect of weaves on appearance, durability and maintenance of garment.

Finishing: meaning and importance; types: (i) basic: cleaning, bleaching, stiffening, tantering; (ii) special: mercerisation, shrinkage control, water proofing; dyeing and printing.

PRACTICALS

Time: 3 Hours

30 Marks

Unit	Title	Marks
I.	Concept of Home Science	-
II	Know myself	-
III.	Nutrition for Self and Family	08
IV	My Resources	08
V.	My Apparel	07
	Record	05
	Viva	02
Total		30

Unit I : Concept of Home Science

Unit II : Know myself : issues related to adolescents

Activity: Observe and test your own strengths and weaknesses; Discuss about them in class with your teacher and fellow students; take decision about maximum utilization of strength and improvement upon weaknesses.

Activity: Report situations from your life to indicate your interaction within the family, with peers and with members of the community.

Unit III : Nutrition for Self and Family

Activity: Look for signs of good health within your family.

Activity: Make a list of foods available in the local market according to food groups.

Activity: Observe how different food stuffs are stored at home and evaluate the effectiveness of the method; practise skills to preserve and optimise nutrients by preparing meals and snacks.

Practical: Preparing meals and snacks

Practical: Household methods of food preservation - Jam, Squash / Syrup Pickles / Chutney.

Unit IV : My Resources

Activity (Observation): Observe and list resources available at home and in neighbourhood.

Make a detailed study on available community resource and its management, suggest improvements.

Activity: Critically evaluate anyone activity centre of your house. Suggest improvements.

Activity: Suggest a work plan for yourself for a day and state where and why will you take help from others.

Practicals: Make flower and foliage arrangements, floor decorations, clean and polish brass, glass, iron, aluminium and plastic surfaces.

Unit V : My Apparel

Activity: Collect samples of fabrics and study characteristics for identification.

Activity: Collect samples of weaves and identify them.

Practicals: Carry out burning test, slippage test, tearing test and test for colour fastness.

Practical: Dyeing: plain and tie dye printing: use blocks (available or make you own) on small sample.