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FOR UTTARAKHAND CLASS 12 PREPARATION

Uttarakhand Board Class 11-12 Syllabus 2027 Home Science

EXAM	YEAR	TYPE	SUBJECT
Uttarakhand Class 12	2027	Syllabus	Home Science

2026-27
HOME SCIENCE (113)

CLASS XI

Time: 3 Hours Theory One Paper Marks :70

No.	Units	Marks
1.	Introduction to Home Science	02
2.	Understanding oneself: Adolescence	20
3.	Understanding Family, Community and Society	15
4.	Childhood	15
5.	Adulthood	18
	Total	**70**
	Practical	**30**
	Grand Total	**100**

UNIT I: INTRODUCTION TO HOME SCIENCE

- What is Home Science
- Areas of Home Science
- Home Science is important for both boys and girls
- Career options of Home Science

UNIT II: UNDERSTANDING ONESELF: ADOLESCENCE

Unit II focus on the stage of adolescence – the stage of life to which you belong at present. This unit deals with understanding your own self in terms of your personal and social identity, your nutritional and health requirements, management of basic resources of time and space, fabrics around you, and your communication skills. The last chapter of the unit situates the adolescent in the context of the family and larger society, thereby linking it to the next unit that deals with the individual in relation to her/his family, school, community and society.

CHAPTER: UNDERSTANDING THE SELF

- What is Self?
  - Personal dimension
  - Social dimension
  - Self- concept
  - Self esteem
- What is Identity?
  - Personal identity
  - Social identity
- Self during Infancy: characteristics
- Self during early childhood: characteristics
- Self during middle childhood: characteristics
- Self during adolescence: characteristics
  - Identity development
  - Identity crisis

- Real vs Ideal self

➢ Influences on identity

- Developing a sense of self and identity
- Influences on formation of identity
  - Biological and physical changes
  - Socio-cultural context
  - Emotional changes
  - Cognitive changes

CHAPTER: FOOD, NUTRITION, HEALTH AND FITNESS

➢ Introduction

➢ Definition of

- Food
- Nutrition
- Nutrients

➢ Balanced diet

- Definition
- RDA

➢ Health and Fitness

➢ Using Basic food Groups for planning Balanced Diets

- Food guide pyramid.

➢ Vegetarian food Guide

➢ Dietary patterns in Adolescence

- Irregular meals and skipping meals
- Snacking
- Fast foods
- Dieting

➢ Modifying diet related behaviour

- Diet journal
- Exercise
- Substance use and abuse
- Healthy eating habits
- Snacks
- Drinking water

➢ Factors influencing eating behaviour

➢ Eating disorders at adolescence

- Key terms and their meaning

CHAPTER: MANAGEMENT OF RESOURCES

- Introduction
- Classification of resources
    - Human /non-human resources
    - Individual / shared resources
    - Natural / community resources
- Human and non-human resources
    - Human resources
        - Knowledge
        - Motivation/ interest
        - Skills/ strength/ aptitude
        - Time
        - Energy
    - Non-human resources
        - Money
        - Material resources
- Individual and shared resources
    - Individual resources
    - shared resources
- Natural and community resources
    - Natural resources
    - community resources
- Characteristics of resources
    - Utility
    - Accessibility
    - Interchangeability
    - Manageable
- Managing Resources
    - Management process
    - Planning
    - Steps in planning
    - Organising
    - Implementing
    - Controlling
    - Evaluation

CHAPTER: FABRIC AROUND US

- Definition of yarns, fibres, textile products, finishing.
- Introduction to fibre properties
- Classification of textile fibres
  - Filament/staple fibres
  - Natural/Manufactured (manmade) fibres
- Types of Natural Fibres
  - Cellulosic fibres
  - Protein fibres
  - Mineral fibres
  - Natural rubber
- Types of Manufactured Fibres
  - Regenerated cellulosic fibres
  - Modified cellulosic fibres
  - Protein fibres
  - Non-cellulosic fibres
  - Mineral fibres
- Some Important fibres and their properties
  - Cotton
  - Linen
  - Wool
  - Silk
  - Rayon
  - Nylon
  - Polyester
  - Acrylic
  - Elastomeric fibres
- Yarns
- Yarn processing
  - Cleaning
  - Making into a sliver
  - Attenuating, drawing out and twisting
- Yarn terminology
  - Yarn number
  - Yarn twist
  - Yarn and thread
- Fabric production
- Weaving

- Knitting
- Braiding
- Nets
- Laces

➢Textile Finishing

- Finishing with colour
- Printing

CHAPTER-MEDIA COMMUNICATION TECHNOLOGY

➢Communication and Communication Technology

- What is Communication
- Classification of communication
- How does communication takes place

➢What is media

- Media classification and functions

➢What is communication technology

- Classification of communication technologies
- Modern communication technologies

UNIT III: UNDERSTANDING FAMILY, COMMUNITY AND SOCIETY

The chapters in Unit II were all addressed to you for the understanding of self and of the factors that influence your decision making. Let us now move on to understanding the family, the community and the society that you are a part of.In the first section- the focus will be on relationships and interactions with significant others, i.e. those important to you in these contexts. The second section- will discuss concerns and needs, such as those of health, work, resources, education and textile tradition in the adolescent"s diverse social contexts.

CHAPTER: CONCERNS AND NEEDS IN DIVERSE CONTEXTS

A. NUTRITION, HEALTH AND HYGIENE

➢Health and its Dimensions

- Social health
- Mental health
- Physical health

➢Health care Indicators of Health

➢Nutrition and Health

➢Importance of nutrients

➢Factors affecting nutritional well being

- Food and nutrient security
- Care for the vulnerable
- Good health for all

- Safe environment

➢Nutritional Problems and their consequences

- Malnutrition
- Under nutrition
- Over nutrition

➢Hygiene and Sanitation

- Personal Hygiene
- Environmental Hygiene
- Food Hygiene
- Water safety-Qualities of potable water, methods of water purification(Boiling, chlorine, storage and electric filter ,RO)

B. RESOURCES AVAILABILITY AND MANAGEMENT

➢Time Management

- Definition of time plan
- How good is your time management (Activity)?
- Steps in making time plan
- Tips for effective time management
- Tools in time management---Peak load period, Work curve, Rest /break periods, Work simplification

➢Space Management

- Space and the home
- Principles of space planning

UNIT IV: CHILDHOOD

The theme of this unit is „Childhood". You may wonder why did the book address the adolescent years first and childhood later. Well, it is because if you as an adolescent understand issues about yourself first, it would be easierto grasp the issues that are concerned with the stage of childhood, and later with adulthood. In this unit you will be studying about children"s growth and development, critical concerns about their health and nutrition, education and clothing. As we would like children with disabilities to be an inclusive part of our society, the chapters provide us important information on their needs and ways to meet them.

CHAPTER: SURVIVAL GROWTH AND DEVELOPMENT

➢The meaning of survival

➢Growth and development

➢Areas of development

- Physical development
- Motor development
- Cognitive development
- Sensory development

- Language development
- Social development
- Emotional development

➢Good Nutrition

➢Stages in development

- Neonate
  - Reflexes
  - Sensory capabilities

➢Development across stages from infancy to adolescence

- Physical and motor development
- Language development
- Socio –emotional development
- Cognitive development
  - Mental processes involved in thinking
  - Stages of cognitive development
    - ❖ Sensory motor stage
    - ❖ Pre-operational stage
    - ❖ Concrete operational stage
    - ❖ Formal operational stage

CHAPTER: NUTRITION, HEALTH AND WELL-BEING

➢Introduction

➢Nutrition, Health and Well-being during infancy (birth – 12 months)

- Dietary requirements of infants
- Breast feeding
  - Benefits of breast feeding
- Feeding the low birth weight infants
- Complementary foods
- Guidelines for complementary feeding
- Immunization
- Common health and nutrition problems in infants and young children

➢Nutrition, Health and well-being of preschool children (1-6 years)

- Nutritional needs of preschool children
- Guidelines for healthy eating for preschoolers
- Planning balanced meals for preschool children
- Some examples of low-cost snacks
- Feeding children with specific needs
- Immunization

➢Nutrition, Health and well-being of school-age children (7-12 years)

- Nutritional requirements of school children

- Planning diets for school-age children
- Factors that influence diet intake of preschool-age and school-age children
- Healthy habits
- Health and nutrition issues of school age children

CHAPTER: OUR APPAREL

➢Clothing functions and the selection of clothes
- Modesty
- Protection
- Status and prestige
- Adornment

➢Factors affecting selection of clothing in India
- Age
- Climate and season
- Occasion
- Fashion
- Income

➢Understanding children‟s basic clothing needs
- Comfort
- Safety
- Self help
- Appearance
- Allowance for growth
- Easy care
- Fabrics

➢Clothing requirements at different childhood stages
- Infancy (birth to six months)
- Creeping age (6 months to one year)
- Toddlerhood (1-2 years)
- Preschool age (2-6 years)
- Elementary school years (5-11 years)
- Adolescents (11-19 years)
- Clothes for children with special needs

UNIT V: ADULTHOOD

With the advent of adulthood, the adolescent passes through the portal of what may be termed as the "real world". One enters the world of higher education, work and marriage, and gets involved in establishing one‟s own family. Hence responsibilities of the individual increases manifold. In this unit you will learn about the major factors that play a role in determining the quality of adult life, these being health and wellness, financial planning and management, maintenance of fabrics and apparel that one uses personally as well as in the home, and appreciation of different perspectives in communication. The unit concludes with the chapter on individual responsibilities and rights, not only for one‟s own self, but also in relation to the family and larger society.

CHAPTER: HEALTH AND WELLNESS

- Importance of health and fitness
- Healthy & Unhealthy diet
- BMI
- Do‟s and Don‟ts for health promoting diets
- Fitness
- Importance of exercise and physical activities in adulthood
- Wellness
- Qualities of a person who is rated high on wellness
- Dimensions of wellness
  - Social aspect
  - Physical aspect
  - Intellectual aspect
  - Occupational aspect
  - Emotional aspect
  - Spiritual aspect
  - Environmental aspect
  - Financial aspect
- Stress and coping with stress
- Simple techniques to cope with stress
  - Relaxation
  - Talking with friends/family
  - Reading
  - Spirituality
  - Music
  - Hobby
  - Yoga

CHAPTER: FINANCIAL MANAGEMENT AND PLANNING

- Financial management

- Financial planning
- Management
- Money and its importance
- Family Income
    - Money income
    - Real income: Direct and Indirect income
    - Psychic income
- Income management
- Budget
- Steps in making budget
- Advantages of planning family budgets
- Control in money management
    - Checking to see how well the plan is progressing
        - Mental and mechanical check
        - Records and accounts
    - Adjusting wherever necessary
    - Evaluation
- Savings
- Investment
- Principles underlying sound investments
    - Safety to the principle amount
    - Reasonable rate of interest
    - Liquidity
    - Recognition of effect of world conditions
    - Easy accessibility and convenience
    - Investing in needed commodities
    - Tax efficiency
    - After investment service
    - Time period
    - Capacity
- Savings and investment avenues
    - Post office
    - Banks

- Unit Trust of India
- NSC
- Mutual funds
- Provident funds
- Chit fund
- Life insurance and medical insurance
- Pension scheme
- Gold, house, land
- Others (new schemes)

➢Credit
➢Need of credit
➢4C"s of credit: character, capacity, capital means, collateral,

CHAPTER: CARE AND MAINTENANCE OF FABRICS

- ➢ Mending
- ➢ Laundering
  - Stain removal
    - Vegetable stains
    - Animal stains
    - Oil stains
    - Mineral stains
    - Dye bleeding
  - Techniques of stain removal
    - Scraping
    - Dipping
    - Sponging
    - Drop method
  - Reagent for stain removal
  - Common stains and method of removing

➢Removal of dirt: the cleaning process
  - Soaps and detergents
  - Methods of washing: friction, kneading & squeezing, suction, washing by machine

➢Finishing
  - Blues and optical brighteners
  - Starches and stiffening agents

➢Ironing
➢Dry cleaning

- Storage of textile products
- Factors affecting fabric care
    - Yarn structure
    - Fabric construction
    - Colour and finishes
- Care label

NOTE:

- **Wherever required latest data/figures to be used.**
- **Latest RDA's to be used.**

PRACTICALS FOR CLASS XI

1. Understanding oneself with reference to:
   a) Physical development in terms of age, height, weight, hip and chest circumference.
   b) Sexual maturity (Age at menarche, Development of breasts: girls). Growth of beard, change in voice: boys)
2. Observe developmental norms: (Physical, Motor, Language and social - emotional) birth to three years.

3. List and discuss 4-5 areas of agreement and disagreement with
   a) Mother
   b) Father
   c) Siblings/ Friends
   d) Teacher

4. a) Record own diet for a day
   b) Evaluate qualitatively for adequacy
5. Preparation of different healthy snacks for an adolescent suitable in her/his context.
6. a) Record one day‟s activities relating to time use and work
   b) Prepare a time plan for yourself

7. Plan a budget for a given situation/purpose.

8. a) Record the fabrics and apparel used in a day
   b) Categorize them according to functionality

9. Relationship of fibre properties to their usage:
   a) Thermal property and flammability
   b) Moisture absorbency and comfort

10. (a) Analyze label of any one garment with respect to: Clarity, fiber content, size andcare instructions.
    (b) Prepare one care label of any garment.
    (c) Analyze two different fabric samples for color fastness.

Scheme for practical examination **30 Marks**

1. Observe developmental norms: (Physical, Motor, Language and social emotional) birth to three years. 5 marks

OR

List and discuss 4-5 areas of agreement and disagreement with

a) Mother
b) Father
c) Siblings/ Friends
d) Teacher

2. Preparation of healthy snacks for an adolescent. 5 marks
3. Plan a budget for a given situation/purpose. 3 marks
4. Prepare a time plan for yourself. 3 marks
5. Relationship of fibre properties to their usage: 4 marks
   a) Thermal property and flammability
   b) Moisture absorbency and comfort

OR

Prepare one care label of any garment.

6. File 3 marks
7. Viva 2 marks
8. Continuous Assessment (Unit Test) 5 marks

Prescribed textbook: Human Ecology and Family Sciences (For class XI): Part I and Part II

2026-27
Home Science(113)
Class XII

Time-3 Hours Theory One Paper Marks: 70

No.	Units	Marks
1	Work, Livelihood and Career	05
2	Nutrition, Food Science and Technology	23
3	Human Development and Family Studies	10
4	Fabric and Apparel	17
5	Resource Management	10
6	Communication and Extension	05
	THEORY	**70**
	PRACTICAL	**30**
	GRAND TOTAL	**100**

UNIT I WORK, LIVELIHOOD AND CAREER
Chapter: WORK, LIVELIHOOD AND CAREER

- Introduction
  - Work and meaningful work
  - Work, careers and livelihood
- Traditional occupation in India
  - Agriculture
  - Handicrafts
  - Indian cuisine
  - Visual arts
- Work ,Age and Gender
  - Gender issues in relation to work
  - Issues and concerns related to women and work
    - ✓ KGBV
    - ✓ Beti bachao ,Beti Padhao Yojana
- Attitudes and approaches to work and life skills for livelihood
  - Attitudes and approaches to work
  - Life skills for livelihood
  - Essential soft skills at workplace
- Ergonomics
  - Definition and need for ergonomics
  - Benefits of Ergonomics
- Entrepreneurship
  - Definition and characteristics

UNIT II: NUTRITION, FOOD SCIENCE AND TECHNOLOGY Chapter: CLINICAL NUTRITION AND DIETETICS

- Introduction
  - Significance

- Nutrition
- Clinical Nutrition
  - Basic concepts
  - Diet therapy
  - Types of diets: Regular Diet and Modified diets
    - Changes in consistency
    - Feeding routes
    - Prevention of chronic diseases
  - Preparing for career
  - Scope

Chapter: PUBLIC NUTRITION AND HEALTH

  - Introduction
  - Significance
  - Basic concept
    - Public health nutrition
    - Nutritional Problems of India
      - Protein energy malnutrition
      - Micronutrient deficiencies
  - Iron deficiency anemia
  - Vitamin A deficiency
  - Iodine deficiency disorders
  - Strategies/Intervention to tackle Nutritional problems
  - Diet or food based strategies
  - Nutrient based strategies
  - Nutrition programmes operating in India
  - ICDS
  - Nutrient Deficiency Control Programmes
  - Food Supplementation Programmes
  - Food Security Programme
  - Health Care
  - Scope

Chapter: FOOD PROCESSING AND TECHNOLOGY

- Introduction
- Significance
- Basic Concepts
  - Food Science
  - Food Processing
  - Food Technology
  - Food Manufacturing
- Development of food processing and technology
- Importance of Food processing and Preservation
- Classification of food on the basis of extent and type of processing
- Preparing for a career
- Scope

Chapter: FOOD QUALITY AND FOOD SAFETY

- Introduction
- Significance
- Basic Concepts
  - Food safety (Toxicity & Hazard)
  - Hazards (Physical, chemical and biological)
  - Food infection
  - Food poisoning
  - Food quality
- Food standards regulation in India-FSSA (2006)
- International Organization and agreements in the area of Food Standards, Quality, Research and Trade
  - Codex Alimentarius Commission
  - International Organization for Standardisation
  - World Trade Organization
- Food Safety Management Systems
  - Good manufacturing practices (GMP)
  - Good handling practices (GHP)
  - Hazard Analysis Critical Control Points (HACCP)
- Scope

UNIT III HUMAN DEVELOPMENT AND FAMILY STUDIES

Chapter: Early Childhood Care and Education

- Significance
- Basic concepts
- Preparing for a career
- Scope

Chapter: Management of support services, Institutions and programmes for children, youth and elderly

- Significance
- Basic concepts
- Why are children vulnerable?
- Institutions, programmes and initiatives for children
  - ICDS
  - SOS Children‟s Village
  - Children‟s Homes run by the Government
  - Adoption
- Why are Youth vulnerable?
- Youth programmes in India
- Why are the elderly vulnerable?
- Some programmes for the elderly
- Preparing for a career
- Scope

UNIT IV FABRIC AND APPAREL

Chapter: Design for Fabric and Apparel

- Introduction
- Basic concepts (Design: Structural & Applied)
- Elements of design
  - Colour
  - Texture
  - Line
  - Shapes or form
- Principles of Design
  - Proportion
  - Balance
  - Emphasis
  - Rhythm
  - Harmony
- Preparing for career
- Scope

Chapter: Fashion Design and Merchandising

- Introduction
- Significance
- Basic Concepts
  - Fashion terminology –Fashion ,fads, style, classic
- Fashion Development
  - France-The centre of fashion
  - Fashion Evolution
- Fashion Merchandising
- Fashion Retail Organization
- Preparing For a career

- Scope

Chapter: Care and maintenance of fabrics in Institution

- Introduction
- Basic concepts
  - Washing equipment
  - Drying equipment
  - Ironing/pressing equipment
- Institutions
- Preparing for a career
- Scope

UNIT V RESOURCE MANAGEMENT

Chapter: Hospitality Management

- Introduction
- Significance
- Basic concepts
- Departments involved in hospitality management of an organization
- Scope

Chapter: Consumer Education and Protection

- Introduction
- Significance of consumer education and protection
- Basic concepts
  - Consumer product
  - Consumer behaviour
  - Consumer forum
  - Consumer footfalls
  - Consumer problems
  - Consumer rights
  - Standardized marks (ISI, Wool Mark, Hall Mark, Silk Mark)
  - Protection Councils
  - Consumer Responsibilities
- Scope

UNIT VI COMMUNICATION AND EXTENSION

Chapter: Development communication and Journalism

- Introduction
- Significance
- Basic concepts
  - Development
  - Development journalism
  - Development Communication
- Methods of communication
  - Campaign
  - Radio and television
  - Print media

- Information and communication technologies
- Knowledge and skills required for a career in this field
- Scope and career avenues in development communication

PRACTICALS FOR CLASS XII

UNIT I NUTRITION, FOOD SCIENCE AND TECHNOLOGY

1. Modification of normal diet to soft diet for elderly person.
2. Development and preparation of supplementary foods for nutrition programme.
3. Planning a menu for a school canteen or mid-day meal in school for a week.
4. Design, prepare and evaluate a processed food product.
5. Qualitative test for food adulteration in: pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafoetida.

UNIT II HUMAN DEVELOPMENT AND FAMILY STUDIES

1. Preparation and use of any one teaching aid to communicate socially relevant messages for children/ adolescents /adults in the community.

OR

Preparation of any one toy for children (age appropriate) using locally available and indigenous material

UNIT III FABRIC AND APPAREL

1. Preparation of any one article using applied textile design techniques; tie and dye/ batik/block printing
2. Remove different types of stains from white cotton cloth -Ball pen, curry, grease, ink, lipstick, tea and coffee.

UNIT IV RESOURCE MANAGEMENT

1. Evaluate any one advertisement for any job position.
2. Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following-

a) Consumer Protection Act (CPA)
b) Consumer responsibilities
c) Consumer organization
d) Consumer Problem

PROJECT

ANY ONE OF THE FOLLOWING PROJECT MAY BE UNDERTAKEN AND EVALUATED-

1. Study of an integrated community based, nutrition/health programme being implemented in own area, with reference to-

a) Programme objectives
b) Focal Group/Beneficiaries
c) Modalities of implementation

2. Visit to the neighboring areas and interview two adolescents and two

adults regarding their perception of persons with special needs.
3. Profile any two person (child/adult) with special needs to find out their diet, clothing, activities, physical and psychological needs.

4. Planning any five messages for nutrition, health and life skills using different modes of communication for different focal groups.

5. Market survey any five processed foods with their packaging and label information.

SCHEME FOR PRACTICAL EXAMINATION **30 Marks**

1. Project (3 marks)
2. Modification of any one family meal for elderly person. Preparing any one of the modified dish. (3 marks)

OR

Development and preparation of any one supplementary food for pre-schooler (2-6 years) nutrition programme.

OR

Planning a menu for school canteen and preparing any one nutritious dish.

3. Identify adulterant using chemical test in any one of the following- pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafetida. (2 marks)

4. Prepare a sample using applied textile design techniques tie and dye/batik/block printing. (3 marks)
5. Remove any one of the stain from white cotton cloth -Ball pen, curry, grease, ink, lipstick, tea, coffee. (2 marks)
6. Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following- (5 marks)

a) Consumer Protection Act (CPA)
b) Consumer responsibilities
c) Consumer organization
d) Consumer Problems

7. File (5 marks)
8. Viva (2 marks)
9. Continuous Assessment (Unit Test) (5 marks)

Practical Evaluation Scheme

Time: 3 Hours **30 Marks**

S. No	Item	Marks
External Examiner		
1.	Project	3
2.	Modification of any one family meal for elderly person. Preparing any one of the modified dish. OR Development and preparation of any one supplementary food for pre-schooler (2- 6 years) nutrition programme. OR Planning a menu for school canteen and preparing any one nutritious dish.	3
3.	Identify adulterant using chemical test in any one of the following- pure ghee, tea leaves, whole black pepper, turmeric powder, milk, asafetida.	2
4.	Prepare a sample using applied textile design techniques tie and dye/batik/block printing.	3
5.	Remove any one of the stain from white cotton cloth –Ball pen, curry, grease, ink, lipstick, tea, coffee.	2
6.	Viva	2
Internal Examiner		
7.	Develop a leaflet/pamphlet for Consumer Education and Protection on anyone of the following- a) Consumer Protection Act (CPA) b) Consumer responsibilities c) Consumer organization d) Consumer Problems	5
8.	File	5
9.	Continuous Assessment (Unit Test)	5