

09.Home Science

Unit I : Food Science

- Food groups and their nutritional contribution
- Changes in nutrients during cooking
- Cooking methods
- Food processing and preservation
- Food quality, safety, sanitation and standards
- Food microbiology

Unit II: Nutrition Science and Meal Planning

- Fundamentals of nutrition- Functions, dietary sources; deficiency diseases/excess of macro and micro-nutrients
- Dietary guidelines for Indians – Dietary Reference Intakes, Recommended Dietary Allowances- 2010; Food Pyramid; Balanced diets
- Nutrition for various age groups and physiological conditions
- Meal planning – Use of food exchange lists; Normal and Therapeutic nutrition
- Community nutrition
- Breast feeding and Complementary feeding.
- National nutrition policy and Nutrition programmes
- Role of National and International agencies in nutrition

Unit III: Clothing

- Clothing terminology, principles
- Family clothing
- Clothing construction techniques - drafting, flat pattern and draping methods
- Equipment used in clothing construction
- Anthropometric measurements and paper patterns for different garments
- Use of construction features in design
- Traditional embroideries of India
- Fashion design – Fashion cycles; Business and Merchandizing.

Unit V: Textiles

- Textile design- Principles, Concepts, Elements
- Care and maintenance of textile materials/garments

- General properties and structure of all textile fibers
- Processing and manufacturing of all natural and man-made fibers
- Definition and classification of yarns; Identification of yarns and its use in various fabrics
- Weaves - Types and use
- Fabric construction, definition and types of woven, non-woven, knitted and other construction techniques
- Looms –parts, classification/types and motions
- Testing of fibers, yarns and fabric; quality control and research institutes
- Dyeing, printing and finishing of fibers, yarns and fabrics.
- Traditional textiles of India

Unit VI: Resource Management

- Concept; Approaches, Ethics of management and management process
- Classification of resources and their characteristics
- Management of resources
- Functions of management
- Decision making process
- Work Simplification
- Household income and expenditure
- Consumer education and protection
- Housing; Interior design, Principles of interior design, Colours and Colour schemes
- Household equipment - Selection and care
- Ergonomics- Concept and its importance/application in home

Unit VII: Human Development

- Human Development - Principles and stages
- Theories of Human Development - Personality, learning theories, cognitive development theories and theories of moral development
- Socialization and child rearing practices
- Children with special needs - Definition, classification and need for special education, education and management of children with disabilities, policies and laws
- Early childhood care and education
- Guidance and Counseling - meaning, types, need and use of psychological testing
- Advanced child study methods and assessment

- Women and child welfare programs in India
- National and International agencies for child and women welfare

Unit VII: Non-Formal Education and Extension Education

- History and development of Home Science in Formal / Non-formal and Extension Education
- Difference in Formal/ Non- formal and Extension Education
- Extension education: History, concept, goals, philosophy, principles and methods
- Community development – Organization, principles, characteristics and functions
- Role of Home Scientist in community development
- Self-employment and entrepreneurship through Home Science
- Extension Institutes in India
- Programmes and agencies for rural development

Unit VIII: Communication and developmental communications

- Communication: history, functions, types, scope, uses, elements, methods and barriers.
- Audio- visual aids: Concepts, classifications, characteristics and scope.
- Developmental communication: Concept, models, characteristics, philosophy and role
- Traditional and modern media (Printed and Electronic): Types, characteristics and role in developmental communication
- Scope and use of ICT in developmental communication

Unit IX: Methods of Research

- Research- definition, nature, need and steps
- Research designs and types of research
- Sampling techniques
- Selection and preparation of tools for data collection
- Variables and their selection
- Data collection and classification / coding
- Analysis of data and report writing