

**Tantia University**  
Sri Ganganagar  
Ph.D. Course Work Syllabus  
(Revised as Per UGC Regulation 2022)  
Home Science

**Maximum Marks-120**

**Minimum Marks-66**

**PART-A**

**Part A- 60 Marks**

**Total Credits = 6**

**Total Hours=6x45= 270 Hours**

**Introduction to Research**

Introduction of Research, Research methodology, Defining Research problem and formulation of hypothesis, research design, sampling design, measuring and scaling techniques, methods of data collection.

Pure and Applied Research, Exploring or Formulative Research, Descriptive Research, Diagnostic Research/Study, Evaluation Research/Studies, Action Research, Experimental Research, Historical Research, Surveys, Case Study, Field Studies

Research Ethics: Characteristics and format of research paper, article, thesis writing, review of Related Literature, Purpose of the review, Identification of the related literature. Organizing the related literature.

**Statistics**

Concept of statistics, relevance in research, parametric and non-parametric data; graphical representation of data: histogram, frequency polygon, ogive and pie chart; Measures of Central Tendency, Correlation, t-test chi square test

**Computer Application**

Basic and fundamental knowledge of Computer and its Applications. Introduction, Application Area, Operating System, Windows, Office, Internet.

**PART-B**

**Part B- 60 Marks (Subject based)**

**Total Credits = 6**

**Total Hours=6x45= 270 Hours**

**Unit-I : Food Science**

Food Groups,  
Food Preparation  
Food Preservation  
Food Science and Food Analysis  
Food Processing

## **Unit-II: Nutrition Science**

Fundamentals of nutrition  
Nutritional 'biochemistry  
Food microbiology  
Public nutrition  
Therapeutic nutrition

## **Unit-III : Institutional Management**

Management of Hospitality Institutes-Hospital/Hotel/Restaurant/Café and Outdoor catering  
Management of Social Institutes=-family as Institute, child care and Geriatric institutes, Panchayats '  
Management of Educational Institutes=-Pre-school, Primary and Secondary Schools, (Colleges and Universities) Higher Educational Institutes  
Management of Special Institutes for physically, mentally and socially challenged  
Challenges and problems faced by Institutions'

## **Unit-IV: Clothing**

Principles of clothing-Socio-psychological aspects of clothing, selection of fabrics, clothing and family clothing  
Clothing construction-basic principles of drafting, flat pattern and draping methods  
Textile design-principles and concepts  
Fashion design-fashion cycles, business and merchandizing  
Care and maintenance of textile materials and garments; Laundry agents-methods and equipments

## **Unit-V : Textiles**

General properties and fine structure of all textile fibers  
Processing and manufacture of all natural and man-made fibers  
Definition and classification of yarns; Identification of yarns- and its use in various fabrics  
Fabric construction, definition and types of woven, non-woven, knitted and other construction techniques  
Testing's of fibers, yarns and fabric Importance of quality control and research institutes

## **Unit-VI: Resource Management**

Concept of Home management and steps

Management of Human Resources; Classification of Resources; Basic Characteristics of Resources

Decision making in family; Steps in decision making; Methods of resolving conflicts

Work simplification; Importance of work simplification in home; .Mundel's classes of change; Simple pen and. pencil technique in work simplification'

Housing, Interior design, Principles of Interior design. Various colours and colour schemes

Household equipment-Selection and Care

## **Unit VII- Human Development**

Child Development-Principles and Stages

Life Span Development-> Theories of Human Development and Behaviour

Child rearing, Socialization practices' and Dynamics

Early Childhood Care and Education-Emerging trends

Development problems and disabilities during childhood and adolescence, guidance and counseling

Advanced child study methods and assessment

Women's Studies, Family Welfare Programme-Recent Approaches

## **Unit-VIII: Non-formal Education and Extension Education**

History and Development of Home Science in Formal/Non-formal and Extension Education

Theory and Practices of programme/curriculum planning and development

Management and Administration of Formal/Non-formal and Extension Education

Monitoring, Supervision and Evaluation of Formal, Non-formal and Extension Education

Vocationalization of Home Science in India

Theories and Principles of Guidance and Counseling in Formal/Non-formal/ Extension

Problems and Challenges encountered in Formal/Non-formal/Extension

## **Unit-IX: Developmental and Educational Communication**

Concept and classification of communication

Traditional Methods' and Materials of communication-selection/preparation/use

Modern methods and materials of communication-selection/preparation/use

Strategies for developmental communication

Classroom communications in Home Science trends

Communications for publicity and public relations

Change, and challenges in communication in contemporary society

