## Semester wise Syllabus for B.A. Home Science, University of Lucknow, Lucknow

	В	.A. First	Semester (Ode	d Semes	ter)					
Paper	Paper title	Marks	Internal Assessment mark	Total Mark	Paper consist of 4 unit and 4 credit	Lecture/ Credit (In hours)	Total hours of Teaching/ paper			
Theory Paper-1 Theory Paper	Human Physiology	80	20	100	4	10	40			
Theory Paper-2 Theory Paper	Family Resource Management	80	20	100	4	10	40			
	B.A. Second Semester (Even Semester)									
Theory Paper-3 Multiple Question at OMR sheet	Introduction to Textiles	80	20	100	4	10	40			
Practical				100						
	В	.A. Third	Semester(Od	d Semes	ster)		1			
Theory Paper-4 Theory Paper	Food & Nutrition	80	20	100	4	10	40			
Theory Paper-5 Theory Paper	Human Development I: The Childhood Years	80	20	100	4	10	40			
			Semester(Eve			T	_			
Theory Paper 6 Multiple Question at OMR sheet	Extension for Development	80	20	100	4	10	40			
Practical				100						

B.A. Fifth Semester(Odd Semester)										
Theory Paper-7	Nutrition: A Life Cycle Approach	80	20	100	4	10	40			
Theory Paper-8	Human Development II: Development in Adolescence and Adulthood	80	20	100	4	10	40			
Theory Paper-9	Research Methodology	80	20	100	4	10	40			
			Semester (Eve		· ·	l	T			
Theory Paper-10 Multiple Question at OMR sheet	Apparel Designing & Construction	80	20	100	4	10	40			
Theory Paper-11 Multiple Question at OMR sheet	Housing and Interior Design	80	20	100	4	10	40			
Practical				100	4	10	40			

#### **Semester-I**

## (Paper-I –Human Physiology)

#### Unit-I

- 1. Cell:
  - structure, components and their function.
- 2. Tissue:
  - Types and Functions.
  - Epithelial, Connective, Muscular and Nervous
- 3. Skeletal System-
  - Axial and Appendicular

#### Unit-II

- 4. Cardiovascular System:
  - Blood and its composition
  - Structure and function of heart
  - Heart rate, cardiac cycle
- 5. Respiratory System:
  - General overview of the respiratory passage.
  - Lungs-Structure and functions
  - Mechanism of respiration

#### **Unit-III**

- 6. Excretory System:
- Structure and function of kidney, formation of urine
- 1. Endocrine system:
- Overview of endocrine System
- 2. Gastrointestinal System
  - Structure and functions of various organs of the G.I. tract
  - -Mouth, Pharynx, esophagus, stomach, small intestine, large intestine, Accessory
  - Digestive glands-Location and functions, salivary, liver and pancreas.

- 9. Nervous System:
- Functions of different parts of brain in brief
- Sensory organs- Eye and ear
- 10. Reproductive System
  - Structure and function of Sex glands and organs
  - Menstrual Cycle
  - Physiology of pregnancy, parturition, lactation and menopause

# Semester-I (Paper II– Family Resource Management and Housing)

#### Unit-I

- 1.Introduction to Family:
  - Definition, functions and types
  - Family life cycle
- 2.Introduction to management:
  - a. Basic concept of management
  - b. Purpose of management
  - c. Obstacles to the improvement of management
    - Lack of awareness of management
    - Lack of awareness of resources
    - Failure to evaluate results of management
    - Seeking ready-made answers to problems
    - Lack of information

#### Unit – II

- 3. Determinates of Management:
- a. Goals definition, types and utility
- b. Values importance, sources of Values Classification, characteristics, changing values
- c. Standards definition, classification
- d. Decision making
- 4. Management Process:
  - a. Planning importance, techniques, types of plan
  - b .Controlling the plan in action
    - Phases energizing checking
    - Supervision of delegated plan
  - c. Evaluation
    - Importance, relationship to goals
    - Techniques of self evaluation

#### **Unit -III**

- 5. Resources in the family:
  - Classification, Factors affecting the use of resources
- 6. Money Management:
  - Family income, Expenditure, Budget Process, Savings

#### Unit – IV

- 7. Time Management:
  - Importance, Tools in Time Management, Process.
- 8. Energy management:
  - Importance, Fatigue and Measures to relieve fatigue, Process
- 3. Work simplification:
  - importance, Mundell's classes of change

#### **Semester-II**

## (Paper III – Textile and Clothing)

#### Unit-I

- 1. Textiles Fibers- Classification and Properties (Chemical, Physical and Microscopic)
- 2. Production/Manufacture and importance of following textile fiber-
  - Natural cotton, linen, wool and silk
  - Man made –nylon, rayon, polyester and acrylic

#### **Unit-II**

- 3. Yarn Construction- Mechanical and chemical spininning
  - Types of yarn- simple and complex
  - Yarn twist and count

#### **Unit-III**

- 4. Fabric construction methods
  - felting, braiding, netting, knitting and weaving
  - classification of weaves with special reference to simple weaves

- 5. Fabric finishes:
  - Basic Singeing, beetling, shearing, sizing, tentering, bleaching, calendaring and mercerizing
  - Texturizing embossing, moiring and napping
  - Functional water resistant and repellant, flame retardant, soil and stain resistant, moth proofing finishes
- 6. Dyeing and printing: types of dyes, general theory of dyeing, tie and dye and batik
  - Difference between dyeing and printing, block printing, roller printing, screen printing and stencil printing

## **Semester -II**

## **Practical**

- 1. Study of different systems (minimum 04 parts)
- 2. Measuring blood pressure
- 3. Identification of blood groups
- 4. Budget Planning.
- 5. Decorative dyeing
  - Tie and dye
- 6.Printing
  - Block printing
  - Screen printing
- 7. Utility Article and Preparation of file with samples of different types of embroideries stitches.

#### Semester III

## (Paper-IV – Foods and Nutrition)

#### Unit-I

- 1. Basic concept of Food and Nutrition-
  - Definition of nutrition and health
  - Functions of food-physiological, psychological and social
  - Relationship between food nutrition and health.
- 2. Energy in human nutrition-
  - Energy balance, assessment of energy requirement
  - Factors affecting energy requirements-BMR,PAL,SDA

## Unit-II

- 3. Classification of Nutrients:
  - Macro and Micro Nutrients
- 4. Function and nutritional importance of the following.
  - Carbohydrates, Lipids, Proteins.
  - Fat soluble Vitamins- A,D,E and K
  - Water soluble Vitamins- Vitamin B Complex and Vitamin C.
  - Minerals and trace elements: Calcium, Iron, Zink, Iodine, Sodium & Potassium

#### **Unit-III**

- 5. Classification of food according to source and function
- 6. Nutritional composition of following foods:
  - a. Cereals
  - b. Pulses and legumes
  - c. Fruits and vegetables
  - d. Milk and milk product
  - e. Egg, Meat, fish and poultry

- 7. Importance of cooking food
- 8. Cooking methods and their effect on nutritive value of foods
- 9. Methods of enhancing nutritive value of food germination, fermentation, supplementation and fortification

#### **Semester-III**

## (Paper V – Human Development I: The Childhood years

#### Unit-I

- 1. Introduction to Human Development:
  - Concept, Definition and need to study of Human Development
  - Domains, Stages and contexts of development
  - Principles of Growth and Development
  - Determinants of Development- heredity and environment

#### **Unit-II**

- 2. Prenatal Development, Birth and Neonate:
  - Conception, Pregnancy and Birth
  - Physical appearance and capacities of the new born
  - Factors affecting Pre natal development.

#### **Unit-III**

- 3. Infancy and Preschool Years:
  - Developmental tasks during Infancy and Preschool Stage.
  - Physical and Motor Development.
  - Social and emotional development
  - Cognitive and language development

- 4. Middle Childhood years:
  - Developmental Tasks during middle child hood.
  - Physical and Motor Development
  - Social and emotional development
  - Cognitive and language development

#### **Semester-IV**

## (Paper VI– Extension Education and Communication)

#### Unit-I

- 1. Extension: Basic Concept and Principles
  - Meaning, Definition, objectives, philosophy and history of extension Education
  - Adult learning components of Extension
  - Principles of Extension Education .
  - Meaning, definition ,objectives and importance of Home Science Extension Education

#### Unit – II

- 2. Extension Approaches and Methods:
  - Extension methods and approaches- Classification, characteristics and selection.
- 3. Audio Visual Aids, Teaching Aids in Extension-
  - Concept, Classification, characteristic and importance
- 4. Leadership:
  - Concept, Types, functions and importance of local leadership
  - Diffusion of innovation and adoption

#### Unit – III

- 5. Extension Programme planning
  - Concept, Definition, Principles and Importance of programme planning
  - Programme cycle and its components
- 6. Monitoring and Evaluation
  - Meaning, definition, scope and Tools of evaluation

## Unit - IV

- 7. Communication and Extension development programmes
  - Definition, elements, scope and barriers of communication.
  - Mass media of Communication- Press, Radio, Television, Cinema
- 8. National Development Program in India-
  - Rural Developments efforts of pre independent-Niketan project, Gurgoon Experiment, Firka Development Programme
  - post independent development programmes- Nilokheri Experiment, Etawah pilot project, Indian Village Services(IVS)National Extension Service(N.E.S.)

## Semester-IV Practical

- 1. Weight and measures their equivalents
- 2. Preparing, serving and evaluating food items
  - Beverages, fruits and milk based
  - Cereals, variations in parenthesis, purees, rice pulao, dosa, idli, preparation using noodles, macaroni
  - Pulses- dals, vadas, dhokla, kadis
  - Vegetables koftas, cutlets, baked vegetable dishes and fancy preparations
  - Soups variations in soups
  - Salads and salad dessings
  - Milk paneer, khoya and curd
  - Indian Sweets
  - Curries and kababs
  - Desserts, sandwiches and snacks
  - Baking biscuits, cakes, pie and patties
- 3 .Study of physical, motor, social, emotional, language and cognitive development at different stages and writing report.(Any five practical)
- 4. Preparation and presentation of Audio-Visual Aids: Chart, Poster, Leaflet & pamphlet, Booklet, Flash card

#### Semester-V

## (Paper VII – Nutrition: (A Life Cycle Approach)

#### Unit-I

- 1. Nutritional Requirement and RDA.
- 2. Dietary guidelines for Indians:
  - Concept of reference Indian man and reference women
- **3.** Principles of meal planning:
  - Concept of Balanced Diet
  - Food composition table and Exchange list.

#### **Unit-II**

- 4. Factors affecting meal planning for a family.
- 5. Nutrition during early years-Growth standards, Nutritional guidelines, RDA and healthy food choices for:
  - Infancy
  - Pre school children
  - School going children

## **Unit-III**

- 6. Nutrition during Adult years-Growth standards, Nutritional guidelines, RDA and healthy food choices for:
  - Adolescence
  - Adulthood
  - Pregnancy and Lactation

- 7. Therapeutic Nutrition:
  - Concept of therapeutic diet.
  - Modification in normal diet
  - Normal, soft, liquid and bland diet
- 8. Nutrition in common diseases:
  - Fever, Typhoid and T.B
  - Diarrhea and constipation.
  - Obesity
  - Diabetes
  - Hypertension

#### Semester-V

## (Paper VIII - Human Development II: Development in Adolescence and adulthood

#### **Unit-I**

- 1. Introduction to Adolescence:
  - Developmental tasks during adolescence
  - Significant Physical, physiological and hormonal changes in puberty.
  - Psychological aspects of adolescence
  - Self and Identify
  - Family and peer relationship

#### **Unit-II**

- 2 Cognitive language and Moral Development during Adolescence:
  - Perspective on cognitive development, development of intelligence and creativity
  - Adolescent language
  - Adolescent Morality

#### **Unit-III**

- 3. Introduction to Adulthood:
  - Concept, transition from adolescence to adulthood
  - Developmental tasks of Adulthood
  - Physical and physiological changes from young adulthood to late adulthood

- 4. Socio- emotional aspect of adulthood:
  - Diversity in roles and relationships
  - Marriage-Contemporary trends,.
  - Parenting and grand parenting

#### **Semester-V**

## (Paper IX- Research Methodology)

#### Unit-I

- 1. Social Research:
  - Concept,
  - Scope,
  - Nature
  - Types of research

## Unit – II

- 2. Hypothesis:
  - Concept, types, significance.
- 3.Research Design
  - Concept, Types, significance
- 4. Sampling-
  - Concept, types, significance

## **Unit-III**

- 5. Sources of Data Collection:
  - Primary & Secondary
- 6. Tools of Data collection
  - Interview schedule, Observation, questionnaire
- 7. Methods of data collection

#### Unit – IV

- 8. Fundamentals of Computer:
- History and Generation of computer
- language,
- Components,
- Application of computer.
- 9. MS-Office-
- MS-Word,
- MS Excel
- Power Point

#### **Semester-VI**

## Paper X: Apparel Designing and Construction

#### Unit-1

- 1. Anthropometric Measurement:
  - Concept, importance, techniques.
- 2. Pattern making:
  - Methods of Drafting, draping, flat pattern, techniques, use.
  - Principles of pattern making.
  - Importance of patterns and patterns importation.

#### Unit-2

- 3. Selection of fabrics:
  - Factors affecting the selection of fabric for different garments.
  - Calculating amount of fabric needed for different garments..
- 4. Lay out planning:
  - Definition, types of lay outs,
  - General guide lines for lay out planning for patterns and fabric.

#### Unit-3

## 5. Fitting:

- Good fit, definition, principles and clues for good fit
- Fitting areas, fitting guide lines and procedures.
- 6. Different types of stitches: Construction and decorative.
- 7. Different types of seams and seam finishes.

#### Unit-4

- 8. Fashion and design:
  - Elements and principles of arts in dress designing
  - Designing for different figures types

## 9. Fashion:

- Definition, fashion cycle
- Sources of fashion, factors favoring and retarding fashion

#### **Semester-VI**

## Paper XI: Housing and Interior Design

#### Unit-I

## Family Housing Needs:

- Principles of House Planning-Grouping, orientation, Circulation, Flexibility, Privacy, spaciousness, aesthetics, economy, light and ventilation
- Planning different Residential Spaces.
- Kitchen Planning

#### Unit-II

#### Design Fundamentals:

- Objectives of Art and Interior Design
- Types of Design-Structural and Decorative
- Elements of Art- Line, form, texture, light, colour, pattern, space
- Principles of Design-Balance, harmony, proportion, Emphasis, Rhyth.

#### **Unit-III**

## Colour and Its Application:

- Dimension of colour
- Importance of colour and different colour scheme
- Colour system and theories

#### **Unit-IV**

## Furniture and Furnishing:

- a. Types, Construction, Selection and purchase, Arrangement
- b. Furnishing-Selection, care and maintenance of soft furnishing, types of curtain and draperies, upholstered furniture, cushions

#### Semester-VI

## **Practical**

- 1. Sewing Machine its parts and accessories, common defects and remedial measures
- 2. Sample Preparation- different types of stitches, seams, seam finishes.
- 3. Drafting, stitching and decoration of following any four garments:
  - Petticoat
  - Baby frock
  - Saree blouse
  - Salwar
  - Ladies Kameez
  - Gown
- 4. Preparation of colour wheel and colour schemes.
- 5. Develop questionnaire on various social issues.
- 6. Planning of layout of various types of Kitchen.
- 7. Preperation of Soft and Liquid diet
- 8. Diet Planning for:
  - Pre School children,
  - School going Children
  - Adolescents,
  - Adults
  - Pregnant Women
  - Lactating Mother