

First semester

PAPER - I COMMUNITY NUTRITION & APPLIED LIFE SCIENCES

M.M.50

UNIT-I An Introduction of physiology & Anatomy

- A. Structure & Functions of cell & Tissues
- B. Cardiovascular System
 - * Blood and its composition & Functions
 - * Coagulation of blood
 - * Blood group
 - * Structure and functions of Heart, Blood vessels
 - * Heart rate, Cardiac output blood pressure and its regulation
 - * Circulation of Blood
- C. Musculo skeletal System
 - * Types of muscles, functions
 - * Skeletal System, Structure and types of Bone

UNIT-II Gastrointestinal System

- * Structure and functions of various organs of the GI Tract.
- * Digestion & absorption of food.
- Nervous System
 - * Elementary Anatomy of Nervous System
 - * Functions of different part of the brain and Spinal cord.
 - * Autonomic, Sympathetic & Parasympathetic nervous system.

UNIT-III Excretory System

- * Structure & Functions of Kidney, bladder, formation of urin.
- * Structure & Functions of Skin.
- * Regulation of temperature of the body.
- Respiratory System
 - * Structure of lungs
 - * Mechanism of respiration and its regulations
 - * O₂ and CO₂ transport in blood.
 - * Vital capacity and other volumes.

UNIT-IV Reproductive System

- * Structure and functions of Male & Female reproductive organs.
- * Physiology of pregnancy, parturition, Lactation and menopause.
- * Special sense organs structure & Functions.

UNIT-V Concept and scope of community nutrition

- A. Nutritional problems of the community and implications for public health.
 - * Common problems in India.
 - * Causes (Nutritional and non nutritional)

- * Incidence of nutritional problems, signs and symptoms treatment.
- B. Schemes and programmes to combat nutritional problems in India.
 - * Prophylaxis programmes.
 - * Mid day meal programme.
 - * ICDS
- C. Hazard to Community Health and Nutritional Status.
 - * Adulteration in food.
 - * Pollution of water.

First Semester
PAPER - II
INTRODUCTION TO HUMAN DEVELOPMENT & FAMILY DYNAMICS

Marks : 50

UNIT - I

- A. What is Human Development? Definition of development and human development Why do we need to study it?
- B. Understanding growth and development definition and difference between Growth and Development.
- C. General Principles of Development.
- D. Constraints and Facilitators in growth & Development (Influence of heredity and Environment)

Genetic Inheritance-

- Fertilization
- Number of Chromosomes
- The Unique third pair determines sex
- Genotype and phenotype
- Sex linked genetic effects

Environmental pre Requisites-]

- Nutrition
- Opportunities

Interaction between environment and inheritance-

- Genes provide the pre disposition, range and direction of development
- Environment determines the extent/ limit

The beginning of new life- pre natal development , - Emphasize major developments during the three stages of intra-uterine development .

Pre natal Influences on the child- biological risks, age of mother, physical characteristics, illness, diet and nutrition, stress and emotional strains, environmental hazards.

UNIT-II What is physical and motor development?

Physical Development

- The newborn physical appearance : size, weight bodily proportions, sensory capacities i.e. hearing, vision, taste, smell, touch, temperature and position.

External physical changes - changes in Body size, changes in Body proportion, internal physical changes - changes in muscles, bones and brain as it continues through : infancy end of infancy, preschool & middle childhood

- Linking physical and motor development.
- Motor development : reflexes in infancy; major milestones through end of infancy, preschool years, middle and late childhood,
- Motor coordination and delayed motor development.

- Physical and motor development can be influenced through : (i) Maturation, (ii) nutrition, (iii) monitoring and health care, (iv) stimulation, (v) practice.

UNIT - III THE DEVELOPMENT OF LANGUAGE ACROSS THE LIFE SPAN

Language as a form of communication

- Functions of language : expressing wishes, controlling others, interacting with others, expressing individuality, exploring the world, pretending, using language to communicate/share information, understanding our society and culture.
- Communicating before language development i.e. the stages of vocalization: undifferentiated crying, differentiated crying, babbling, gestures and emotional expression.
- Beginning to use language :Development of comprehension , word usage ,sentence usage oneand correct pronounciations
- Language development can be influenced through : (i) maturation, (ii) stimulation.

Cognitive Development Across the Life Span

a. What is cognitive development ?

- The concept of intelligence.
- A brief introduction to Piaget's theory (introduce stages without much elaboration : sensorimotor stage in infancy concrete operational stage in childhood (changes in remembering the reasoning in middle childhood formal operations in adolescence.
- The concept of intelligence, mental age and intelligence coefficient.

UNIT-IV Socio-emotional Development Across the life Span

a. Understanding social and emotion development

b. Social development :

- Introduce socialization as an important part of the process of becoming human.
- Social milestones : beginning with the emergence of the social smile; attachment, separation, anxiety.
- Patterns and role of parent-child interactions, interactions with siblings and peers; social and cultural interactions through infancy to old age.

c. Emotional development :

- Emotions serve two adaptive functions : (i) motivating and (ii) communication.
- Basic emotional reactions (joy, fear, jealousy, anger, sadness, aggression)
- Components of emotion : (i) emotions are elicited by the context, (ii) include bodily activity, (iii) emotional expressions are made through facial expressions, bodily movements, vocalization, (iv) labelling emotions.

Emotions may be acquired as a result of/by the Influence of - (i) internal and external sources, (ii) cognition, (iii) learning and (iv) social reinforcement.

UNIT-V PERSONALITY DEVELOPMENT ACROSS THE LIFE SPAN

a. What is personality ?

b. Types of personality

c. Components of personality patterns

c. Personality may be influenced by : (a) heredity, (b) environment (parenting styles, peer groups, social interactions, early experiences, life events, support available in a community etc

Marriage

- a. Marriage as an institution : goals, rituals, functions, changes and challenges.
- b. Mate selection : factors influencing, considerations of exogamy and endogamy, changing trends, arranged and personal choice of mates.
- c. Preparation for marriage, social emotional issues, financial concerns and exchanges, guidance and counselling.
- d. Marital adjustment, areas and factors influencing, planned parenthood.

Families with Problems

- a. Families with marital disharmony and disruption, dimension, casual factors.
- b. Families in distress, violence and abuse, dowry victimization, violence against women.

**First Semester
PAPER - III
INTRODUCTION TO TEXTILES & CLOTHING**

Marks : 60

UNIT-I Classification of Textiles :

- a) Introduction and classification of textiles, Terminology in textiles.
- b) History, composition, types, production, properties and uses - Cotton, Linen, Wool, Silk, Rayon, Nylone, Polyamide, Polyester and Acrylic fibres.

UNIT-II Study of Yarns :

Methods of spinning, making of spinning, making of sewing thread, simple, novelty, metallic and textures yarns, stretch, core spun, bi and multi component yarns characteristics. Yarn numbering systems (Cotton count, Denier).

UNIT-III Spinning and Finishes

- a. Fabric Construction, Weave and its types and method of making

Finishes

- a. Mechanical Finish-Singeing, napping brushing, shearing, sizing, shrinking, tendering, calendaring, etc.
- b. Chemical - bleaching, mercerizing, etc.
- c. Special purpose finishes - wrinkle resistant, water resistant and repellent, flame retardant, durable press, soil release and resistant, ant piling, dyeing and printing, etc.

UNIT-IV Equipment

Equipment and supplies used in clothing construction, their maintenance, problems faced, remedies with specific reference to sewing machine.

Selection of Fabrics

Factors influencing selection of fabrics, budget, age, season, occupation, figure, fashion, occasion etc.

Care and storage of fabric

UNIT-V Principles of Clothing Construction :

General Principles of clothing construction. Drafting and making paper patterns.

Taking body measurements for different types of garments. Preparation of fabrics for garment making Laying out of patterns, cutting and marking.

Selection of fabric for garment and Occasional dresses.

B.Sc. (Home Science) Part - I
FOOD SCIENCE & QUALITY CONTROL
PAPER - I
BASIC NUTRITION & FOOD CHEMISTRY
Total Marks-60

UNIT - I

1. Introduction to nutrition - food as a source of nutrients, function of foods, definition of nutrition, nutrients, adequate optimum and good nutrition, malnutrition.
2. Inter-relationship between nutrition and health-visible symptoms of good health.
3. Food guide-Basic five food groups how to use food guide.
4. Use of food in body-digestion, absorption, transport utilization of nutrients in the body.
5. Water- as a nutrients, functions, sources, requirement, water, balance-effect of deficiency.

UNIT - II

1. Carbohydrates - composition, classification, food sources, functions, Digestion, absorption, storage in body.
2. Carbohydrates: reactions, functions of mono, oligo and poly sach chained in food.
3. Other sweetening agents Changes on cooking and processing.
4. Fat and oils composition, saturated, unsaturated fatty acids, classification, food sources, functions of fats., digestion absorption.
5. Lipid : Nomenclature, classification, Physical properties, Emulsion and emulsifiers.

UNIT - III

1. Proteins-composition, sources, essential, non essential amino acids sources of proteins, functions, protein deficiency (very brief).
2. Amino acids, Peptides, Physical and chemical properties of protein.
3. Denaturation.
4. Energy - unit of energy, food as sources of energy, energy value of food. The body's need for energy, B.M.R. activities for utilization of food to fat energy requirement.

UNIT - IV

1. Minerals- Functions, sources, and deficiency of following minerals-calcium, iron, iodine fluorine, sodium, potassium (in very brief)

2. Enzymes: Nomenclature, definite specificity, catalysis regulations enzy kinetics, Factors influencing enzymeactivity.

enzymes inhibitors

UNIT - V

1. Vitamins - classification, unit of measurement, sources, functions and deficiency (very brief) about following vitamins:

a) Fat soluble vitamins- vitamin A., Vitamin D, Vitamin E, Vitamin K.

b)Water soluble vitamins: Ascrobic acid, Thiamin, Riboflavin, Niacin, Other member of B-complex such as Folic acid.

B.Sc. (Home Science (2019-20)

MARKING SCHEMES

THEORY

Serial	Name of the Paper	Theory	Internal Assesmt	Total Marks
1	English Language	60	15	75
2	Fundamental of food & Nutrition	60	15	75
3	Life Span Development	60	15	75
4	Textile & Loudry Science	60	15	75

Practical

Serial	Name of the Practicals	Marks
1	Fundamental of food & Nutrition	50
2	Life Span Development	50
3	Textile & Loudry Science	50

Total Marks-450

BSc Home Science

SEMSTER -II

PAPER-I

FUNDAMENTAL OF FOOD NUTRITION

Marks : 60

UNIT-I 1. Concept of Nutrition - Food; Nutrients, Nutrition- under & over Nutrition, Health & Nutrition

2. Functions of Food

3. **Nutrients : Macro nutrients**

- a. Classification, sources, functions
- b. Recommended Dietary Allowances
- c. Deficiency and excess (in brief)-

Water

Carbohydrates

Fats

Protein

Fiber

UNIT-II Vitamins & Minerals-

Calcium

Iron

Magnesium

Zinc

Fluorine

iodine, Selenium, Copper, Manganese

Fat-soluble vitamins -

Vitamin-A,D,E,K

Water soluble Vitamins -

Thiamine, Riboflavin Niacin

Folic Acid

Pyridoxine, Panthotenic acid, B 12

Vitamin C,

UNIT-III Food Production (in brief), Food Composition Structure nutritional contribution and selection factors for the following:

Cereals and Millets

Pulses

Fruits

Vegetables

Milk and milk products

Nuts and oilseeds

UNIT -IV Food Production (in brief), Food Composition Structure nutritional contribution and selection factors for the following:

Meat, fish and poultry

Eggs

Sugars

Tea, coffee, cocoa, chocolate and other beverages

Condiments and spices

Processed foods

UNIT-V Methods of Cooking, their Advantages and Disadvantages and Effect on Nutritive Value.

Improving Nutritional Quality of Foods-

Germination

Fermentation

Supplementation

Substitution

Fortification and enrichment

PRACTICALS

SECTION-I

- 1- Type of Cells: Microscopic examination of prepared slides.
Epithelium- Stratified Squamous, Ciliated columnar glandular
Connective tissue- Adipose, Bone
areolar connective tissue, muscle- smooth, cardiac, stratified
- 2- Blood
Microscopic Examination of prepared slide
Fresh amount of blood
Stained blood smear
Testing of blood groups using anti sera
Estimation of coagulation time by using filter paper spot method
Hemoglobin estimation using hemocytometer
Estimation of ESR
- 3- Digestion: Identification test
Benedict test for sugar
Barford test for Strach
- 4- Estimation of Blood Pressure by Auscultatory methods

SECTION -II

- A. Use and care of kitchen equipments
- Weights and measures – standard and household measures for raw and cooked foods
 - Use and care of kitchen equipments
 - Soft diet
 - bland diet
 - high and low fiber diet
 - High and low protein diet
 - High and low fat diet
 - High and low carbohydrate diet
 - High and low sodium diet
 - High and low potassium diet
 - High and low calcium diet

Semester-II

PAPER - II

LIFE SPAN DEVELOPMENT, METHODS AND MATERIAL FOR YOUNG CHILDREN

Marks-60

UNIT-I

1. Life Span development and need to study development through the life cycle Inter-relationship between the aspects of development.
2. Prenatal Period - Review of prenatal development.
3. Infancy (0 to 2 years) and childhood period (2 to 12 years) - Definition, Characteristics and Developmental tasks. Review (2-6 yrs to 6-12 yrs) of different developmental areas (Physical, motor, Social, emotional, intellectual sensory and perceptual development) cognition piaget)

UNIT-II Adolescence (13 to 18 years)

1. Definition, Developmental tasks.
2. Physical Development - Puberty, growth, spurts, Primary and Secondary sex characteristics, early and late maturing adolescents.
3. Identity - Definition, body image, positive and negative outcomes (Role confusion, ego-identity)
4. Heightened emotionality - Meaning causes, expression characteristics of emotional maturity, conflict with, authority coping up strategies.
5. Problems- Drug and alcohol abuse, psychological breakdown (Behaviour) STD and AIDS, Pregnancy.

UNIT-III Adulthood (19 to 60 years) and ageing- (Early adulthood 19 to 40 years) Definition and characteristics Development tasks. significance of the period, responsibilities and adjustment - New family, parenthood, independence, financial matters.

1. Middle Adulthood (41 to 60 years), Definition, physical changes (senses, diseases - Transition Period.)
2. Menopause- Health issues.
3. Stresses in middle age, coping with stress to family.
4. Preparation for retirement.

UNIT-IV Late adulthood and Ageing - Definition.

1. Physiological changes, and health problems.
2. Retirement-effect of retirement on self family, society financial problems faced.
3. Recreational interest of the aged.
4. Issues- Old age homes, loneliness, living in joint family, prolonged illness (Plan visit to old age homes)
5. Death- preparation and coping strategies.

UNIT-V Creativity

- * Concept of creativity and highlights of the role of creative expressions in overall development of children.
- * Creative expressions, Meaning and definition of creativity expressions.
- * Role of teacher in planning and fostering creative expressions.
- * Creative expressions through a variety of media i.e. painting. Printings.
- * Painting with brush, drawing with crayons, chalk, rangoli on floor, finger painting. (Some special characteristics of this medium)
- * Tearing, cutting, pasting and collage, mural

Second semester

Practical-II

Section -A

Marks-50

1. Visit to a pediatric ward to observe a new born baby and a premature baby.
2. Preparing a growth average height weight chart of 5 children from 1 to 3 years.
3. Study of immunization schedule.
4. Survey of parents regulative awareness about weaning food, toys; and cloths.

Section-B (Any Ten)

1. Intancy and Toddlerhood

1. A file to be prepared to list activities appropriate for age groups - 0-6 months, 7-12 months, 13 to 20 months and 25 to 36 months.
2. Students be encouraged to observe materials available in the locality, Different type of shops, tailor.
3. Develop play materials suitable for each age group.
4. List activities, which can be used for working with different age groups
 - (a) 0 to 6 months.
5. Prepare materials and design activities for seeing, hearing touching and feeling.
6. Sensation and movement for soothing movements and exercises.
 - (b) 7 to 12 months.
7. Prepare materials and design activities for touching and feeling sensation an movement, and manipulation.
 - (c) 13 to 13 months.
8. Identify activities for gross motor development and prepare play materials available in the locality.
9. Prepare play materials and list activities promote manipulation sensory experiences concepts and language.

Art Activities

10. A few suggestions are given under each category as guideline students be encourage to explore experiment with each media and understand the characteristics of ead medium.
11. Samples of each be included in the resource file which each student is expected to maintain along with description of values materials and technique used.
12. Difficulty level of each activity be considered and decide its suitability for different age group.
 - * Painting and graphics.
 - * Prepare a variety of brushes from different types of brooms, cotton, wool, stich of cloth, feather etc.

Tearing cutting and pasting

13. 3-5 years

Tearing with all fingers tearing with thumb and two fingers as used in holding pen tearing on straight line, curved line.

14. 6-8 years

Tearing circular rings starting from one corner of the page till centre of page, Making designs.

15. 3-5 cutting and pasting

Cutting a design, pasting, piece of paper, cloth, stick leaves collage most Printing.

Printing

16. Printing with strings, leaf, vegetable blocks, stencil printing, thumb, finger, spt. painting.

17. Keeping coins, leaves with veins below paper and gently colouring with crayon.

Second Semester
PAPER - III
TEXTILE & LAUNDRY SCIENCE

M.M.60

UNIT-I Introduction,

Classification and Introduction to Laundry process

- (i) Wet and
- (ii) Dry cleaning

Materials and equipment in laundry

Water - Hard & Soft water

Temporary and permanent hardness. Problems caused by hard water Methods of softening water.

Soaps and Detergents - Definition, Chemical nature, manufacture, properties and their cleaning action.

UNIT-II Bleach-Classification commercial Products, application of bleaches to various fibre fabrics.

Additives used in laundry

Optical brightness blueing agent vs. fluorescent whiteness

Starches, Stiffening's and Softeners

Various types and their characteristics, method of application.

Additional laundry Agent

Acidic, alkaline and others,

Principles of Laundering- Equipment

Laundering of different cloths.

UNIT-III Dry Cleaning

Technology - agents - classification

Stain Removal

Classification of stains, Principles of removal. Types of stain removals.

Techniques of removal,

Preservation and storage

Apparel & household linen.

Disinfection of cloths

UNIT-IV A brief study of different types of dyes and their applicability to different fibres.

Difference between dyeing and printing, methods of dyeing.

Factors affecting dyeing. Style of dyeing - Direct, resist and discharge styles involving varying dyed effects Fiber, yarn and fabric dyeing.

UNIT-V Principles of design, element of design for garment.

Principles of colour schemes in garment.

Selection of cloths for the different uses in home.

UNIT - V

1. Vitamins - classification, unit of measurement, sources, functions and deficiency (very brief) about following vitamins:

a) Fat soluble vitamins- vitamin A., Vitamin D, Vitamin E, Vitamin K.

b) Water soluble vitamins: Ascorbic acid, Thiamin, Riboflavin, Niacin, Other member of B-complex such as Folic acid.

PRACTICAL'S (ANY EIGHT)

PRACTICALS

1. Identificaztion of Textile Fibres
Visul, Mlcroscopic, burning and chemical
2. Identification of Yarn types
3. Identification of weaves and their variations
4. Sample collection for weaves and finishes and Identification
5. Simple dyeing of different fabric.
6. Tie and Dye techniques
7. Batik
8. Printing - Block, screen, tie & die, stencil printing.
9. Stain Removal
10. Garment Construction
Drafting, cutting and stiching of simple garments, such as vest and bib. A-Line Dress and knickers.

**BSc (Home Science)
SEMESTER III**

MARKING SCHEME

Sr No	Name of the Paper	Theory	Internal Assessment	Total
1	English Language	60	15	75
2	Food Preservation	60	15	75
3	Family Resource Management	60	15	75
4	Community Development Perspectives & Approaches -socio economic analysis of Communities	60	15	75

TOTAL MARKS=300

SEMESTER-III

Paper-I

FOOD PRESERVATION

Marks-60

UNIT-I

Food and its preservation, Home and community level including commercial operations. Principles of food Preservation

Causes of spoilage of food.

UNIT-II

Fresh Food Storage, Principles - Plant product., Storage, animal product, Storage, Effect of Storage . Condition on quality, Canning - Principles and methodology influence of canning on food quality. Storage Of canned foods.

UNIT-III

Pasteurization

Effect on food quality, Storage of pasteurized food.

Drying & Dehydration

Methods used and effect on food quality. Types of driers. Storage and deterioration of dehydrated food products.

UNIT - IV

Use of low temperature

Refrigeration and freezing methods, principles and applications. Preparation of foods for freezing , influence on food components and structure. Self life of frozen foods,

Pickling and Fermentation

Pickles, chutneys, ketchups sauces. Fermentation - Types, products and method use \ Establishment of a small scale industry / cottage industry.

UNIT-V

Chemical Preservatives

Preparation of Fruit, Juices, Squashes, Fruit Syrups, Cordials, Jam Jelly. High Acid & High Sugar Products - common defects, Preservation of crystallized and glazed fruits. Nutritional implications of food processing Causes for loss of vitamins and minerals. Enrichment, Restoration and Fortification.

SEMESTER-III

Paper-II

FAMILY RESOURCE MANAGEMENT

Marks -60

UNIT-I Introduction to Management

Basic concepts of Management

Purpose of Management

Achievement of Goals

Obstacles to the Improvement of Management

- a. Life style
- b. Type of family
- c. Family size, stage of family life cycle.

UNIT-II Factors Motivating Management

- a. Goals, definition, types and utility
- b. Values - Importance, sources of values, classification, characteristics, changing values.
- c. Standards - Definition, classification-quantitative, qualitative, conventional and non-conventional.
- d. Decision - Role of decision making in management, resource availability.

UNIT-III Management Process

- a. Meaning and elements of process - planning, controlling the plan and evaluating decision making.
- b. Planning Importance, techniques, types of plan.
 - i) Controlling the plan in action
 - ii) Phases energizing checking
 - Factors in success of the control step
 - Suitability
 - Promptness
 - New decisions
 - Flexibility
 - iii) Supervisions of delegated plan
 - Types of supervision - direction and guidance Analysis of supervision.
 - Analysis of supervision.
 - iv) Evaluation - Importance, relationship to goals
 - Types -Informal and formal, overall and detailed.
 - Techniques of self-evaluation
 - Evaluation of the whole process of management.

Resources in the Family

- a. Types of resources

b. Factors affecting the use of resources

UNIT-IV Introduction to Elements of design

- Design - Definition and types- structural and decorative
- Elements of design- Line, Size, Form, structure, space, pattern, shape, light -characteristics and classification, colours- classification, dimensions, colour scheme and effect.
- Principles of design- balance, harmony, scale, proportion, rhythm, and emphasis.
- Furniture
- Flower arrangement- Principles, Types and uses

UNIT-V Family resources-

- Meaning , Classification and characteristics
- Time Management- Process and means
- Energy Management- Process and energy values of different house hold works
- Work Simplification- Meaning, methods and techniques of habit improvements , Pathway chart, Process chart .

SEMESTER-III
PAPER - III
COMMUNITY DEVELOPMENT PERSPECTIVE AND APPROACHES SOCIO
ECONOMIC ANALYSIS OF COMMUNITIES

Marks : 60

UNIT-I DEVELOPMENT :

- a. Definitions, types - large scale and centrally planned and small scale and locally planned.
- b. Goals, the purpose of development - processes of development - the input process and social action process.

Historical Perspective of Development Approaches:

- a. The Capitalistic approach.
- b. The welfare approach
- c. The Gandhian approach
- d. The modernization approach
- e. The institutional and social justice approach

Critical Development Issues :

- a. Massive poverty
- b. Food security

Community Development in India:

- a. Evolution of community development programme in India since Independence.

UNIT-II SUPPORT STRUCTURES AND THEIR FUNCTIONS :

- a. Central Social Welfare Board
- b. State Social Welfare Board
- c. National Level Voluntary Agencies such as CAPART, KVIC.
- d. Elected Panchayats.

Community Development Programme Approaches :

- a. Multi-purpose
- b. Target group
- c. Growth centred
- d. Area
- e. Minimum needs
- f. Antyodaya
- g. Integrated

Home Science and Community Development :

Scope of Home Science Extension for meaningful participation in community development in India.

UNIT-III INTRODUCTION TO SOCIAL STRUCTURES AND SYSTEMS-FRAMEWORK FOR ANALYSIS-

- a. Meaning and Systems of Organization
- b. Relationship between Social Systems
- c. Types of Society - Harmonic - Disharmonic

Analysis of Family as a Social Unit -

Type(s), average size (Micro/Macro), marriage, distinct social roles and nature of relationships' between members of the family; internal distinction in authority based on age and sex roles, gender differences with reference to activities and access to resources. Emerging patterns of familial organization influenced by broader economics and political forces - female headed households.

Analysis of Social Relations of Groups Social Stratification- Caste System (Micro/Macro)- Deferential ranking of groups as superior and inferior caste groups changes that have taken place/expected abolition of untouchability, intercaste colobration, fusion of sub caste , impact of reservation ,Social inequalities, extent of acceptance or opposition

UNIT-IV POVERTY ANALYSIS (MICRO/MACRO)

The number and proportion of poor (in general and with reference to gender in particular) prevalence of hunger and malnutrition, availability and accessibility to drinking water and sanitation facilities, health facilities, clothing and housing facilities, education facilities. Unemployment pattern and indebtedness; causes of poverty and inequalities; programs for poverty alleviation. Poverty line.

Social Relations in Religion and Culture (Micro/Macro)

- a. Religions represented - the role of religion in the lives of people.
- b. Popular expression of beliefs and attitudes that promote fatalism or confidence in themselves.
- c. Religious and cultural customs and organizational patterns that oppose the values of social justice, equality, liberty and solidarity.

UNIT-V Analysis of Social Relation to Environment (Micro/Macro).

- a. Customs mores, rules, regulations that are eco-friendly and that are not eco-friendly.
- b. Changing patterns of production and consumption-organic farming, soil and water conservation measures, recycling of wastes, use of bio-degradable articles etc., impact of these in the communities.

Gender Analysis -

- a. The concept of Gender as distinct from sex.
- b. The division of labour.
- c. Access and control of resource.
- d. Changes in the means of gaining access to resources.

Approaches and Methods of Socio-Economic Analysis-

- a. Rapid Rural Appraisal
- b. Participatory Rural Appraisal
- c. Surveys, case studies, observation
- d. Participant observations

BSc (Home Science)
SEMESTER IV
MARKING SCHEME

Sr No	Name of the Paper	Theory	Internal Assessment	Total
1	Hindi Language	60	15	75
2	Extension Education	60	15	75
3	Foundation of Art & Design	60	15	75
4	Personal Empowerment & Computer Basics	60	15	75

Practical

Sr No	Name of Practical	Marks
1	Extension Education	50
2	Foundation of Art & Design	50
3	Personal Empowerment & Computer Basics	50

Total Marks =450

SEMESTER-IV

PAPER-I

EXTENSION EDUCATION

M.M. 60

UNIT - I

1. Concept of Education
 - (a) Meaning of Extension
 - (b) Origin of Extension
2. Extension Education Process
 - (a) Environment for learning
 - (b) Role of educator
 - (c) Role of the people participants.
3. . Communication Process

UNIT-II

4. Concept of adult / non formal education
 - (a) Meaning
 - (b) Purpose
5. Five Year Plans
 - (a) History of planning in India.
 - (b) Five year plans and their focus.
6. Planning at different levels - National to Grass roots.

UNIT-III

7. Programmes to enhance food production
 - (a) national food production programmes.
8. Poverty alleviation efforts
 - (a) Programmes for poverty alleviation for rural and urban arenas.
 - (b) Current programmes for rural and urban poor.

UNIT-IV

9. Programmes for women and children
Women as target groups - specific measures for women and children such as DWCRA, ICDS, IMY. Current programmes for women as initiated and implemented by the different ministries and Departments.
10. Role of NGOs Need for participation of Non-Governmental organizations in developmental efforts. Encouragement given NGO's - Role of CAPART.

UNIT-V

Advertising Media

11. Different media for advertising - print media, Newspapers and periodicals,
12. Broadcast media - Television - Films.
13. Non- media advertising
14. Outdoor advertisement— Hoardings, Posters, Billboards, Bulletin Boards, Electronic signs, Letter bins, Aerial methods.
15. Transportation media {Mobile Vehicles}
16. Exhibition and Trade fair.

SEMESTER-IV
PAPER - II
FOUNDATION OF ART AND DESIGN

M.M. 60

UNIT-I

Introduction to foundation of art

1. Design, Definition and types : Structural and Decorative
2. Elements of design:-
 1. Line 2. Size 3. Form 4. Structure 5. Space
 6. Pattern 7. Shape 8. Light - Characteristics and Classification
 9. Study of Colour - classification, dimensions, colour schemes and effect.
3. Principles of design - definition and their characteristics and types :-
 1. Balance 2. Harmony 3. Scale 4. Proportion
 5. Rhythm 6. Emphasis

UNIT-II

1. Indian, regional, traditional and contemporary arts and their use in :-
 1. Floor decoration 2. Home decoration
 3. Accessories 2. Appreciation of art
 1. In terms of principles of art and design
 2. In terms of composition and aesthetic appeal.

UNIT-III

1. Family's Housing Needs
 1. Protective, economic, affection, social, standard of living, housing goals, style, function occupation.
 2. Factors influencing selection and purchase of site for house building
 1. Legal aspects, location, physical feature, soil conditions, cost, services.
 3. House planning -
 1. Reading house plans.
 2. Grouping of rooms, orientation, circulation, flexibility, Privacy spaciousness, services, aesthetics, economy, light and ventilation.
 3. Planning different rooms : living room, dining room, bedrooms, kitchen, store room, toilet, passage, staircase.
 4. Landscape planning - Principles and application.

UNIT-IV

Financial Considerations :

1. Availability of funds for housing
2. Housing Development finance corporation
3. Cooperative Housing Society
4. Life Insurance corporation
5. Cooperative Banks
6. Loan from provident fund
7. Finance corporation of India

8. Disability of owning versus renting
2. State and central Housing scheme ‘
1. Housing problems, causes and remedial measures.

UNIT-V

1. Furniture :-
 1. Styles of furniture - traditional contemporary and modern.
 2. Selection of furniture for comfort, rest and relaxation for work_T,
for storage
 3. Arrangement of furniture. for living. Sleeping, dining and multipurpose rooms.
 4. Upholstered furniture materials, techniques and designs.
2. Furnishing fabrics
 1. Types of curtains, draperies, floor coverings rugs and carpets,
cushion covers.
 2. Selection and use
 1. Accessories and their role in interiors

SEMESTER-IV

PAPER-III

PERSONAL EMPOWERMENT & C COMPUTER BASICS.

UNIT-I Personal Growth and Personality Development

(through exercises, role play, discussions)

- a. The challenge : understanding and managing oneself : being aware of one's strengths and weaknesses.
- b. Personality Development : Factors and influences : emotional and motivational aspects; assertion Vs. aggression.
- c. Peer pressures : Issues and management; group conformity and individualism as co-existing aspects.
- d. Conflicts and stresses, simple coping strategies.
- e. Adjustment and readjustment to changing needs and conditions of contemporary society (technological changes, social changes, changes in values).

UNIT-II Empowerment of Women

- a. Women and Development : The personal, familial, societal and national perspectives.
- b. Capacity building for women : Education, decision-making abilities and opportunities, awareness and information on legal and political issues.
- c. Women's organizations and collective strength : Women's action groups women's participation in development initiatives.

Note : Students must be sensitized and made aware through assignments to identify and study the contributions of women in their own regional areas as also in the context on national perspectives. Cases of individual and collective/organized women's strengths must be discussed with examples from local/regional/levels. Each student may prepare profiles of one individual and one collective group.

UNIT-III Home Science Education as Empowerment

1. The interdisciplinary of Home Science Education.
2. the role of Home Science Education for personal growth and professional development.
3. Home Science as holistic education with integration of goals for persons enhancement and community development.

UNIT-IV Some Significant Contemporary Issues of Concern.

- a. Gender issues : Inequities and discriminations, bases and stereotypes; myths and facts.
- b. Substance abuse : Why and how to say no.
- c. Healthy Habits : In relation to physique, to studies to heterosexual interests.
- d. AIDS : Awareness and education.

Note: Teachers/facilitators must be knowledgeable and equip themselves sufficiently, orientations/training sessions for facilitator....

UNIT-V Computer Fundamentals:

- a. Overview about computers
- b. Components of a computer
- c. Input/output devices

- d. Secondary storage devices
- e. Number Systems : Decimal, Binary, Octal, Hexadecimal
- f. Representation of information : BCD, EBCDIC, ASCII
- g. Representation of Data : Files, Records, Files
- h. File organization and access

d. Study and discussion of life histories, case studies of illustrious Indian women from different walks of life (eg. Indira Gandhi, Jhansi ki Rani, Medha Patkar, Kiran Bedi, Vijayalaxmi Pandit, Sudha Chandran, Anutai Wagh, Ila Bhai Bhanvari Devi).

Brief sketches/ profiles of women's organization and collective and activis efforts to improve the quality of the or tackle issues of concern (e.g. SEWA Women's co-operatives, WIT).

- i. Security and safety of data
- j. Introduction to Operating Systems

SEMESTER-IV

PRACTICAL-I

BASIC NUTRITION AND EXTENSION EDUCATION

MARKS-50

SECTION A

PRACTICALS : (Any Six)

1. Preparation of Jam, Jellies marmalades.
2. Preparation of Pickles & chutneys. •
3. Dehydration of Vegetables & Fruits.
4. Preparation of synthetic syrups & squashes.
5. Preparation of Sauces.
6. Preparation of Papad, Badi, Chips.
7. Survey of market products.
8. Packaging.

SECTION B

PRACTICALS:

1. Visits to Radio / T.V. stations.
2. Script writing for Radio.
3. Visit to Extension Education Unit.
4. Write slogan about Adult Education.
5. Designing an Advertisement for any product with relevant slogan at least Two.

SEMESTER-IV

PRACTICAL -II

Marks-50

FOUNDATION OF ART & DESIGN

PRACTICALS : (Any Ten)

1. Freehand drawing : Memory drawing and sketching.
2. Scale drawing, solid geometry, orthographic.
3. Preparation of colour wheel and colour schemes.
4. Elements of design laws of field size, proportion, types of shadows.
5. Residential space planning - scale, lines, abbreviations, metric projections, defining space by shades, shadows
6. Lettering.
7. Use of colour for wall/floor decoration and making accessories.
8. Application of design principles in flower arrangement, styles of flower arrangement, innovation of new styles.
9. Gift wrapping and preparing decorative articles of fiber, fabric, coir, bamboo, clay, metal etc.
10. Drawing house plans with standard specification.
11. Furniture layout of living, dining. Kitchen and bedroom designs presentation with furniture layout, sectional elevation, views.
12. Development of designs and construction of any five of the under mentioned items -cushions, curtains, carpets, doormats, rugs, table mates.
13. Wall paintings, picture frame design.
14. Graphic designs

SEMESTER IV
PRACTICAL III
COMMUNITY DEVELOPMENT & COMPUTER BASICS

MARKS -50

PART A

Field Experience in Village(s) / Urban Slums

- a. Practical use of RRA/PRA Methods.
- b. Reporting on Socio-economic analysis of the rural/urban community.
- c. To select, Plan, preparation & use of different-audio visual aids., aids, i.e.
Chart - Educational, Tree Chart, Flow.
Chart.- Suspense Chart.
Posters- Cartoons Pamphlets Puppets.
- d. Conduct of survey based on Unit IV & V of Theory Papers. (any two)
- e. Organizing group demonstration.

SECTION B

SECTION B

1.
 - a. Introduction
 - b. Exploring the Desktop
 - c. running multiple programmes
 - d. Accessories
 - e. Control Panel
 - f. Managing Documents and Folders
2. **MS Word**
 - a. Starting MS-WORD
 - b. Creating and Formatting a document
 - c. Changing Fonts and font Size
 - d. Table Creation and operations
 - e. Autocorrect, Auto Text, Spell Check, Thesaurus
 - f. Word Art, Inserting objects
 - g. mail merge, letter, label, envelope
 - h. Page set-up, Page preview
 - i. Printing a document.
3. **MS-Excel**
 - a. Starting Excel
 - b. Work Sheet, Cell, Inserting Data into Rows/Columns
 - c. Alignment, Text-wrapping
 - d. Sorting data, Auto sum
 - e. Use of functions, referencing formula cells in other formulae
 - f. Naming cells and ranges, Goal seek
 - g. Generating graphs
 - h. Integrating Worksheet data and charts with WORD

- i. Creating Hyperlink to a WORD document
 - j. Page set-up, Print Preview, Printing Worksheet.
- 4. Internet**
- a. Genesis and use of Internet
 - b. Software and hardware requirements for Internet
 - c. Accessing the Internet, Web Page, Using a Search Engine, Accessing the Internet from MS-Office applications

BSc (Home Science)
SEMESTER V
MARKING SCHEME

Sr No	Name of the Paper	Theory	Internal Assessment	Total
1	Hindi Language	60	15	75
2	Nutritional Biochemistry	60	15	75
3	ECCE	60	15	75
4	Consumer Economics	60	15	75

SEMESTER V
PAPER-I
NUTRITIONAL BIOCHEMISTRY

M.M. 60

UNIT-I.

(A) Introduction to Biochemistry - definition, objectives, scope, and interrelationship between Biochemistry and other biological sciences.

(B) Carbohydrates - Definition, classifications functions and properties of Monosaccharides - Glucose, Fructose, Galactose Disaccharides- Maltose, Lactose, Sucrose Polysaccharides Dextrin, Starch, Glycogen Glycolysis, Gluconeogenesis, Glycogenesis, Glycogenolysis, citric and cycle. Blood sugar regulation.

UNIT-II

(A) Lipids - Definition, composition, importance and classification Fatty acids - Functions, properties Significance of Acid value, Iodine value and saponification value. Chemistry and function of Phospholipids, Glycolipids and sterols. Metabolism - B (Beta) Oxidation.

(B) Aspects of transport - Passive diffusion, Facilitated diffusion, Active transport.

UNIT-III

(A) Proteins - Definition composition function, and classification.

Amino acids- Essential and Nonessential. Metabolism - Urea cycle, Nitrogen balance, Amino acid pool.

(B) Enzymes- Definition, properties, classification, Mode of action of enzymes, factors affecting velocity of enzyme catalyzed reactions, coenzymes.

UNIT-IV

(A) Hormones • Biological roles of hormones of Pituitary, Adrenal cortex and medulla, Thyroid, Parathyroid, Pancreas, Sex glands.

(B) Urine - Formation and Composition.

UNIT-V

(A) Energy - Definition, Unit, calorimeter, caloric value of foods, BMR, RQ, SDA of Foods.

(B) Nucleic Acid and Nucleo-proteins - Chemistry, composition, structure, functions.

SEMESTER-V

PAPER-II

MARKS-60

EARLY CHILDHOOD CARE & EDUCATION

UNIT-I Significance and objectives if Early Childhood care & education-

- Significance if early childhood years in individual's development
- Meaning and need for intervention programme for better growth and development
- Objectives of ECCE
- Different types of programmes currently offered, objectives of the programmes routine and target group covered by each of the following-
ECE Programme- Balwadi, Aanganvadi, Nursery school, Kinder Graden, Montessori School, Laboratory nursery school
ECCE Programme-ICDS **and Mobile crutch**, Day Care Centre

UNIT-II Current status and expansion and scope of ECE to ECCE-

- Expansion from ECE TO ECCE
- Current / status of ECCE Programme
- Objectives- staff qualifications, teacher- children ratio, Indoor and Out door Play space, Play facilities, Equipments, curriculum and evaluation
- Admission tests and effects on children
- Needs for ECCE Programmes to provide quality acre where mothers are at work

UNIT-III Meaning of curriculum, foundation of curriculum development -

- Impact of play as meanings of development and learning
- Teacher's role in creating environment and promoting play
- Classical theories of play- surplus energy theory, relaxation theory, pre- exercise and recapitulation theory

Programme Planning-

- Approaches to learning- incidental and planned learning
- Principles of programme planning - from known to unknown, simple to complex, concrete to abstract
- Factors influencing programme planning
- Balance between individual and group activity, indoor and out door play, guided and free activities quite and active plays.

UNIT- IV Language -

- Goals of language teaching
- Readiness for ready and writing, meaning of readiness
- Factors to be considered for readiness- age , vision, caring, physical, emotional , social ,experimental background, finger- motor coordination, eye-hand coordination, reading from left to right and top to bottom

Mathematics-

- Importance of number and mathematics
- Number as a language and history of its development
- Abstract nature of number

- Mathematical readiness
- Decimal system
- Number line position and relevance of zero
- Subtraction, multiplication and division
- Two and three dimensional shapes- properties , characteristics

UNIT V Project Method-

- Introduction
- Meaning and advantages of using project method
- Planning
- Resource unit

Alternative to home work-

- Disadvantages of learning by role
- Suitable alternatives such as observations, experimentation and reporting orally, picture etc
- Something related to the concepts covered in class

Evaluation-

- Need for evaluation
- Formatting evaluation
- Method of evaluation- Observations
- Evaluation of daily work, tools for evaluation
- Reporting to parents

SEMESTER V
PAPER-III
CONSUMER ECONOMICS

M.M.60

UNIT-I Consumption Economics.

- (1) Meaning and definition
- (2) Family as a decision making unit of house hold
- (3) Consumer - definition

Measures of living and consumption

- (1) Place of living
- (2) Level of living
- (3) Standard of living
- (4) Plan of consumption
- (5) Level of consumption
- (6) Standard of consumption
- (7) Price/Price level/cost of living

UNIT-II Consumer income

- (1) Types of income - real, money, psychic, national income, disposable income Market.
- (1) Definition
- (2) Type of market Segmentation and characteristics
- (3) Functions
- (4) Channels of distribution

UNIT-III Consumer in the market

- (1) Consumer buying habits - Convenience goods
- (2) Buying motives - Primary selective, rational emotional

Types of Products

Advertisement, Sales, Promotion packing

Consumer Buying Problems

- (1) Adulteration
- (2) Faculty weights and measures
- (3) Pricing
- (4) Legal - guarantee and warrantee contracts, installment buying

UNIT-IV Consumer protection services

- (1) Organizations
- (2) Legislation - import laws for consumer protection
- (3) Consumer representation

Consumer and consumers problems

- (1) Definition of consumers
- (2) Choice and buying problems of consumers

Consumer Protection Law

- (1) Definition of laws, Types of laws importance of law
- (1) Consumer Decision making
- (2) Factors effecting consumer decisions in the market
- (3) Good buy mans hip
- (4) Consumer aides for decision making Consumer rights and responsibilities

UNIT-V Consumer Awareness Programmes-

- (1) Indian Standard Institution
- (2) Educational Institution
- (3) Consumer Co-operatives
- (4) Government Agencies Municipality
- (5) Consumer organizations – origin, functioning, role and types.
- (6) Consumer cooperatives – role, history and growth in India, PDS Kendriya Bhandars.
- (7) Basic legislative framework for consumer protection in India, Consumer Protection

**BSc (Home Science)
SEMESTER VI**

MARKING SCHEME

Sr No	Name of the Paper	Theory	Internal Assessment	Total
1	Skill Course	60	15	25
2	Nutritional Management in Health & Diseases	60	15	75
3	Apparel Making & Fashion Designing	60	15	75
4	Communication Process in Development	60	15	75

Practical

Sr No	Name of Practical	Marks
1	Nutritional Management in Health & Diseases	50
2	Apparel Making & Fashion Designing	50
3	Communication Process in Development	50

Total Marks =450

SEMESTER VI

PAPER-I

NUTRITIONAL MANAGEMENT IN HEALTH AND DISEASES

Marks : 60

Unit- I: Definition of Health & Nutrition-

Dimensions of health (Physical, Psychological, Emotional)

Energy Requirements-Factors affecting energy requirements-

BMR, Activity, Age, Climate, Diet- Induced Thermo genesis (SDA) , Physiological conditions

Concept of Nutritionally adequate diet & meal Planning-

- Importance of Meal Planning

Factors affecting meal planning- Nutritional, Socio-cultural, religious, geographic, economic, availability of time

Unit II: Nutrition through the life cycle-

(At different activity and socio economic levels), Nutritional requirements, nutritional problems, food selections-

- Pregnancy
- Lactation
- Infancy
- Pre-school
- Adolescents
- Adulthood
- Old age

Unit- III Principles of diet therapy

- Principles of diet therapy- Modifications of normal diet for therapeutic purposes, Full diet, Soft Diet, Fluid Diet, Bland Diet
- energy modification and nutrition for weight management
- Identifying for over weight and obesological factors contributing to obesity.
- Prevention and treatment, low energy diets
- Underweight- Etiology and assessment , high energy diet
- Diet for febrile condition and surgical conditions
- Nutritional anemia's
- Diet of infections – Typhoid

Unit IV: Etiology, Symptoms and diet management of the following-

- (a) Diarrhoea
- (b) Constipation
- (c) Peptic ulcer
- (d) Jaundice
- (e) Viral Hepatitis
- (f) Cirrhosis
- (g) Arthritis
- (h) Gout

Unit V: Diet in Diseases of the endocrine-

Pancreas- Diabetes Mellitus, Classification, symptoms, diagnosis , Dietary counseling and nutritional management. Metabolism in Diabetes, management of Diabetes Mellitus, Insulin therapy, oral

hypoglycemic agents, special dietetic foods, sweeteners and sugar substitutes. Diabetic coma, Juvenile diabetes.

- Diseases of the cardio-vascular system-Atherosclerosis- etiology and risk factors, hypertension- etiology and prevalence, nutritional management and prevention.
- Renal Diseases- etiology and characteristics –symptoms and dietary management of Glomerulonephritis- Acute and Chronic.

SEMESTER VI

PAPER-II

MARKS-60

APPAREL MAKING & FASHION DESIGNING

UNIT-I

Introduction Importance of Clothing, Sociological & psychological aspects of clothing Fabrics to be considered while selecting of fabric for different garment-Estimation of material required for different garments (cloth estimation) Study of fabric finishes - Meaning, objective facilities, General & special.

UNIT-II

Experiments & principles of design : Meaning methods of creating importance Elements of principles of design as applied, to apparel designing - Harmony, balance proportion, Rhythm & emphasis.

Element :- Lines, shapes / forms. Colour consideration: Definition, Dimensions, characteristics colour systems & colour schemes. Classification & Process of designing –

-Structural
-Decorative Realistic

-Abstract

-Stylized

-Geometric

-Traditional

-Big & small design

UNIT-III

Fashion - Definition, Fashion trends in India & changes , Theories, Body measurements , Tailoring tools & Equipments , Methods of taking, body measurements , For different garments , Importance, Pattern making techniques, Flat pattern , Drafting, Drapping ‘

UNIT-IV

Fashion Illustrations: - Disposals of fullness

- 1.. Plackets - One piece , two piece, seam invertible , Continuous
- 2: Neck lines
3. Collie's
4. Sleeve details
5. Factories
6. Frill & gather!
7. Pleats & Tucks , ‘
8. Darts
9. Patch work
10. Seams & seam finishes

UNIT-V

Fundamentals of Embroidery:-

Techniques, design colour, uses of different combination - threads;

Embroidery stick - Types, Types of thread, needle, used for different fabrics., Study of traditional Embroideries of India. Kasida of Kashmiri, Kantha of Bengal, Chichenkari of Lucknow, Kutch & kathiawan, Kasuti of Karnataka, Phulkari of Punjab . , Gold & Silver (Zari work) . Appliqué work .

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**SEMESTER VI
PAPER-III**

COMMUNICATION PROCESS IN DEVELOPMENT

MARKS-60

UNIT-I Concept of development communication (3)

- * Meaning and importance of communication in development
- * The purpose of communication
- * Existing patterns of communication
- * Factors that help or hinder communication

UNIT-II Communication Process (3)

- * One-way and two-way or interactive communication
- * Gaps in communication or distortions in transmission of message and their causes.

- * Importance of two way communication
- * Basis for effective, interactive communication.
- * Attitude of respect for others

UNIT-III Methods of communication in Development Methods to reach individuals (10)

- * Personal conference
- * Interviews
- * House visits
- * Exhibits
- * Methods to reach small groups
- * Illustrated lecture
- * Group discussions
 - Fish Bowl
 - Small group
- * Co-operation

UNIT-IV

- * Role Plays
- * Demonstrations
- * Workshop
- * Camps
- * Radio announcements/ programmes
- * Newspaper stories
- * Posters
- * Videos, films
- * Television programmes
- * Letters, folders of pamphlets
- * Public meetings

UNIT-V Media for development communication

- * Folk media

- * Songs
- * Stories
- * Street-theatre
- * Games
- * Arts
- * Puppet play
- * Print Media
- * Posters
- * Pamphlets, leaflets
- * Newspapers - articles, stories
- * Periodicals - articles, stories, songs
- * Books
- * Cartoons
- * Audio/Visuals, Audo-Visual Media
- * Audio-tapes, radio broadcasts
- * Slides, pictures, drawings, photographs etc.
- * Videos, telecasts
- * Films-documentary, feature

SEMESTER VI
PRACTICAL I

MARKS-50

BIOCHEMISTRY AND DIET THERAPY

PART A

PRACTICALS (Any Six)

1. Identification of Glucose, Fructose, Maltose, Lactose, Sucrose, Starch.
2. Colour and precipitation reactions of Protein.
3. Colour reactions of cholesterol
4. Estimation of Glucose by Benedict's method.
5. Estimation of Ascorbic acid by iodometric method.
6. Estimation of Glycine by Titration.
7. Estimation of Haemoglobin by acid Haematin method.
8. Preparation of Haemin crystals.
9. Action of Salivary amylase on conversion of starch.

PART B-

- Use and care of kitchen equipments
- Weights and measures – standard and household measures for raw and cooked foods
- Soft, bland high and low fiber diet
- High and low protein diet High and low fat diet

- High and low carbohydrate diet
- High and low sodium diet
- High and low potassium diet
- High and low calcium diet

Planning & Preparation of Normal and Therapeutic diet in relation to special nutrient requirements

1. Geriatric Person
2. Pregnancy
3. Lactation
4. Constipation
5. Diarrhoea
6. Obesity
7. Under weight
8. Peptic Ulcer
9. Jaundice
10. Viral Hepatitis
11. Cirrhosis
12. Acute glomerulo nephritis
13. Chronic glomerulo nephritis
14. Diabetes mellitus
 - (i) With Insulin
 - (ii) Without Insulin
15. Hypertension
16. Atherosclerosis

SEMESTER VI

PRACTICAL II

MARKS-50

PART A

PRACTICAL

PRACTICALS : (any four)

1. Plan three activities for children : list objectives, analyst tasks to achieve goals, select and organize instructional and .learning materials, teacher's role, preparation of evaluation sheets i.e. chick list, rating scale.
2. Prewriting activities.
- 3.(a) Mathematics
(b) Readiness
(c) Materials for classifying, comparing, serrations, patterning, counting shapes, fractions, list vocabulary related to mathematical concepts.
(d) Material for addition, subtraction, multiplication and divisions. ,
(e) Graphs.
(f) Experiences for understanding time distance weight, capacity and money.
4. Plan science experiences.
5. Plan a project based on lessons of first and second standard, plan activities which children can do at home.

PART B

PRACTICALS :-TECHNIQUES (any seven)

1. Preparation of paper pattern for all age groups
(A) Creeping age
(B) Preschools
(C) For Children wear
(D) For men's wear
(E) For Ladies wear
2. Adoption of the basic block to various clothes & their stitching Saree - blouses; Satwar; Chudidar Kameez; Petticoats; Frock; Night Dress.
3. Making samples of traditional embroideries of India (any five),
(i) Kashida of Kashmir
(ii) Kantha of Bengal,
(iii) Kasuti of Karnataka
(iv) Kutch Kathiawar
(v) 'Phulkari of Punjab
(vi) Chikankari of Lacknow
(vii) Gold & Silver (Zari work)

4. Free hand sketching of simple objects involving various shapes & forms.
5. Drawing designs for various textile articles by adopting principles of design.
6. Drawing & colouring a colour wheel.
7. Painting designs with different colour schemes.
8. Reducing & enlarging a design.
9. Creating various textures.

SEMESTER VI
PRACTICAL -III

MARKS-50

PART- A

PRACTICALS

- (1) Selection of Relevant Topics
- (2) Written matter (typed 20 pages, double space, A-4 size paper).
- (3) Oral Presentation of 20 minutes, by the student.
- (4) Audio Visual aids to be used in presentation.
- (5) Q.A. session of 10 minutes.
- (6) File presentation by the student.
- (7) List of reference/Source to be written in the report.

PART B

PRACTICALS (ANY SIX)

1. Organizing group discussion.
2. Organizing group demonstration.
3. Preparation & Presentation of Audio visual aids, i.e. Posters, Charts, Cartoons, Models Puppets.
4. Problem/need identification of a community.
5. Planning an educational programme.
6. Evaluation of the effectiveness of methods and media.
7. Visit to Radio Station/T.V. Centre/Printing Press.
8. Preparation of Drama based on Social Development.

