## MODIFIED SYLLABUS

**B.SC. (HOME SCIENCE)**

**FIRST, SECOND, THIRD, FOURTH, FIFTH & SIXTH SEMESTERS**

<table>
<thead>
<tr>
<th>Sr. No.</th>
<th>Proposed</th>
<th>Marks</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>Theory</td>
<td>Practical</td>
</tr>
<tr>
<td><strong>FIRST SEMESTER</strong></td>
<td></td>
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</tr>
<tr>
<td>I</td>
<td>Applied Mathematics</td>
<td>60</td>
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<td>II</td>
<td>Chemistry I</td>
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<td>III</td>
<td>General English I</td>
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<td>IV</td>
<td>Environmental Studies</td>
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<td>V</td>
<td>Horticulture and Gardening</td>
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<td><strong>SECOND SEMESTER</strong></td>
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<td>VI</td>
<td>Computer Application</td>
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<td>VII</td>
<td>Chemistry II</td>
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<td>VIII</td>
<td>Elementary Physiology</td>
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<td>IX</td>
<td>Psychology</td>
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<td>X</td>
<td>Biochemistry</td>
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<td><strong>THIRD SEMESTER</strong></td>
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<tr>
<td>XI</td>
<td>Human Development-I (HDFS-I)</td>
<td>60</td>
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<tr>
<td>XII</td>
<td>Fundamental of Nutrition and Food Science (FN-I)</td>
<td>60</td>
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<tr>
<td>XIII</td>
<td>Textile Science and Analysis (TAD-I)</td>
<td>60</td>
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<tr>
<td>XIV</td>
<td>Family Finance and Consumer Education (FRM I)</td>
<td>60</td>
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<td>XV</td>
<td>Extension Education and Community Development (ECM-I)</td>
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<td><strong>FOURTH SEMESTER</strong></td>
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<td>XVI</td>
<td>Early Childhood Education (HDFS-I)</td>
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<td>Course Description</td>
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<td>Nutrition for the Family (FN II)</td>
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<td>XVIII</td>
<td>Wet Processing of Textiles (TAD-II)</td>
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<td>XIX</td>
<td>Concepts and Principles of Home Management (FRM-II)</td>
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<td>XX</td>
<td>Teaching Methods and Media (ECM-II)</td>
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**FIFTH SEMESTER**

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<td>Human Development-II (HDFS-II)</td>
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<td>XXII</td>
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<td>Textile Design and Garment Construction (TAD-III)</td>
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<td>Family Housing (FRM-III)</td>
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<td>Programme Planning for Family Development (ECM-III)</td>
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**SIXTH SEMESTER**

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<td>Marriage and Family Dynamics</td>
<td>60</td>
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<td>XXVII</td>
<td>Community Nutrition (FN-IV)</td>
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<tr>
<td>XXVIII</td>
<td>Textile Design and Apparel Construction (TAD-IV)</td>
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<tr>
<td>XXIX</td>
<td>Interior Designing and Home Decoration (FRM-IV)</td>
<td>60</td>
<td>40</td>
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<td>XXX</td>
<td>Communication Process and Adoption (ECM-IV)</td>
<td>60</td>
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**Total** 3000
B.Sc. (Home Science)

First Semester
Unit I. Number System

(a) Natural numbers, Whole numbers, Integers (positive, negative, zero)
    Rational numbers, Irrational numbers, Prime, Odd, Even numbers,
    Composite numbers.
(b) Test of Divisibility
(c) LCM, HCF, Application of numbers (Square root, Cube root)
(d) Simplification of expressions (BODMAS).

Unit II. General Arithmetic

(a) Simple and compound interest
(b) Unitary method, work, time and speed
(c) Percentage: Conversion of percentage into least fraction, conversion of
    simple fraction into percentage. Simple problems based on percentage.
(d) Profit Loss and Discount: Concept of Cost price, Selling price, Profit, Loss,
    Discount, Net price and Marked Price etc. Simple Problems based on it.

Unit III. Algebra

(a) Fundamental operation – Addition, Subtraction of like and unlike term.
    Multiplication and division of polynomials.
(b) Factorization: Concept of Factors, Grouping Method, Factoring
    Polynomials by Common Factors, Factoring Quadratics-Difference of
    Square, Perfect Square.
(c) Concept and solution of simple equation, problems based on simple equation.

**Unit IV. Simultaneous Equations**

Concept and solution of simultaneous equations, problems based on simultaneous equations.

**Unit V. Menstruation**

(1) Area of Triangle, Square, Rectangle, Parallelograms and Circle.

(2) Perimeter of polygons.

(3) Volume of Cubes, Cuboids and spheres

**STATISTICS**

Processing of data, Diagrammatic and Graphic representation of data, Average (Mean)
B.Sc. (Home Science) First Semester
CHEMISTRY I
PAPER-II

Theory: 60 Marks
Practical: 40 Marks

Unit – I
(a) Introduction:- Definition, Branches of Chemistry and scope of Chemistry with General Information of the chemical industries.
(b) Matter:- States of Matter, Physical and Chemical changes of matter, Element, compound, Mixture, Symbol and Chemical Equation.

Unit –II

Unit III
(a) Ionization:- Arrhenius theory of Ionization, Idea of pH and buffer solution.
(b) Elementary idea of Oxidation and Reduction.
(c) Water:- Hard and Soft water, Hardness and their removal.
Unit - IV

(a) Catalysis, types of Catalysis, characteristics, theory of catalysis and its application.
(b) Elementary idea of Colloidal Solutions- Method of preparation, properties and application, Emulsions and Gels.

Unit – V

Radioactivity:- Definition study of $\alpha$, $\beta$ and $\gamma$ rays, Artificial radioactivity, Concept of Isotopes, Isobars, Isotones.

Practical:

1. Salt analysis:- Detection of one acid and one basic radical.
2. Acid and Base titration :- Oxalic acid and Sodium hydroxide.

Reference books:

1. Physical and Inorganic chemistry of Bountra and Khanna.
2. Physical and Inorganic chemistry of Bochlas and Gupta.
B.Sc. (Home Science) First Semester

GENERERAL ENGLISH

PAPER-III

Theory: 60
Sessional: 40

1. VOCABULARY BUILDING
   Word- Formation; synonyms, Antonyms, Homophones, Idiomatic Phrases

2. PREPOSITIONS
   Model verbs, Conditional sentence

3. TRANSFORMATION AND SYNTHESIS

4. PRECISE WRITING
   5. EASSAY WRITING ( 5 topics to be discussed)

6. LETTER OF APPLICATION FOR JOB AND RESUME

PRACTICAL

1. Based on Lectures
2. LANGUAGE WORK: the prescribed lessons having a bearing on the topics
   covered in lectures.
3. Identification of phonetic sounds and symbols
4. Stress and Intonation
5. Listening Comprehension
6. Speaking English

REFERENCES:

B.Sc. (Home Science) First Semester
ENVIRONMENTAL STUDIES
PAPER-IV

Theory: 60 marks
Sessional: 40 marks

UNIT I
The Multidisciplinary Nature of Environmental Studies: Definition, scope & its importance, Need for public awareness. Natural resources: Natural resources and associated problems.

UNIT II

UNIT III
Environmental Pollution: Definition, Causes, effects and control measures of: a) Air Pollution b) Water Pollution c) Soil Pollution d) Marine Pollution e) Noise Pollution f) Thermal Pollution g) Nuclear Hazards

UNIT IV
Solid Waste Management: Causes, effects and control measures of urban and industrial wastes. Role of an individual in prevention of pollution. Pollution case studies Disaster Management: Floods, Earthquake, Cyclone and Landslides

UNIT V
Ecosystem: Concept of an ecosystem, Structure and function of an ecosystem, Producers, consumers and decomposers, Energy flow in the ecosystem, Ecological succession, Food chains, food webs and ecological pyramids. Introduction, types, characteristic features, structure and function of the ecosystems

Field Work
1. Visit to a local area to document environmental assets—river / forest / grassland / hill / mountain.
2. Visit to a local polluted site–Urban / Rural / Industrial / Agricultural. Study of different ecosystems.

3. Study of simple ecosystems–pond, river, hill slopes, etc.

References

5. Hawkins, R. E., Encyclopaedia of Indian Natural History, Bombay Natural History Society.
B.Sc. (Home Science) First Semester  
HORTICULTURE AND GARDENING  
PAPER - V

Theory: 60 marks  
Practical: 40 marks

**Unit-I**  
Gardening, Layout of a Garden, Soil preparation –digging, tillage and sterilisation. Drainage watering and weeding  Manures and fertilizes

**UNIT-II**  
Propagation of plants, Seed propagation, Vegetative propagation by natural and artificial methods (Bulbs Rhizomes Suckers Runners Tubers Budding and grafting)

**UNIT-III**  
Kitchen Garden  Principle of planning and cultivation of vegetables with reference to all seasonal vegetables.

**UNIT-IV**  
Lawn, Hedges and edges, Principle of planning of lawn and hedges. Brief description of care and cultivation of ornamental plants  Care and cultivation of seasonal flowers  Care and cultivations of common indoor plants.

**UNIT-V**  
Plan deceases bacterial, fungal and viral. General characteristics, morphology and economic importance of algae, fungi and moulds

**Practical**

i) Study of garden tools and accessories.

ii) Identification of different types of plants i.e. vegetable flowers, ferns and ornamental plants.

iii) Preparation of nursery.

iv) Prepare and manuring a seed bed for raising seedlings. 
v) Prepare a bed for sowing potatoes and cultivate them.
vi) To prepare a plot for raising seedlings, ornamental/Indore pot plants.

vii) From seeds guiding rules for seed sowing.

viii) Vegetative propagation by cutting and grafting.

ix) Maintenance of plants.

x) Use of pesticides and fungicides

xi) Identification of slides of algae fungi and moulds.

xii) Prepare a plot and cultivate seasonal vegetable

xiii) Plant propagation

xiv) Prepare pot for repotting

**Project:** Prepare Herbarium file, Collection of specimen of ornamental plants flowers

**REFERENCE BOOK:**

1. Gemmell Alam, Basic Gardening, Penguin books publication

2. Aruna Lundra, Four Seasons Gardening in India, Low Price Publications

3. Roman Kapoor, Home Gardening, UBS Publisher's Distributors
B.Sc. (Home Science)

Second Semester
B.Sc. (Home Science) Second Semester
COMPUTER APPLICATION
Paper VI

Theory: 60 Marks
Practical: 40 Marks

UNIT 1: WINDOWS OPERATING SYSTEM

Introduction, what is windows, windows XP, using mouse, windows features-basics concepts, working on desktop, opening and closing an Application, manipulating windows, saving your work, printing your work, start up, shut down and sleep.

My computer- opening your drive.

windows explorer- starting windows explorer, navigating drives and folders, science window, selecting files/folders, creating a folder, opening IXComp folder, creating file, opening file global warming, coping files or folders, moving files or folders, changing the name of a file or folder, deleting files or folders, searching files or folders, switching between tasks, Windows keyboard shortcuts.

UNIT II WINDOWS ACCESSORIES:
Introduction, notepad, word pad, ms-point, character map, clip board, calculator.

UNIT III WORD PROCESSING BASICS:
Introduction, types of word processors, starting openoffice.org writer- writer interface, creating a new documents, saving a documents, closing an openoffice.org writer documents, exiting openoffice.org, viewing writer window.

Text editing- selecting text, selecting using click-and-drag method, selecting using double click and triple click method, selecting a block area, selection using select all menu option, keyboard commands for selecting text, inserting text, insert Vs. overtype mode, deleting text, undo and repeat. using cut copy and paste- cut and paste text, copy and paste text, using drag and drop. Text formation- about font
style, changing the font, typeface and size, using the formatting toolbar, changing
text color, changing the font effects, using superscripts, subscripts and rotation,
adding background color.

PARAGRAPH FORMATTING:
Paragraph alignment, indenting text, indenting with the ruler, defining paragraph
spacing, tabs using ruler, using the ruler to change margin setting, setting tab using
menu, using format paint brush, using drop caps. Using grammar and spell check-
using spellcheck. Preview a page before printing- printing writer document.

UNIT IV MANAGING WRITER DOCUMENT:
Introduction, find and replace text, show/hide nonprinting characters. Page setup-
adjusting page margins, using mirror margin, set the size and orientation of page,
choosing your paper source. Header and footer- creating header, creating footer,
header and footer using page setup, deleting header and footer. Footnotes and
dendotes. Adding border and shadow. Numbering Pages, Page number in
Header/Footer. Inserting Special Characters. Bullets and Numbering, Creating,
removing and changing Bulleted list, Creating, removing and Changing Numbered
list. Working With Columns, Defining the number of columns on a page, Changing
the number of columns for existing text.

UNIT V TABLES AND GRAPHICS IN WRITER:
Introduction, Creating table-Inserting new table, entering text in an open office.
Org table, Modifying table structure, changing column and cell widths, Adjusting
the width of table cells, Adding borders and shading, using math in cell, Merging
and Splitting cells, Table auto format, Convert text to table and table to text,
Deleting a table. Inserting and sizing graphics, adding images to a document,
Inserting An image from a file, Moving Graphics on the page, Proportionately
resizing the graphic using the sizing handles, Text wrapping, Disproportionately
resizing the graphic using the sizing handles, Inserting a border around a graphic,
Drawing Tools, Creating drawing objects, Inserting Fontwork gallery.
B.Sc. (Home Science) Second Semester
CHEMISTRY
PAPER-VII

Theory: 60
Practical: 40

Unit – I
a. Fuel and fuel gases: Definition, characteristics of a good fuel, Types of fuels and their application, Composition of L.P.G., Kerosine, Diesel Oil, Petrol, Bio Gas, Octane number and Cetane number.

b. Prevention of fire, Types of fire extinguishers, Uses.

Unit -II
General introduction of IUPAC and Nomenclature of simple organic compounds.

Unit – III
Elementary Study of Drugs:- Definition, Classification,
General application and their mode of actions of Antibodies, Antiseptics, Analgesic, Sulpha drugs, Insecticides, disinfectants.

Unit – IV
Carbohydrates: Definition, classification, preparation, properties and uses of Glucose and Sucrose (No. structure and Isomerism)

Unit – V
a. Amino acids: Preparation, properties and uses.

b. Protein: Definition, Classification, preparation, properties and uses, simple tests of protein.
Practical:
1. Salt analysis :- Detection of two acids and Basic radicals
2. Redox titration:- Oxalic acid KMnO₄
3. Element detection

Reference Books:
1. Inorganic Chemistry by S.R. Gupta
2. Organic Chemistry by Dr. S.K. Wadhwa
3. Applied Chemistry by Thankamma Jacob.
4. Org. Chemistry By Dr. R.N. Singh
5. Org. Synthetic products by O.P. Agarwal
B.Sc. (Home Science) II Semester
Elementary Physiology
Paper VIII

Unit-I
Cell structure, components and their function. Elementary anatomy of various systems. Cardiovascular System, Blood and its composition, Blood groups, Coagulation of blood, Structure and function of heart, Heart rate, Cardiac output, Blood pressure and its regulation

Unit-II- Elementary knowledge of the Following:
Gastrointestinal System, Structure and functions of various organs of the G.I. tract, Digestion and absorption of food and role of enzymes and hormones. Reproductive System, Structure and function of Sex glands and organs including hormones, Menstrual Cycle, Physiology of pregnancy, parturition, lactation and menopause.

Unit-III

UNIT IV
Excretory System, Structure and function of kidney, bladder, formation of urine, role of kidney in homeostasis, Structure and function of skin, Regulation of body temperature

Unit V
Nervous System, Functions of different parts of brain in brief, Nerve cell and impulse transmission, Sense organs and their functions.

Practical
Demonstrations and study of models of

i) digestive,
ii) excretory
iii) female reproductive system
iv) Human heart, eye and ear.

v) Microscopic examination of prepared slides of different human body system as well as tissue of different body organs.

Reference Books

1. Text book of Biology for 10+2 students (NCERT)
B.Sc. (Home Science) Second Semester
PSYCHOLOGY
PAPER-IX

Unit I – Introduction
(a) Definition of Psychology. Psychology as a science its scope.
(b) Branches of Psychology
   i. Social
   ii. Clinical
   iii. Educational
   iv. Abnormal
(c) Importance and application of psychology in Home Science.

Unit II- Methods of studying Human Behavior
(a) Introspection ------- (i) Merit (ii) demerit.
(b) Observation ------- (i) Steps (ii) Merit (iii) Demerit
(c) Experimental ------- (i) Steps (ii) Merit (iii) Demerit
(d) Case Study
(e) Interview
(f) Sociometry in brief
(g) Questionnaire

Unit III- Personality, Motivation, Frustration and conflicts:-
(a) Concept of personality, definition, measurement of personality.
(b) Definition and types of motivation (i) innate and acquired, needs, incentive
   and instincts.
(c) Meaning of frustration, source of frustration.
(d) Types of conflicts, methods of resolving conflicts.

Unit IV - Learning, Memory and Forgetting, Individual differences.

2. Memory and forgetting
   a. Meaning, Kinds, methods, process of memory.
   b. Characteristics of good memory.
   c. Forgetting causes of forgetting.
3. Individual differences
   a. Meaning and types of individual difference
   b. Causes of individual difference.

Unit V: Intelligence, Attention and interest.

(a) Definition of intelligence, factors affecting intelligence measuring intelligence.
(b) Definition characteristic, types, conditions of attention.
(c) Definition of interest, forms of interest, differences between attention and interest.

Sessional work

1. Administration of personality test on an adolescent.
2. Administration of frustration test and adolescent.
3. Exposure to two psychology tests (i) questionnaires (ii) Rating scale
4. Administration of an interest inventory and adolescent
References

UNIT-I
1. Introduction to biochemistry and interrelationship between biochemistry and other biological sciences.
2. Carbohydrates-
   • Introduction, classification, structure, general properties of monosaccharide.
   • Digestion and absorption of carbohydrates in human body
3. Metabolism- Glycolysis and Kreb’s Cycle
4. Mutarotation

UNIT-II
1. Lipids-
   • Composition, classification, general properties.
   • Analysis of fats and oil- acid value, iodine value, saponification value, acetyl number, hydrogenation and rancidity, Digestion and absorption of lipids in human body.
2. Lipid metabolism
   • Beta oxidation theory with its energetic
   • Elementary knowledge of different sterols e.g. cholesterol, phytosterol and ergosterol

UNIT-III
1. Proteins-
   • Definition, composition, classification, general properties- solubility, amphoteric nature, colloidal nature of proteins, denaturation of protein
• Classification of amino acids including essential amino acid and non essential amino acids
2. Digestion and absorption of proteins
3. **Protein metabolism** - Brief idea of Deamination, Transamination, Decarboxylation, Transmethylation

**UNIT-IV**

1. **Vitamins** - definition, classification absorption, storage, functions and excretion of vitamin A, D, E, K, Thiamine, Riboflavin, Niacin, Ascorbic Acid
2. **Minerals** - brief idea of calcium, phosphorous, iron, iodine, sodium, chlorine, potassium, their storage, absorption, function, and excretion

**UNIT-V**

1. **Enzymes** - definition, classification, general properties of enzyme, enzyme inhibition, factors affecting the role of enzyme reaction. Clinical importance of enzymes
2. **Hormones** - elementary study of TSH, ACTH, Gonadotrophic Hormones and Growth Hormone their biological function and mode of action. A general idea of Sex Hormones

**Practical –2 interactive periods per week**

1. Simple test for glucose, fructose, galactose, sucrose, maltose, and lactose.
2. Simple test for protein- milk, egg. (Biuret test, Millions test, Xanthoproteic test).
4. Separation of water soluble and insoluble protein from wheat and soybeans flour.
5. Test for starch-
   - Iodine test for starch solution.
   - Preparation of stained slide of potato starch grain.
   - Microscopically examination.


7. Simple test for sterol.

8. Ether extraction of fatty acid substances.


10. Qualitative test of food adulterations-
   - Metanil yellow in turmeric / dal, vanaspati in pure ghee.
   - Starch in milk
   - Adulteration in red chilli, black pepper

Reference books-

1. General biochemistry by Frutton and Simmond.
5. Biochemistry by Kleiner and Orten.
6. Hawk’s Physiological Chemistry by Oser.
10. Essentials of Biochemistry by Dr. M.C. Pant.
13. Nutrition and diet therapy- Sheel Sharma, Pee,pee, publishers, New Delhi-2013
B.Sc. (Home Science)

Third Semester
B.Sc. (Home Science) III Semester  
HUMAN DEVELOPMENT – I  
PAPER XI

Unit–1 Meaning, determinants and principles of Human Development
(a) Meaning and scope of human development, Contribution of allied fields and their importance, Stages of human development
(b) Principles of growth and development
(c) Determinants of Development
   (i) Heredity Vs Environment
   (ii) Maturation Vs Learning

Unit II – Prenatal development and Care of the neonate
(a) Menstrual cycle, fertilization
(b) Stages of Prenatal development, factors affecting prenatal development
(c) Antenatal Care
   (i) Signs and Symptoms of Pregnancy
   (ii) Discomforts of pregnancy
   (iii) Prenatal diagnostic tests
   (iv) Calculation of expected Date of delivery (EDD)
   (v) Labor and its stages
   (vi) Types of birth
   (vii) Concept of IUGR (Intra Uterine Growth Retardation) SFD (Small for Date babies) and premature babies.
   (viii) Physical and psychological preparation for the neonate
(ix) Care of the mother

(d) (i) Care of the newborn  (ii) Puerperium period
  (iii) Immunization

Unit III – Infancy (0 – 2 yrs)
  (a) Development tasks and characteristics
  (b) (i) Physical and motor development
       (ii) Sensory and perceptual development
       (iii) Cognitive development
       (iv) Early language development

Unit IV – Early Childhood Period (2 - 6 yrs)
  (a) Development Tasks and characteristics of early childhood period
  (b) (i) Physical and motor development
       (ii) Social emotional development
       (iii) Cognitive development
       (iv) Language development

Unit V - Childhood Period (7 – 11 Yrs)
  (a) Developmental tasks and characteristics of middle childhood period
  (b) (i) Physical and motor development
       (ii) Social emotional development
       (iii) Cognitive development
       (iv) Language development
       (v) Personality development and Interest development
  (c) School and its influences
Sessional

1. Visit to maternity and well baby clinics.
2. Preparation of teaching aids
3. Preparation of a toy for infants.
4. Planning and organization of competitive games for middle childhood.

References

   Elkind D, 1978, Development of the child, John Wily and Sons.
UNIT- I - Basic concepts in Food and Nutrition

1. Basic terms used in the study of Food and Nutrition.
2. Understanding relationship between food, nutrition and health
3. Functions of food – physiological, psychological and social.

UNIT –II- Nutrients

Functions, dietary source and Recommended Dietary allowances (RDA)

1. Carbohydrates, lipids, and proteins.
2. Fat soluble vitamins- A, D, E and K
3. Water soluble vitamins – thiamine, riboflavin, niacin, pyridoxine, folate, vitamin B12, and vitamin C.
4. Minerals- calcium, iron and iodine

UNIT –III- Food Groups

Selection, nutritional contribution and changes during cooking of the following food groups:-

1. Cereals
2. Pulses
3. Fruits and vegetables
4. Milk and milk product
5. Eggs
6. Meat, poultry and fish
7. Fats and oils

UNIT –IV Methods of Cooking and preventing nutrient losses

1. Dry, moist, frying and microwave cooking
2. Advantages, disadvantages and the effect of various method of cooking on nutrients
3. Minimizing nutrient losses
UNIT- V Nutritional Improvement of Foods

Nutrient losses in cooking and enhancing the nutritional quality of foods.

Food Preservation

References:


Internal:

1. Working instructions. Weights and measures and table setting, preparing market order.
2. Identification of food sources for various nutrient
3. Food preparation, understanding the principles involved, nutritional quality and portion size
   - Beverages: Hot tea/coffee, milk shakes/lassi, fruit based beverages
   - Cereals: boiled rice, pulao, chapati, paratha, puri, pastas.
   - Pluses: Whole, dehusked
   - Vegetables: curries, dry preparations
   - Milk and milk products: Kheer, custard
   - Meat, fish and poultry preparations
   - Egg preparations: Boiled, poached, fried, scrambled, omelet, egg pudding
   - Soups: Broth, plain and cream soups
   - Baked Products: Biscuits, cookies, cream cakes, sponge cake preparations, tarts and pies.
   - Snacks: pakoras, cutlets, samosa, upma, poha, sandwiches
   - Salad: Salads and salad dressings
   - Preserved Foods
COURSE CONTENT : THEORY

UNIT I:
(i) Introduction to textiles (ii) Its importance in day to day life (iii) Its scope (iv) Classification of textile fibers (v) General Properties of textile fibers – primary and secondary properties.

UNIT II:
(a) Raw material, Properties and Uses of -
   (i) Cellulosic fiber - Cotton
   (ii) Protein fibers - wool and silk
   (iii) Regenerated fiber – Viscose Rayon
   (iv) Synthetic fibers – Polyester, Acrylic and Nylon

(b) Sources and uses of minor fibers-
   (i) Cellulosic – Sisal, Pina, Coir, Kapok, Jute and Ramie
   (ii) Protein – Mohair, Cashmere, Camel hair, Alpaca, Llama, Vicuna

UNIT III:
(a) Definition of yarn
(b) Yarn properties and their effect on fabric performance
(c) Types of spinning - (i) Mechanical (Ring and Rotor) Spinning
   (ii) Chemical Spinning
(d) Types of Yarn – (i) Simple Yarns (ii) Novelty Yarns (iii) Textured Yarns

UNIT IV:
(a) Preliminary knowledge of various techniques of fabric construction – weaving, knitting (warp and weft), non –woven (felting, braiding, multicomponent fabrics-bonded).
(b) Study of Hand loom – parts and their uses, basic steps of weaving.
(c) Types of weaves – basic and decorative

UNIT V:
(a) Variety of fabrics available in the market and their characteristic features.
(b) Fabric faults /defects as related to stages of manufacture and their classification.
(c) Selection of fabrics for various end-uses keeping in mind: purpose, serviceability, maintenance, durability, economy, storage and appearance.
(d) Selection of clothes keeping in view: age, sex, personality, figure, occupation, occasion and season.
(e) Appropriate labels on fabrics and garments.
(f) Storage of various clothing.

REFERENCES
1. Textiles by Hollen and Saddler.
2. Textiles – Fiber to fabric by Peter Corbman.
3. Corbmen P Bernard: Textiles fiber to fabric
4. Hess KP: Textiles, fibres and their uses
5. Gupta & Bajaj: Rui se Nylon tak
6. Charu Arora: Introduction to Clothing and Textiles

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Sessional:
1. Identification of pure fabrics by – visual, burning, microscopic and chemical tests.
2. Yarn Analysis - twist direction, ply, staple/filament, yarn structure.
3. Laboratory tests on fabrics – Fabric count and balance of cloth.
4. Collection and study of 15 samples of yarns.
5. Collection and study of different weaves-basic and decorative.

7. Collection of various types of fabric samples based on application (Apparel for various age groups and occasions, Upholstery and Furnishings, household use-towels, blanket, bed sheets) and their analysis.

8. Collection of 5 different fabrics labels.

9. Collection of 5 different garment labels.
B.Sc. (Home Science) III Semester
Family Finance and Consumer Education (FRM I)
PAPER XIV

Theory: 60 Marks
Sessional: 40 Marks

Unit – I: Family Finance
(a) Meaning, Definition and importance of family finance.
(b) Standard of Living: Meaning, Definition, types and factor determining.
(c) Causes of low standard of living and remedial measures.

Unit – II: Family Income
(a) Meaning, definition and sources of income.
(b) Types of Income: Money income, Real income, Psychic income and their importance.

Unit – III: Budget & Saving
(a) Budget – Meaning, Definition, Types, Characteristics, Advantages and Disadvantages.
(b) Saving – Meaning, Importance and methods to save.

Unit – IV: Consumer Education
(a) Meaning, Definition, Objectives and need of consumer education in India.
(b) Meaning, Definition and characteristics of consumer.
(c) Consumer rights and responsibilities in today’s world.

Unit – V: Consumer and the Market
(a) Basic concept of market and types of market.
(b) Consumer choice: Factors influencing consumer decisions.
(c) Problems of consumer.

Sessional Work
a. Study on income and expenditure pattern of various income groups.
b. Visit to Saving Institutes.
c. Problems of consumer- small survey report.
Reference Books

a. Family Finance: H.F. Bigelow
b. Elements of Modern Economics: Meyere
c. Fundamentals of Economics: J.K. Mehta
d. Modern Economics: M.L. Seth.
e. The Economics of Consumption: L.J. Garelen.
f. Management in Family living: Nickell and Dorsey
g. Management for Modern Families: Gross and Crandall
h. Paribaric Vitt: Saraswati Verma and Asha Pandey.
i. Home management and family finance: Dr. Maneesha Shukul and Prof. Veena Gandotra
j. Consumer Economics: Dr. Saxena And Saxena
k. Premovthy seetharman and Mohini Seth - Consumerism strategies and practices.
l. Satya Sundaram - "Consumer protection in india."
m. Journals of Consumer education.

n. Veena gonaotra & ami divatia - "Consumer education."
I. Extension Education:
1. Meaning, philosophy, objectives, functions, elements and scope of Extension Education.
2. Difference between Formal education and non-formal education.
4. Role of Home Science Extension Education in National development.
5. Role and qualities of Extension Personnel.

II. Historical Perspective:
1. Extension activities in India-pre-independence and post-independence (NES)

III. Community Development and Panchayati Raj:
1. Community-Meaning, characteristics and types.
3. Community development Programme- origin, principles, Organizational setup and functions of the programme at various levels.
Institutions for Community Development in India: School; Panchayat-Panchayati Raj System – origin, 73rd Amendment Act; Cooperatives; youth clubs; mahila mandals, SHGs

IV. Support Structures and their functions:
1. GO’s and NGO’s
2. Central Social Welfare Board.
4. National Level Voluntary Agencies like DRDA, CAPART, KVK’s, KVIC and NIPCCD.
5. Local Level Voluntary Agencies, people’s organizations at grass roots.

V. Extension Teaching Models – Social Education Model; Social Action Model; Indigenous Model; Empowerment model.

Sessional:
1. Visit and survey of nearby slum and rural areas to get acquainted with their social and cultural problems and other specific problems.
2. Submission of project related to the survey.
3. Preparation of activities under various extension teaching models.

References
1. Directorate of Extension Education,
2. A. S. Sandhu, “Agricultural communication”
4. S. K. Wag mare, “Teaching Extension Education”
B.Sc. (Home Science)

Fourth Semester
B.Sc. (Home Science) IV Semester
EARLY CHILDHOOD CARE AND EDUCATION
PAPER - XVI

Theory: 60 Marks
Sessional: 40 Marks

Unit I – Introduction
(a) Meaning and importance of early childhood education
(b) Recent trends and achievements in ECCE
(c) Curriculum for ECCE
   (i) Meaning of Curriculum
   (ii) Basic Principles of Curriculum Construction
   (iii) Formation of Curriculum
   (iv) Types of Curriculum

Unit II – Play
(a) Play as means of development and learning.
(b) Theories of Play – Surplus energy theory, relaxation theory, Recaptitulation theory
(c) Types of play
(d) Development stages of play
(e) Functions of play in language and cognitive development.
(f) Teachers role in promoting and fostering play

Unit III Principles of programme planning
(a) Known to Unknown, Simple to complex and concrete to abstract
(b) Programme planning: goals and objectives
(c) Formal, non-formal and integrated learning approaches
(d) Role of teacher in guiding children's development and learning.

Unit IV – Literature for Children – Understanding need for literature for children

(a) Types of literature and criteria for selection
(b) Books for preschoolers: (i) Picture books (ii) Story books,
(iii) Information books (iv) Concept books
(v) Number and Alphabet books
(c) Techniques of storytelling: (i) Reading of story books,
(ii) Narration with the help of aids like flash cards, flannel board puppets,
   Modulation and speech, use of gestures, role play.

Unit – V Activities in the pre-school

(a) Creative activities: (i) Painting (ii) Drawing
   (iii) Tearing cutting (iv) Pasting, (v) Collage
   (vi) Modeling (Dough, clay, plasticine sand and mud.)
(b) Music and dance - (i) their educational values
   (ii) Role of teacher in organizing the activities
(c) Science Experiences
(d) Activities to develop mathematical concept.
(e) Nature study and field Trips: (i) Planning of field trips
   (ii) Preparation of field trips and its importance

Practical

1. Preparation of the material to be used with children in school. Each student to use at least 5 material.
2. Organizing of activities for children.
5. Visit to at least four nursery school.
6. Organizing pre writing activities.
References

B.Sc. (Home Science) IV Semester
NUTRITION FOR THE FAMILY
PAPER XVII

Theory: 60
Practical: 40

Unit I- Basic concepts of meal planning
1. Food groups and concept of Balanced Diet
2. Food exchange list
3. Concepts of Dietary reference intake
4. Factors affecting meal planning and food related behavior.
5. Dietary guidelines for Indians and food pyramid.

Unit II- Nutrient Requirements
1. Concepts of minimum nutrient requirements and Recommended Dietary Allowances and excess / deficiency of nutrients
2. Energy Metabolism-
   • Concepts of energy balance
   • Components of energy expenditure and factors affecting the same
   • Physiological fuel factors
   • Method of assessing energy needs

Unit III- Nutritional during the Adult Years

Physiological changes, RDA, Nutritional guidelines, nutritional concerns and healthy food choices in the following groups:
1. Adults – Male and Female
3. Lactation- Physiology of lactation, nutritional needs of nursing mother, feeding the baby.
4. Elderly- life expectancy, physiological changes in elderly, nutritional and health concerns in old age and their management
Unit IV - Nutrition during Childhood

Growth and development, growth reference/standards, RDA, nutritional guidelines, nutritional concerns and healthy food choices in the following groups:

- Infants
- Preschool children
- School children
- Adolescents

Unit V - Nutrition for special Conditions

1. Nutrition for physical fitness and sports
2. Feeding problems in children with special needs.

Reference:


Practicals:

1. Identification of nutrient rich sources of foods, their seasonal availability and price, study of nutrition labeling on selected foods.
2. Use of food exchange list
3. Planning, preparation and evaluation of adequate diets using food exchange list to suit different socioeconomic groups for:
   - Young adult
   - Pregnant and lactating women
   - Preschool child
   - School age child and adolescents
   - Elderly
4. Planning Complementary food for infants
B.Sc. (Home Science) Fourth Semester
WET PROCESSING OF TEXTILE (TAD-II)
PAPER XVIII

Theory: 60
Sessional: 40

COURSE CONTENT : THEORY

UNIT I:
(a) Definition, purpose and classification of finishes (according to purpose, method and durability)
(b) Process and uses of-
   (i) Basic finishes - Bleaching, Mercerization, Calandering, Sanforization, Tentering, Singeing
   (ii) Functional Finishes - Crease Resistance, Water Proof and Water repellant, Flame proof and flame retardant, antistatic, soil proof, Mildew proof.

UNIT II:
(a) Water - Sources, uses, types; hardness of water – types, causes and techniques of removal of hardness.
(b) Soaps and detergents – Kinds, composition and properties.

UNIT III:
(a) Blues – Types, composition, uses and action of blues.
(b) Stiffening agents – Types, properties, sources, preparation and application of various stiffening agents.
(c) Bleaches – Classification and their uses, optical brighteners.
(d) Additional laundry reagents – Uses of Washing soda, borax, acetic acid, ammonia, oxalic acid, solvents (petrol, acetone, carbon tetrachloride), absorbents (common salt, talcum, French chalk)
UNIT IV:
(a) Dyes –
(i) Natural dyes – Sources
(ii) Synthetic dyes – Classification, types and uses of acid, basic, direct, azoic, sulphur, disperse, vat, Pigment.
(iii) Health hazards caused by synthetic dyes.
(iv) Methods of dyeing – Solution, fiber, yarn, fabric and piece dyeing, resist (batik and tie & dye)

(b) Methods of Printing -
(i) Direct- Block, screen, stencil (ii) Transfer Printing (iii) Discharge Printing
(iv) Polychromatic and digital Printing
(v) Automatic Printing: Roller, screen, duplex, discharge, photographic

UNIT V:
(a) Stains – Definition, classification, identification, and general precautions observed during stain removal (b) Dry cleaning – Definition, principle, dry cleaning agent and their use, comparison with wet cleaning, advantages and disadvantages, spot cleaning.
(b) Disinfecting the fabric
(c) Textiles and Environment – Health Hazards to workers and consumer, toxicity of chemicals used in textiles (during growth, manufacture, finishing and use), textiles as a source of air and water pollution.

REFERENCES:
1. Trotman ER: Dyeing and chemical technology of fibers.
2. J. Hall “the standard hand Book of textiles”, Woodhead publication, 2004

Sessional:
1. Removing individual stains by Home and lab methods (blood, wax, chewing gum, chocolate, coffee, egg, fruit, grass, ice-cream, medicine, Ink pen, ball-pen ink, iron-rust, mildew, lipstick, oil, perspiration, urine, paints).
   (b) Making sample of Batik
3. (a) Making sample of screen printing
   (b) Making sample of stencil printing
   (c) Making one article using combination of any of the above methods of dyeing and printing.
Unit – I: Introduction of Home Management
(a) Definition, Philosophy and Concepts of Home Management.
(b) Importance and factors affecting home management.
(c) The management process – Planning, organizing, controlling and Evaluation.
(d) Management cycle.

Unit – II: Systems approach to Management
(a) Meaning and Definition.
(b) Managerial unit - The family and its environment as system.

Unit – III: Decision making
(a) Its importance and role.
(b) Decision making process.
(c) Classification of decisions.
(d) Factors affecting decision making.

Unit – IV: Motivational Factors of Management
(a) Values – Origin, Classification and Characteristics.
(b) Goals – Types and Characteristics.
(c) Standards – Types, Conventional of flexibility standard & Quantitative and Qualitative Std.
(d) Interrelatedness of values, Goals & Standard.

Unit – V: Family Resources
(a) Family resources – Classification, Characteristics and Objectives of use of resources.
(b) Factors affecting resources- Scarcity, utility, accessibility exchange, transferability, substitution, Manageability, Interchangeability.

**Sessional work**

a. Identification of values and goals.
b. Identification of resources.

**References**

a. Home management for Indian families : M.K. Mann
b. Management for modern families : Gross and Crandall
c. Management in daily living : hoodyear and Khlor
d. Management in family living : Nickell and Dorsey
e. Home management and family finance : Maneesha Shukul and Gandotra

II. Approaches in Extension Education: individual, group and mass.

III. Methods of Extension Education according to approaches – concept, use, importance, selection and limitations.

IV. Audio-visual Aids for teaching learning process – meaning, importance, classification, criteria for selection and use of audio-visual aids.

V. Media – concept, types and importance.
   1. Folk media.
   2. Print media.
   3. Electronic media.

Practical and Sessional:
   1. Preparation and use of audio-visual aids – display, distribution and use with teaching methods.
   2. Preparation and presentation of any one media.

References:
   1. Directorate of Extension Education,
   2. A. S. Sandhu, “Agricultural communication”
   4. S. K. Wag mare, “Teaching Extension Education”
B.Sc. (Home Science)

Fifth Semester
Unit I – Puberty and Adolescence (11 to 21 years)
(a) Development tasks and characteristics. Physical development: Puberty, growth spurts, primary and secondary sexual characteristics, secular trends.
(a) Identity: Definition, Identity status, Factors influencing Identity development. (b) Social relationships and heterosexual relationship, Importance. (c) Adolescent’s Emotions: - Meaning, Causes, expression, characteristics of emotional maturity. (d) Problems – Drug and Alcohol abuse, STD, HIV AIDS, Teenage pregnancy.

Unit II – Young Adulthood (20 to 35 years)
(a) Definition of an adult, its characteristics, Development task of a young adult. (b) Responsibilities and adjustments- educational, occupational, marital and parenthood. (c) Choosing a Career - Stages, factors affecting selection for career.

Unit III – Middle Adulthood (35 to 55 years)
(a) Characteristics, Developmental tasks, physical changes. (b) Reproductive Changes- Menopauses, climetric syndrome and associated health risks.
(c) Stresses in middle age - family, workplace, occupation and coping strategies.
(d) Preparation for retirement - physical, social, financial and occupational

Unit IV – Late adulthood (55–65 years) and Old Age (65 years onwards)
(a) Characteristics, developmental tasks, physiological changes and health problems, cognitive, memory and personality changes.
(b) Retirement – effect of retirement (emotional, economic, self and family), changes in relationship with family.

Unit V – Old Age
(a) Issues: - Old age homes, elderly abuse, loneliness and post parental status.
(b) National Policies and legal provisions for elderly.
(c) Death – Preparation and coping strategies.

Sessional
1. Case study of any one stage.
2. Visit to old age home/Widow Home.
3. Establishing one day camp for the aged to give them opportunity of association and submitting a report of the same.
4. Assessment of problems of any two stages.
5. An intervention to study middle crises and retirement blues and submitting its report.

References
B.Sc. (Home Science) Fourth Semester
DIET THERAPY
PAPER XXII

Theory-60
Practical-40

Unit I- Principles of Diet therapy and Nutrition care process
1. Principles of diet therapy
2. Assessment of patients nutritional needs
3. Team approach in health care
4. Planning, implementation and evaluation of nutrition care
5. Dietary counselling in Nutrition care

Unit II- Therapeutic adaptation of normal diet
1. Qualitative and quantitative adaptation
2. Progressive diets- clear fluid, full fluid, soft and regular
3. Introduction to enteral and parenteral nutrition

Unit III- Weight Management
Etiology, clinical features, diagnosis, complications, nutritional and lifestyle modifications and dietary counseling in weight management
1. Overweight and obesity
2. Underweight
3. Eating disorders- Anorexia nervosa and bulimia

Unit IV- Nutritional management of common disorders
Etiology, clinical features, diagnosis and nutritional management of the following:
1. Infections and fevers- short term and long term (Typhoid, Tuberculoses and HIV/AIDS)
2. Stomach disorder- Gastritis and Ulcers
3. Small and large intestine disorders- Diarrhoea, Constipation, Lactose intolerance, Steatorrhoea, Celiac disease
4. Liver disease- infective hepatitis
Unit V- Cardiovascular and common metabolic disorders

Etiology, clinical features, diagnosis, complication, nutritional management, lifestyle modification and dietary counselling in:-

1. Cardiovascular disorders- Hypertension, Hyperlipidemia and Atherosclerosis
2. Diabetes Mellitus- Type 1 and Type 2
3. Gout

References:


Practical’s:-

1. Planning, calculation, preparation, service and evaluation of diet for patients suffering from following disorder

   A) Therapeutic diets
      i) Normal Diet with a 3 day cycle menu
      ii) Soft diet
      iii) Liquid diet- clear and full fluid

2. Diet in fever- acute & chronic
3. Diet in Diarrhoea, Constipation
4. Diet in infective hepatitis
5. Diet in Overweight / Obesity and underweight
6. Type 2 diabetes
7. Cardiovascular disorders- Hypertension, Atherosclerosis
8. Designing and preparation of a dietary counselling aid
COURSE CONTENT: THEORY

UNIT I:
(a) Origin and functions of clothing
(b) Theories of clothing- theory of modesty, immodesty, protection, adornment, combined need theory.
(c) Psychological and Sociological aspects of clothing.
(d) Clothing needs of the family at its various stages.

UNIT II:
(a) Types of Design- Structural & Applied
(b) Elements of Design as applied to Textiles and Apparel
(c) Principles of Design as applied to Textiles and Apparel

UNIT III:
(a) Fabrics with Traditional Embroidery of different states- Phulkari, Kantha, Kasuti, Kutch & Sindhi, Kasidakari, Chikankari and Zardozi.
(b) Traditional woven fabrics- Brocades, Baluchars, Patola, Ikat, Pochampalli, Carpets and Shawls of Kashmir.
(c) Traditional painted /printed and dyed fabrics- Sanganeri, Bhagru, Kalamkari, Madhubani, and Bandhani.

UNIT IV:
(a) Textile Design, motifs and their features – Natural, Stylized, Geometric and Abstract.
(b) Repeats and layouts.

UNIT V:
(a) Fashion – Definition, Origin and Evolution.
(b) Fashion Cycle, Terminology, Elements and Principles.
(c) Theories of Fashion adoption
(d) Career options in Fashion Industry.

REFERENCES:
1. Helen J Armstrong, Pattern Making for fashion design, prentice Hall

Sessional:

1. Making samples of basic stitches of clothing constructions (total 58)............14practicals
   (a) Basic stitches (5) – Basting (even and uneven), Hemming (visible and invisible), Back stitch.
   (b) Seams (6) – Plain, lap, french, run and fell, counter seam and counter hem.
   (c) Seam Finishes (6) – Pinking, turn and machine, turn and baste, turn and hem, over casting and blanket stitch.
   (d) Plackets (6) – Continuous, two piece, kurta placket, frock/shirt placket, zip, zip with cover.
   (e) Fasteners (2)–of Overlap and underlap.
   (f) Neckline Finishes(7) – Piping (on square, round, v-shape neckline) Facing (square, round, v-shape and fancy shaped neckline)
   (g) Fullness (8) – Darts (Single and double), Tucks (pin, broad, cross and shell), Gathers and Shirring.
   (h) Knitting samples(2)–Basic-
(i) Darning and patch(3)- plain and printed
(j) Pocket (2)– patch with flap and side seam pocket.
(k) Cuff(1)- Simple
(l) Embroidery sample with at least 20 stitches (1)
(m) Smocking sample with 8 stitches(1)

2. Drafting of basic sleeve block.

3. Drafting of child's basic bodice block and

   (A) Its adaptation to
      a. (i) 'A' – line frock (ii) simple gathered frock.................................8 practicals
      b. (i) ‘A ‘– line romper (ii) romper with bib and bloomer.....................8 practicals

   (B)Drafting and stitching instruction of all of the above and stitching of any one from (a) and one from (b).

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Unit – I: Housing

(a) Housing needs and importance.
(b) Housing scenario in India.
(c) Causes of shortage of housing.
(d) Renting and ownership housing: advantages and disadvantages.

Unit – II: House Planning

(a) Selection of site: Natural features, neighborhood and social consideration, availability of external and utility services.
(b) Principles underlying planning of house.
(c) Vastu Shastra.
(d) Planning units of the house: Private, Work, Recreational, Service area.

Unit – III: Types of House Plans

Meaning and characteristics of:
(a) Site plan.
(b) Floor plan.
(c) Cross section plans.
(d) Elevation plans.
(e) Perspective plans.

Unit – IV: Construction and Building Material

(a) Construction features of a house (brief description).
(b) Building Materials

Unit – V: Housing Legislation and Schemes
a. Building Codes  
b. Bye-laws  
c. NBO (National building organization).  
d. Governmental housing schemes.

**Practical Work**  
a. Making different floor plans for various Income levels.  
b. Visit and Observation of a residential building under constructions.  
c. Market survey of different building material.

**Reference Books**  
d. Home with Character - Craig and Rush.  
e. House Plans of different living – Veena Gandotra Sarjoo Patel, Dominant pub & Distributor, New Delhi.
I. Programme Planning:
1. Concept, Meaning and Objectives of Programme Planning.
2. Need of Programme Planning.
3. Principles of Programme Planning
4. Participatory planning- Concept, importance and approaches.

II. Steps in Programme Planning:
   A. 1. Meaning and Importance of Plan of Work.
      2. Developing a Plan of Work
      3. Factors to be considered in preparing the Plan of Work
   B. Programme Execution-
      1. Aspects of execution.
      2. Steps of Programme Execution.
   C. Programme Evaluation:

III. Leaders and Leadership:
1. Meaning, qualities and role.
2. Types of leaders, identification and training of leaders.

**IV. Rural Development Programmes** under Five Year Plans.

**V. Planning Commission of India in brief** – role and importance.

**Sessional:**

a. Visiting community to identify needs of community through PRA techniques.

b. Development of need-based programmes – its implementation and evaluation.

c. Writing report and its presentation.

**References**

1. Anoop Singh Sandhu, “Extension program planning”
4. Dr. A. Adivi Reddy, “Extension Education”
B.Sc. (Home Science)
Sixth Semester
B.Sc. (Home Science) Sixth Semester
MARRIAGE AND FAMILY DYNAMICS
PAPER XXVI

Unit 1- Marriage in Indian Society
(a) Meaning, goals, characteristics of marriage, prevalent forms of marriage restrictions on marriage
(b) Readiness for marriage (i) Psychological(ii) Social
(iii) Physiological(v) Economical
(c) Preparation for marriage - (i) Selecting a suitable partner, Theories on mate selection (ii) Premarital association (iii) Premarital guidance and counseling
(d) Presents trends in marriage

Unit II- Marital Adjustment
(b) Types of adjustment-physical, financial, in-laws and social
(c) Marital adjustment at different stages of family life cycle and occupational cycle
(d) Factors affecting marital adjustment

Unit III- Legal laws related to marriage in India :-
(a) The Hindu Marriage Act
(b) Special Marriage Act
(c) The Dowry Prohibition Act.
(e) Christian Act, Muslim Act.
Unit IV- Family

(a) Meaning, definition, structure (Joint family and nuclear family), functions of family, sociological significance of family.

(b) Changes in family structure, factors responsible, advantages and disadvantages of change in family structure, effects of different family structures on changing roles of family.

(c) Modern trends in family - single parent families, childless families, dual earner families, nuclear families, DINK families, liv-in-relationship.

Unit V- Dysfunctional families and family counseling

(a) Dysfunctional families-
   (i) Separation and divorce
   (ii) Violence and distress
   (iii) Abused families

(b) Family counseling-
   (i) Meaning, principles, importance and techniques of family counseling.
   (ii) Skills, competencies and role of counselor.

Sessional work

1. Term paper on any topic from the course.
2. Critical analysis of relevant news articles on marriage and family issue.
3. Identification of risk family and assessment of their needs.

References:

B.Sc. (Home Science) Sixth Semester
COMMUNITY NUTRITION
PAPER XXVII

Theory- 60
Internal -40

Unit I- Introduction to Community Nutrition
- Concept and Scope of community nutrition
- Food related behavior – factors affecting food habits, relation to knowledge, attitude, beliefs and practices in food behavior.

Unit II- Assessment of Nutritional status
1. Direct methods – anthropometry, biochemical and clinical examination
2. Indirect methods- dietary surveys, vital statistics

Unit III- Nutritional problems and their implications
Etiology, prevalence, clinical features and preventive strategies of :-
1. Under nutrition-
   - PEM
   - Nutritional anemia
   - Vitamin A deficiency
   - Iodine deficiency disorder
2. Fluorosis

Unit IV- Nutrition Policy and Programmes in India
1. National nutrition Policy
2. Objectives, target group and intervention strategy of
   a. ICDS
   b. Mid day meal programme
   c. National programmes for prevention of anaemia, Vitamin A deficiency and Iodine deficiency disorder

Unit V- Nutrition Education
1. Objectives, principles and scopes of nutrition and health education and promotion
2. Behaviour change communication – concepts, objectives and approaches.
3. Methods and aids for imparting nutrition education

References:-


Internal :

1. Planning and demonstration of low cost nutritious recipes for infants, preschoolers, pregnant/ lactating mothers.
2. Development of suitable aids for nutrition education programs.
3. Assessment of nutritional status-
   a. Anthropometric measurements- weight, height and MUAC.
   b. Plotting and interpretation of growth charts of children below 5 years
   c. Identification of clinical signs of common nutritional disorders
   d. Dietary assessment-24 hour recall
4. Planning and conducting a nutrition promotion activity
5. Visit to an ongoing nutrition and health promotion programme.
B.Sc. (Home Science) Sixth Semester

TEXTILE DESIGN AND APPAREL CONSTRUCTION (TAD-IV)

PAPER - XXVIII

Practical: 60
Sessional: 40

TAD-IV A: Textile Design (Practical)

1. Learning Traditional and Contemporary embroidery stitches.
2. Sketching of designs with different motifs (Natural, Stylized, Geometric and abstract.)
3. Development of design- Motif, design, pattern, repeat- drop repeat (full drop, ¼, ½, 2/3, ¾ drop, ), brick and mirror (vertical and horizontal) repeat.
4. Sketching of Croquets and Garment details- Necklines and collars, Sleeves with details, Fullness (pleats, gathers, darts, tucks), frills, flounces, ruffles, fringes, variety of fasteners.
5. Sketching of- ladies wear (skirts, pants, blouse, Top), Men’s wear (Shirt, Trousers), Unisex garments (coat, jackets, Kurta).
6. Sketching of-different lines to see the effects produced by them.
7. Making of different Colour schemes and to study the effect produced by different colours and colour schemes..
8. Collection of different types of Stripes, Checks, plaids. Effects produced by each and by mixing of these.
9. Collection of different types of textures (Stretch fabrics, velvet, leather, fur and lace, non – woven). Effects produced by each and by mixing these textures.
B.Sc. (Home Science) Sixth Semester  
INTERIOR DESIGN AND HOME DECORATION (FRM-IV)  
PAPER - XXIX

Theory: 60 Marks  
Practical: 40 Marks

Unit – I: Interior design and Home decoration

a. Meaning of interior design.
b. Factors affecting interior design.
c. Interior design : Traditional and modern overview.

Unit – II: Design

a. Objectives of design  
b. Type of design- Structural and Decorative.  
c. Elements of design- Line, Form, Texture, Space, Pattern, Light and Colour.  
d. Principles of design- Proportion, Balance, Rhythm, Emphasis, Harmony

Unit – III: Colour

b. Colour System- Prang colour system and Munsell colour system.  
c. Dimensions of colours ; Hue, value and Chroma.  
d. Colour Wheel – Primary, Binary, Intermediate, Teritary and Quarternary colour, Warm and Cool colour and their effect.  
e. Colour Schemes – Similar and contrasting colour schemes, Planning of colour schemes for different areas in the house.

Unit – IV: Furnishing

a. Furnishings: Classification of furnishing–Curtain, Draperies, Upholstry, Carpet.  
   (i) Factors influencing the selection of furnishings for the home-family needs and preference, availability, climatic condition, income, home maker taste etc.  
   (ii) Windowtreatment.  
b. Light: Natural and artificial light, lighting in various rooms and for different activity centers.
Unit – V: Flower arrangement
   a. Equipments used in Flower arrangement.
   b. Types of Flower arrangement using elements and principles of art and design.

Practical Work
   a. Making any one decorative article for the home i.e. bed cover, table net, cushion cover, lampshade etc.
   b. Floor decoration with flower, rice powder, chalk powder and poster colours. (Alpana, Mandana, Rangoli).
   c. Artificial flower making and their arrangements.

Reference Books
   a. Art in everyday – Goldstein and Goldstein
   b. Home with characters – Craig and rush
   c. Home furnishing – A.H. Rull
      Grah Vyavastha awam grah Kak G.P. Sherry.
   d. Grah Prabandh – Sharma and Verma
   e. Interior Architecture – J. Rosemary Riggs
   f. Colours in your home – Tersa Eve Legh
   g. Colour Forecasting – Tracy Dianne

TAD-IV B: Apparel Construction (Practical)

1.   (a) Drafting of petticoat – 4 paneled and 6-paneled
     (b) Stitching of any one of these.
2.   Drafting of various collars – Flat peterpan collar, raised peterpan collar, cape collar, baby collar, shawl collar, T-shirt collar, Chinese band collar and sailors collar…………………………2 practicals.
3.   Drafting of basic sleeve block and its adaptation to different sleeves.
   (a)Set in sleeves: puff and its variations, gathered and its variations, long and short cap, flared, leg-o-mutton.
   (b)Modified sleeves – loose and tight magyar, loose and tight reglan, kimono, saddle sleeve………………………………………………………………………………2 practicals
4. (a) Drafting of adult's bodice block and sleeve block.
   (b) Its adaptation to: Ladies Shirt (Kameez) / Kurti /Top
   (c) Stitching of anyone of these garments.
5. (a) Drafting of – (i) salwar and (ii) churidar pyjama
   (b) Stitching of any one of these.
6. Exhibition
I. Communication:
   1. Meaning, nature and importance of communication.
   2. Factors influencing effective communication.
   3. Key elements in the communication process.
   4. Models of communication.

   2. Barriers of communication and ways to overcome them.


IV. Innovation and Diffusion:
   1. Concept of Innovation and Diffusion.
   2. Characteristics of innovation and applicability of each characteristic to homestead technologies.
   3. Consequences of innovation.
   4. Innovation decision process.
   5. Elements of diffusion-social agents, opinion leaders and change agents.

V. Adoption - concept, adoption stages, adopter categories, rate of adoption, discontinuance.

Practical:
   1. Formulating communication strategies for home science development programmes.
   2. Development of Communication Skills using different Approaches.

References
3. A. S. Sandhu, “Agricultural communication”
5. B. N. Ahuja, “Theory & Practice Journalism”
7. Lady Irwin College, “Studies of the Rural Community”
8. Larry L. Barker, “Communication”