



# B.Sc(H.Sc)(I,II,III,IV,V,VI Semester) Session (2019-20)

S.No.	1st Semester.	Code
1	English Language & Communication Skills	P-101
2	Communication and Instructional Technology	P-102
3	Introduction to Human Development - I	P-103
4	Food Science	P-104
5	Human Physiology	P-105
6	Computer Basic	P-106
7	Environmental Science- Qualifying Paper	P-107
1	Introduction to Textiles	P-201
2	Introduction to Resource Management	P-202
3	Applied Physics	P-203
4	Applied Chemistry	P-204
5	Sanitation & Hygiene	P-205
6	Meal Management	P-206

1.	Family Dynamics	P-301
2.	Human Development –II	P-302

3.	Consumer Economics	P-303
4.	Nutritional Bio-Chemistry	P-304
5.	Laundry Science & Finishing of Fabrics	P-305
6.	Applied Life Science –I	P-306

S.No.	IVth Semester	
1.	Introduction to Clothing Construction	P-401
2.	House Hold Equipments	P-402
3.	Food Microbiology	P-403
4.	Applied Life Sciences –II	P-404
5.	Human Development- III	P-405
6.	Community Nutrition	P-406
	Vth Semester	
1.	Therapeutic Nutrition	P-501
2.	Human Development- IV	P-502
3.	Community Development	P-503
4.	Family Housing	P-504
5.	Advanced Clothing Construction	P-505
6.	Nursery School Education	P-506

	Vith Semester	
1.	Textile Design	P-601
2.	Interior Decoration & Art Principles	P-602
3.	Food Preservation & Protection	P-603
4.	Entrepreneurship & Motivation	P-604
5.	Extension Training & Management	P-605

## B.Sc.Home Science

S.No.	1st Semester.	Th.	Pr.	Total
1	English Language & Communication Skills	50	-	50
2	Communication and Instructional Technology	50	50	100
3	Introduction to Human Development -I	50	25	75
4	Food Science	50	50	100
5	Human Physiology	50	25	75
6	Computer Basic	50	50	100
7	Environmental Science- Qualifying Paper			
	<b>Total</b>	<b>300</b>	<b>200</b>	<b>500</b>
	<b>IInd Semester.</b>			
1	Introduction to Textiles	50	50	100
2	Introduction to Resource Management	50	50	100
3	Applied Physics	50	25	75
4	Applied Chemistry	50	25	75
5	Sanitation & Hygiene	50	-	50
6	Meal Management	50	50	100
	<b>Total</b>	<b>300</b>	<b>200</b>	<b>500</b>
	<b>IIIrd Semester.</b>			
1	Family Dynamics	50	-	50
2	Child Development I	50	-	50
3	Consumer Economics	50	50	100
4	Nutritional Bio-Chemistry	50	50	100
5	Laundry Science & Finishing of Fabrics	50	50	100
6	Applied Life science –I	50	50	100
	<b>Total</b>	<b>300</b>	<b>200</b>	<b>500</b>

S.No.	IVth Semester	Th.	Pr.	Total
1	Introduction to Clothing Construction	50	50	100
2	House Hold Equipments	50	50	75
3	Food Microbiology	50	50	100
4	Applied Life Sciences-II	50	50	100
5	Human Development-III	50	-	50
6	Community Nutrition	50	-	75
	<b>Total</b>	<b>300</b>	<b>200</b>	<b>500</b>
	<b>V Semester</b>			
1	Therapeutic nutrition	50	50	100
2	Human Development- IV	50	-	50
3	Community Development -	50	-	50
4	Family Housing	50	50	100
5	Advanced Clothing Construction	50	50	100
6	Nursery School Education	50	50	100
	<b>Total</b>	<b>300</b>	<b>200</b>	<b>500</b>
	<b>VIth Semester</b>			
1	Textile Designing	50	50	100
2	Interior Decoration & Art Principles	50	50	100
3	Food Preservation & Protection	50	50	100
4	Entrepreneurship & Motivation	50	50	100
5	Extension Training & Management	50	50	100
	<b>Total</b>	<b>250</b>	<b>250</b>	<b>500</b>
	<b>Grand Total</b>	<b>1750</b>	<b>1250</b>	<b>3000</b>

# Semester I

## PAPER I ENGLISH LANGUAGE & COMMUNICATION SKILLS

M.M.50

### Unit I. Introduction to Communication

- A) What is communication?
- B) The importance of effective communication.
- C) Principles of communication – clarity, completeness, conciseness, consideration, courtesy, correctness.

### Unit II. Aids to correct writing

- A) Nouns, Pronouns, Adjectives, Articles, Verbs, Adverbs, Prepositions, Conjunctions, Punctuation, Vocabulary – Synonyms, Antonyms, one word substitution, Idioms & Phrases.

### Unit III. Letter writing

- A) layout of letter, types of letter- business letter, application, letters.

### Unit IV Report writing

- A) Importance, types of reports, parts of reports, preparing the report.
- B). Essay writing
- C) . Precis writing

## Paper II Communication & Instructional Technology

MM.50

Unit I Origin, Meaning, Definition, Functions & Problems of Communication.

Unit II Types of Communication

- a) Intra Personal
- b) Interpersonal
- c) Group
- d) Organisational
- e) Public
- f) Mass

Unit III Communication Receiver Relationship:

- a) Rapport
- b) Empathy
- c) Perception
- d) Persuasion
- e) Credibility
- f) Motivation

Unit IV Different types of audio-visual aids

- a) Their meaning definition & advantage Limitation & use in communication

## Practical

M.M. 50

- A) To select, plan, prepare and use different audio-visual aids.

- B) To develop ability to prepare and present individualized and group instruction.
- C) To familiarize the students with different types of accessories used for preparing communication media.

**Paper III Introduction to Human Development**

**M.M.:50**

Unit I--Human Development –

- A) Definition and importance of Human Development
- B) Human Development and allied fields
- C) Scope of Human Development
- D) Methods of child study

Unit II- Growth and Development

- A) Concept and principles of development
- B) Difference between growth and development
- C) Factors affecting growth and human development.

Unit III- Determinates of Development.

- A) Heredity and Environment
- B) Maturity and Learning

Unit IV-Developmental Stages

- A) Menstrual Cycle and Fertilization
- B) Prenatal development stages and sub stages.
- C) Factors affecting prenatal development

Unit V-Care of the newborn

- A) Reflexes of the newborn and neonatal assessment
- B) IUGR( Intra Uterine Growth Retardation) and Pre mature babies
- C) Immunization of the new born.

**(INTERNAL ASSESSMENT)**

**M.M.25Marks)**



A) Make a resource file of minimum ten articles from various magazines and news papers on Human Development

B) Write critical evaluation of each article

## **Paper IV Food Science**

**MM.50**

### Unit I

A) Foods Definition and objectives in the study of foods.

B) Relation to nutrition and function of foods.

### Unit II

Basic food groups: Composition and nutritive value.

A) Cereals

B) Pulses

C) Vegetables and fruits D) Milk

and milk products. E) Meat,

fish, poultry and eggs. F) Nuts

and oils.

G) Spices and condiments.

H) Sugar and jiggery.

### Unit III

#### Cooking

A) Various methods and principles of cooking various food stuff – (boiling, steaming etc.)

B) Processing of food stuffs before cooking.

C) Effect on nutritive and other values of foods during cooking.

### Unit IV

Improving nutritional quality of foods.

A) Germination

B) Fermentation

C) Supplementation

D) Substitution

E) Fortification and enrichment

## **Practical**

**M.M.50**

Basic food preparation.

A) Rice and pulse preparation.

B) Vegetable preparation.

C) Suji and wheat flour preparation.

D) Milk preparation

E) Soups

F) Bakery preparation

G) Beverages

- H) Egg, fish and meat preparations
- I) Standardization of weights and measures of various food items.

## Paper V Human Physiology

M.M. 50

### Unit I

Basic Unit of Human Body-Cell

A) Structure of cell

B) Structure of tissues and types

C) Functions of tissues

### Unit II

Elementary anatomy, physiology and functions of-

A) The skeleton system

B) The nervous system – Organs, sensation vision, hearing, sense of touch, smell and taste.

### Unit III

Elementary anatomy, physiology and functions of-

A) The circulatory system– human heart and other organs,Composition of blood and function

B) The respiratory system – respiratory organs and their functions.

### Unit IV

Elementary anatomy, physiology and functions of-

A) The digestive system – organs of the digestive system and their functions.

B) The excretory system –organs of the excretory system and their functions

### Unit V

Elementary anatomy, physiology and functions of-

A) The Endocrine system – The ductless glands and their functions.

B) The Reproductive system – elementary knowledge of male and female reproductive organs, their function.

- A) Prepare Charts and Poster on Human Physiology
- B) each student should make minimum two Poster or Chart.

Unit I

Introduction to Computers

- A) What is Computer
- B) Characteristics of Computer
- C) Generation of Computers
- D) Classification of Computers
- E) Hardware & Software
- F) Input & output devices
- G) Data Representation & Processing

Unit II

Windows

- A) Features of Windows
- B) Date & Time
- C) Display
- D) Fonts
- E) Mouse
- F) Find

Unit III

MS-WORD

- A) Starting Word
- C) Creating Documents
- D) Parts of Word Window
- E) Formatting Features
- F) Toolbars & their Icons
- G) Tables

Unit IV

MS-Excel

- a) Starting MS-Excel
- b) Toolbars & their icons
- c) Selecting Cells
- d) Entering & Editing text
- e) Entering Numbers
- f) Entering cell contents
- g) Formulas
- h) Creating the charts

#### Unit V

#### MS-PowerPoint

- A) Starting PowerPoint
- B) Creating Power Point Presentation
- C) Editing Text on Slide
- D) Formatting Text
- E) Formatting Paragraphs
- F) Checking Text
- G) Using Clip Art Gallery
- H) Develop a SlideShow

#### Unit VI

#### Internet

- A) Computer Network (LAN, MAN, WAN)
- B) What is Internet?
- C) Use of Internet
- D) Software & Hardware requirements of Internet
- E) Search Engines & Search of a topic
- F) Advantages & Disadvantages
- G) Creation & use of E-mails

### **PRACTICAL:**

**Max.Marks:50**

#### 1.Window XP

- A) Starting & shutting Computer, Moving windows, Display Properties.
- B) Exploring Disk, Files & Folders.
- C) Use of CDs & Pen drives

#### 2.MS-Word

- A) Creating new word document, Open existing document, Save, Print, Page Setup, Close, Exit.
- B) Edit, View, Insert, Format, Tools menus

#### 3.MS- Power Point

- A) Starting presentation , Improving presentation, Create Presentation using Auto Content Wizard & Using power point Templates, Copying Text, Moving Text, Deleting Text, Aligning Text in a Slide,

- B) Changing fonts, Adding Symbols, Using Clip Art Gallery, Animate text and Graphic Object

#### 1.MS Excel

- A) Printing & Saving sheets, Entering & Editing text, Page Setup
- B) Edit, Insert, Format, Tools menus

5. Internet

- A) Opening web page
- B) E-mail
- C) Search Engines
- D) Downloading files from Internet

# Semester II

## Unit I

### Introduction to Textiles

- A) Classification of Textile fibers and their general properties.
- B) Importance of textiles in day to day life.
- C) Factors affecting selection of fabric for various end uses.

## Unit II

### History, composition, manufacturing process, properties and uses of common fibers

- A) Natural cellulosic fibers- Cotton, Flax and Jute.
- B) Natural Protein fibers- Silk and Wool.
- C) Synthetic fibers- Rayon, Acrylic, Nylon and Polyester

## Unit III

### Study of Yarns

#### A) Definition and types of Yarns

- i) Simple yarn: Single ply, cord, crepe, staple, filament, balanced, unbalanced, types of twist and effect of twist on fabric performance.
  - ii) Complex yarns: Slub, flock/ flack, Bounce/ loop, ratine, loop, knot, grandelle chennille.
- Methods of spinning.

## Unit IV

### Fabric Construction

- A) Study on Hand loom- parts and their uses
- B) Basic weaves used in fabric construction and classification of weaves
  - (i) Plain weaves and variations
  - (ii) Twill weaves and variations
  - (iii) Floating weaves
- C) Other Methods of fabric construction - netting, knotting, felting, braiding and bonding

## Unit V

## Fabric Finishes

A) Importance and classification

B) Methods and uses of-

- (i) Mechanical- tentering, calendaring, napping, sanforizing singeing.
- (ii) Chemical- Mercerizing, bleaching Additive- Sizing
- (iii) Special finishes- Water proof, moth proof, acid and basic finishes.

## Practical

M.M.50

- A) Identification of textile fabrics by- visual, burning, microscopic and chemical tests.
- B) Laboratory tests on fabrics- Fabric count and balance of cloth.
- C) Laboratory Identification of different types of weaves and collection of their sample.
- D) Color fastness to sunlight and washing of various fabrics.

## Paper II Introduction to Resource Management

M.M.50

### Unit I

#### Home Management

- A) Definition, Philosophy and Concepts of Home Management.
- B) The Management process- planning, organizing, controlling and Evaluation.

### Unit II

#### Family Life Cycle

- A) The Family life cycle and its stages.
- B) Qualities and responsibilities of a good home maker.
- C) Motivation in home management- values, goals and standard.

### Unit III

## Decision Making

- A) Importance and classification of decisions.
- B) Decision making process.
- C) Conflicts during decision-making.

## Unit IV

### Family Resources

- A) Classification and characteristics of resources.
- B) Time Management- Time demand in different stages of the family life cycle.
- C) Energy Management- Energy demands in different stages of family life cycle, Work curve and fatigue types.

## Unit V

### Work Simplification

- A) Definition of work simplification and its importance.
- B) Techniques of work simplification.
- C) Mundel's classes of change.

## **Practical**

**M.M.50**

- A) Time plans for different work situation.
- B) Making of waste material article.
- C) Making of a decorative article.
- D) Cards and book marks.

## **Paper III Applied Physics**

**M.M.-50**

## Unit I

### Simple Machines

- A) Machines and their principles, efficiency, mechanical advantage, lever pulley and axel.



B) Working knowledge of household equipments like vacuum cleaner, hair dryer, food processor, washing machine, microwave oven and OTG's.

## Unit II

### Heating & Cooling Machines

- A) Functioning, utility and maintenance of- Heater, Iron, Water Geysers, OTG and Induction cook top.
- B) Functioning, utility and maintenance of cooler, refrigerator, air conditioner and deep freezer.

## Unit III

### Light & Electricity

- A) Light-
  - Properties and transmission of light.
  - Laws of reflection and refraction, Normal vision, defects of vision.
  - Working of camera, microscope and Binoculars.
- B) Electricity-
  - Transmission of electricity.
  - Study of conductors, ammeter and voltmeter.
  - Study of house wiring, earthing, transformer, adopter, plug, fuse, bulb, fluorescent tube.

## Unit IV

### Sound

- A) Production & Reflection of sound measurement of noise, echo and its uses.
- B) Elementary knowledge of radio, television, telephone, microphone and loudspeaker.

## Unit V

### Consumer Awareness

- A) Guarantee and warranty of all household equipments.
- B) Precautions while using equipments and servicing of equipment used.

- A) Measurement of length and diameter with calipers.
- B) Determination of Refractive index of glass.
- C) Determination of Focal length of optical lenses.
- D) Verification of Ohm's law.
- F) Measurement of voltage of various household equipments used.

Unit I

Introduction

- A) Branches of Chemistry, its terminology.
- B) Element, mixture, valency, compound, molar solution and equivalent weight.
- C) Atomic Structure of Electron, Proton and Neutron
- D) Atomic number, atomic weight and atomic structure of sodium, chlorine, copper.

Unit II

Acids, Base and Salts

- A) Alkaloids- Function and Properties of Alkali.
- B) Uses and effects of Nicotine and Quinine.
- C) Types of Dyeing agents and their uses.

Unit III

Study of Drugs

A) Definition and function of Antibodies, Antiseptics, Analgesics, Sulpha-drugs, Insecticides and disinfectants.

B) Fire extinguisher- use and maintenance.

#### Unit IV

##### Cosmetics

A) Composition, characteristics of cold and vanishing creams, lipsticks, nails paints, shampoo, suns creams and hair color, hair oil and dyes.

B) Precautions while purchasing cosmetics and while using them.

#### Unit V

##### Paints and Vanishes

A) Composition and Types.

B) Elementary knowledge of cement and glass.

### Practical

M.M.25

A) Maintenance and handling of physical and chemical balance.

B) Qualitative analysis of chloride, acetate, phosphate, sulphate, sulphide as acid radicals, basic radical as aluminum, chromium, zinc, copper, iron, nickel, lead.

C) Determination of pH

D) Qualitative analysis of preservative-nitrate, sulphites, salicylate, benzoate,

### Paper V Sanitation and Hygiene

M.M.50

#### Unit- I

##### Health

A) Concept of positive health, good health, mental health, school health.

B) Factors affecting health

## Unit-II

### Hygiene

- A) School hygiene and industrial hygiene.
- B) Health Hazards of industrial worker and safety measures.

## Unit-III

### Infection Diseases\_- Symptoms, causes, care, and treatment

## Unit IV

- A) Water, food borne diseases- cholera, dysentery, tuberculosis, hepatitis,diarrhea.
- B)Air borne and viral infection- influenza, cold, pneumonia, polio, measles, mumps.
- C) Insect and rodent agencies – Malaria, Plague, Dengue
- D) Direct contact through cuts and abrasions, skin disease, conjunctivitis, leprosy, tetanus.

## Unit-IV

### Food Sanitation

- A) Control and inspection
- B) Planning and implementation of training program for health personal.

## Unit- V

### Public health organization

- A) W.H.O., central and state health activities, immunization programmes (Triple vaccine – smallpox, polio, typhoid, cholera, tuberculosis, AIDS and hepatitis).
- B) Municipal and district health services.

## Paper VI Meal Management

M.M.50

## Unit I-

- A) Relationship of nutrition to human health, growth and human welfare. Concept and definition of terms
- B) Recommended dietary allowances for Indians, Normal Nutrition, malnutrition, under nutrition, dietary fiber, water, acid- base balance,electrolyte balance.

## Unit II-

A) Energy value of foods and energy requirement,

B) Basal metabolism, factors affecting basal metabolic rate, calorogenic effect of food, specific dynamic action of food.

Unit III-

A) Basic principles of meal planning and its importance.

B) Planning menu for individual and family

C) Factors affecting meal planning, food groups, their exchange and distribution

Unit IV-

A) Nutrition during infancy, preschool age, school age, Adolescence, Adults and the elderly (for both genders, various activity levels and all income groups).

Unit V-

A) Nutrition during pregnancy and lactation, nutritional requirements, effect of malnutrition on maternal health and pregnancy outcome.

### **Practical**

**M.M.50**

A) Categorization of food as rich, moderate and poor sources of energy, protein, fat carbohydrates, vitamins and minerals.

B) Demonstration, understanding of principle and working of a bomb calorimeter

C) Planning diets for different age groups, income groups and activity levels.

D) Planning diet for pregnancy and lactation period.



Influence of different disciplinary patterns, maternal deprivation, and overprotection in child development.

## Paper II Human Development II

M.M.50

### Unit I- Early Childhood period

A) Physical and motor development- change in height, weight, body proportion and motor development.

B) Social and emotional development:-

a) Socialization and parent child relation.

b) Role of play activities and theories of play.

c) Meaning and characteristics of childhood emotions. Development of common emotions - fear, anger, joy, grief, jealousy, curiosity etc.

### Unit II- Intellectual development

A) Definition and factors affecting intellectual development.

B) Development of reasoning, memory, imagination, communication and creativity.

C) Moral development and discipline.

### Unit III- Late childhood period

A) Physical development- height, weight, body proportion, motor skills and sports.

B) Social and emotional development.

a) Process of socialization and relations with parents, sibling and peers.

b) Emotional characteristics and factor affecting emotions.

### Unit IV-

A) Physically Challenged

B) Emotionally Challenged

C) Mentally Challenged

Unit I- Family Income

A) Family income- Meaning and definition.

B) Types of income and methods of handling income, Money income, real income, psychological income and supplementing family income.

Unit II- Budget and Saving

A) Budget- Meaning and definition, Types of budget, Engle's law of consumption, factors influencing budget, steps in making budget.

B) Saving- Meaning of saving, objectives of saving, types of saving, investment schemes and agencies of saving and investment.

Unit III- Consumer and consumer behavior

A) Meaning and definition, objectives and need for consumer education.

B) Definition of consumer characteristics, role of consumer in the economy.

C) Consumer behavior and educating consumer.

D) Consumer buying habits, choice and needs.

Unit IV- Consumer in the Market

A) Concept and classification of market

B) Types of market- wholesale, retail, local, telemarketing global etc.

C) Changing nature of the business world i.e. e- business and e-commerce.

D) Consumer buying habits and consumer choice and needs.

Unit V

A) Consumer buying problems

a) Adulteration and other malpractices.

b) Weights and measures.

B) Consumption

a) Wants, demand and supply laws.

b) Law of diminishing marginal utility and marginal utility.



A) Market Survey of common commodities.

B) Consumer buying problems adulteration faulty weight, measures and other malpractices.

C ) Analyzing the advertising and label information contents

Unit I - Introduction to biochemistry

A) Objectives and scope of biochemistry.

Unit II Carbohydrates

A) Introduction, composition, classification and functions of carbohydrates

B) Metabolism of carbohydrates

Unit III- Lipids

A) Composition, classification and functions of lipids

B) Digestion and absorption of lipids.

Unit IV- Proteins

A) Definition, composition, classification and properties of proteins.

B) Digestion, absorption and metabolism of proteins.

Unit V- Micronutrients, Enzymes, Hormones

A) Vitamins - Definition, classification, function, storage, absorption and excretion of vitamins. (Fat solvable and water solvable)

B) Minerals – Classification digestion, absorption, storage and excretion of

C) Enzymes- Definition, properties of enzyme, inhibition, factors minerals. Effecting function of enzyme action, Clinical importance of enzymes.

D) Hormones- Types, secretory glands and biological role of hormones.

Practical

A) Detection of glucose, fructose, sucrose, maltose and lactose.

B) Identification of protein- casein, egg albumin.

C) Separation of water and insoluble protein from egg proteins.

D) Test of starch:-

- a) Iodine test for starch solution.
- b) Preparation of stained slide of potato starch grains.
- c) Microscopically examination

E) Estimation of chloride in table salt by titrimetric method.

F) Estimation of vitamin C content in food by titrimetric method.

## **Paper–VI Laundry Science and finishing of fabrics**

**M.M.50**

Unit I- Introduction

A) Principles of laundering and their application on laundry equipment.

B) Water- Hard and soft water, techniques of removal of hardness caused by hard water.

Unit II-Soaps and Detergents

A) Kind and composition, manufacturing, functioning and properties of laundry - Soaps and Detergents..

Unit III-

A) Blues- Types, composition, uses and action of blues.

B) Stiffening agents- composition, sources, preparation and application of various stiffening agents.

C) Bleaches- Classification and their uses.

Unit IV-Stains

A) Definition, classification, identification, general precautions observed during stain removal, home and lab method for removing stains (blood, wax, chewing gum, chocolate, coffee, egg, fruit grass, ice-cream, medicine, ink pen, bull pen, ink iron, rust mildew, lipstick, oil, preparation, paints ).

B) Dry cleaning- Definition, principles, dry cleaning agents and their uses, comparison with wet cleaning, advantages and disadvantages.

Unit V-Fabric Finishes

A) Importance and classification.

B) Method and uses-

a) Physical - singeing, napping, brushing, shearing, sizing, shrinking etc.

b) Chemical – bleaching, mercerizing etc

d) Special finishes – Wrinkle resistant, water resistant and repellent, flame retardant crease resistance.

- a) Study of laundry equipments.
- b) Laundering of different types of fabrics.
- c) Stain removal
- d) Bleach and starching fabrics.
- e) Dry cleaning of fabrics.

**Unit I-Soil**

- A) Importance and general knowledge of soil.
- B) soil and selection of soil for establishing a new garden.
- C) Methods for making of soil for more fertilization and conservation of soil.

**Unit II-Manure and Fertilizers**

- A) Importance of manure.
- B) Methods for application of manures and fertilizers.
- C) Preparation of compost of manures and Bio-fertilize.

**Unit III- Plants**

- A) Elementary idea of the classification of Plant Kingdom. Parts of a typical angiosperm plant, Pollination, fertilization, Dispersal of seeds and life cycle of a plant.
- B) Economic botany- Plants, different parts of plant useful for human welfare and daily human life.

**Unit IV Herbal and Medicinal plants**

- A) General Knowledge of gardening.
- B) Planting, maintenance and therapeutic uses of herbal and medicinal plants.

**Unit V Kitchen Gardening**

- A) Scope and Layout of Kitchen gardening.
- C) Cultivation of vegetables- Tomato, Cauliflower, Bhindi, Brinjal, chillies, carrot, radish and Spinach.

- A) Layout of Kitchen garden Practical Knowledge of garden tools.
- B) Transplantation of seedlings.
- C) Seedbed preparation ,sowing of seedling and raising seedlings, weeding, hoeing, irrigation earthing, staking.
- D) Identification and common bacterial and viral infected plants.
- E) Collection of ornamental plants and vegetables, common Weed

## Semester IV

### PaperI Introductionto clothing construction..... M.M.50

#### Unit 1

- A ) sewing machine and its part comman defects and how to remedy them

#### Unit II

selection of clothing material

- A) factors influencing selection of fabrics – budget, age, season, occupation, figure , fashion etc
- B) selection of linen – towel, bedsheet , table covers and curtains.

#### Unit III

principles of clothing Construction

- A)principles of drafting and making paper pattern
- B) taking body measurement of different types of garments
- C) preparation of fabric for garment making
- D) layout of patterns , cutting and stitching

#### Unit IV

- A) basic seams and seams finishes
- b) fullness – gathers , pleats ,darts and tucks etc.
- C) placket opening and its variations
- D) fasteners and pockets
- E) finishing of neck lines – various techniques including collars

## **Practical**

**M.M.50**

1. sewing techniques – basic seams and seams finishes, fullness – gathers, pleats,darts,tucksetc. Placket opening and its variations, fasteners, finishing of necklines- various techniques including collars,pockets
2. garment construction –drafting,cutting and stitching of simple garments like bib,baby’s panty , sun-suit/rompers ,a-line dress, simple frock with yoke.

## **Paper II House hold equipments**

**M.M. 50**

### **Unit I**

Meaning, definition, working principle, use and care of house hold equipment in terms of –  
Unit I

A)Electrical - motor driven

(i)Food related – refrigerator, Grinder, mixer, blender, food processor.

B) Laundry - washing machine,Cleaning – vacuum cleaner

### **Unit II**

A)Electrical – heat appliances

i) Food related – surface heating units, toasters, percolators, oven simple & microwave

B) Laundry – Electric iron & its types.

### **Unit III**

A)Solar cooker

B) Non electrical – cookers, non stick pans, knives, peelers, graters.

C)Certification and guarantee – their meaning, importance and implication.

D) Cleaning of household articles(including metals)

**Practical****M.M. 50**

1. Conduct market survey of electrical and non-electrical equipments for projecting trends in equipments.
2. Evaluation of different electrical and non-electrical Equipments.
3. Cleaning of different household articles.

**PaperIII FoodMicrobiology****M.M.50**

## Unit I

- A) Brief history of food microbiology and introduction to important micro organisms in food.

## Unit II

- A) Cultivation of micro organisms – nutritional requirements of micro organisms, types of media used, methods of isolation.

## Unit III

- A) Fundamentals of control of micro organisms in foods – use of high and low temperature, dehydration, freezing, irradiation, preservation, sterilization and disinfection.

#### Unit IV

A) Food Spoilage – Contamination and microorganism in the spoilage of different kinds of food and their preservation – cereals & cereal products, vegetables & fruits, fish & meat products, egg & poultry, milk and milk products, canned food.

#### Unit V

Public health hazards due to

- A) Contaminated foods
- B) Microbes used in food
- C) Biotechnology
- D) Fermented foods.

### **Practical**

**M.M. 50**

- A) Demonstration of the different parts of the microscope, the use and care of micro organisms.
- B) Preparation of bacterial smear, simple staining.
- C) Preparation of common laboratory media for cultivation of bacteria, yeast and mold.
- D) Morphological identification of important molds and yeast - Rhizopus, Mucor, Aspergillus, Penicillium, Sacchomyces, Alternaria, Demonstration of micro biological analysis of water, milk.

### **Paper IV Applied Life Sciences-II**

**M.M.50**

#### Unit I

A) Poultry Keeping - Knowledge about housing, feeding & important breeds.

#### Unit II

A) Apiculture – General introduction and collection of honey.

#### Unit III

A) Sericulture – general introduction about silkworm & their rearing.



#### Unit IV

A) Insect Pest – knowledge of organism, their control and damage by cockroach, termite, grainmoth, weevil, clothmoth

#### Unit V

A) Fish Culture-Knowledge about fish culture,Management of Fish culture Programmes,By products of fishing industry.

### **Practical**

**M.M. 50**

- A. Identification of insect pest, silkworm, bees.
- B. Maintenance of bee hives and collection of honey.
- C. Insect pest management-Natural Control,Applied Control and integrated pest management.
- D. Visit to poultry farm.

### **Paper VHUMANDEVELOPMENT-III**

**M.M.50**

#### Unit I –

A) Adolescence (13 to 18 years) – Definition, different views regarding the period, development tasks and characteristics.

#### Unit II

A) Physical development : Puberty, growth spurts, primary and secondary sexual characteristics, early and late maturing adolescents.

#### Unit III

- A) Definition , Construction of an identity
- B) (iv) Factors influencing Identity development
- C) Choosing a Career, Stages, factors affecting selection for career

#### Unit IV

- A) Social relationships and heterosexual relationship,Importance
- B) Heightened emotionality :- Meaning, Causes, expression, characteristics of emotional maturity.

#### Unit V

A) Problems – drug and alcohol abuse, STD and AIDS

Unit 1

- A) Concept and scope of Community Nutrition.
- B) Common problems in India.

Unit II

- A) Factors affecting food, Availability and intake.
- B) Agriculture production, population, distribution and industrialization.

Unit III

- A) Food adulteration, food laws .
- B) Common food adulterants and health hazards.
- C) Agencies checking food adulteration.

Unit IV

- A) Meaning of nutrition education and its importance.
- B) Organization of nutrition education programmes for the community .
- C) Communication methods .
- D) Communication aids.

Unit V

- A) Nutrition programmes in India .
- B) Role of national, international and voluntary agencies .

## SEMESTER V

Unit I –

- A) Therapeutic Nutrition – Importance, different types of diets, modification of normal diets to therapeutic nutrition, methods of feeding patients, pre- and post operation diets.

B). Diet in deficiency diseases – Protein Energy Malnutrition, classification of PEM according to Gomez welcome group of IAP (Indian associate Pediatrician).

Unit II –

A). Diets in fevers – acute and chronic.

B). Diets during under weight, overweight and obesity.

Unit III –

A). Diets in diseases of intestine: diarrhoea and constipation.

B). Diets in diseases of stomach and duodenum: dyspepsia, gastritis and peptic ulcer.

C). Diet in liver diseases – hepatitis.

Unit IV

A). Diet in Cardio-Vascular diseases : hypertension and Atherosclerosis.

B). Diet in Kidney disease – Nephritis.

Unit V-

A). Diabetes Mellitus:- Classification, Causes, Test, Diet Therapy

B) Diabetes in children and pregnancy.

**Practical**

**M.M.50**

A). Planning and preparation of soft and liquid diet.

E). Diet in Diarrhoea and constipation.

B). Diet in Kwashiorkor, Marasmus.

F). Diet in peptic ulcers.

C). Diet for underweight and obese.

G). Diet in Hypertension.

D). Diet in fevers.

H). Diet in Diabetes

**Paper II Human Development -IV**

**M.M.50**

Unit I – Young Adulthood (20 to 35 years)

A) Definition of an adult, its characteristics.

B) Developmental task of a young adult, significance of the period, responsibilities and adjustments, parenthood, financial matters.

C) Occupational cycle.

Unit II – Middle Adulthood (35 to 50 years)

A) Definition, physical changes (Senses, disease)

B) Menopauses and associated health risks.74

C) Stresses in middle age, coping with stress at family, workplace, occupation, job satisfaction.

D) Preparation for retirement.

Unit III – Late adulthood (50 – 60 years)

A) Definition, physiological changes, health problems, cognitive and memory changes.

B) Retirement – effect of retirement (emotional and economic) on self and family, financial problems faced, changes in relationship with family.

Unit IV – Old Age (65 years onwards.)

A) Personality characteristics of old age.

B) Issues :- Old age homes coping with loneliness post parental status., Recreational activities.

### Paper III Community Development

M.M. 50

Unit I

A) Community Development – Meaning, Definitions, Types and scope.

Unit II

Goals, Purposes and Problems of Community Development.

Unit III

Community development in India

A) Evolution of community development programme in India since Independence.

B) Structure and function of community development at different levels.

Unit IV

Support structures and their functions:

A). Central social welfare board.

B). Welfare programmes : JRT, IRDP, ICDS, DWACRA.

C) National voluntary Agencies : CAPART, KVIC, ICAR

D) Elected Panchayat.

## Unit V

Critical review of community development programmes in five year plans.

## Paper IV family housing

M.M.50

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### Unit – I

Factors influencing choice of family housing

A) Family Size – Size of Family, Family Structure, Family activities,

Stage in Family Life Cycle.

B) Income of family

C) Availability of Housing

D) Housing values & Standard

E) Selection of site

F) Selection of House site: Types of soil, locality Orientation and Public Convenience

### Unit – II

Residential Planning

A) Principles underlying the planning of House – Aspects, Prospects, Privacy, Grouping, Roominess, Flexibility, Sanitation, Circulation

B) house plan for different income groups

### UNIT III

A) Construction & Building Material

B) Construction features of a house – Foundation walls, doors, windows. Floor & floor covering roof, Staircases.

C) Building Materials – Bricks, Stones Cement, Lime, Plastics, Glass, Metals, Woods.

Unit – IV

A) Advantages of renting a house

B) Disadvantages of renting a house

C) Advantages of home ownership

D) Disadvantages of home ownership

Unit – V:

A) Government Housing Scheme

B) Financial Institution-L.I.C Bank, Housing board cooperative housing societies

Practical

–M.M.50

A) Making different House plans from the various Income levels.

b). Visit and Observation of a residential building under constructions

C). Model Making

Paper V Advanced Clothing Construction M.M.50

Unit I

A) Drafting, and making paper patterns for different garments

B) Placing and cutting patterns in relation to fabric

C) Principles of good design

Unit II

A) Renovation & removal of defects in garments.

B) Fitting Problems.

Unit III

Clothing and its importance

A) Biological, psychological and sociological aspects of clothing.

B) Influence of need and environment on clothing behaviour.

#### Unit IV

A) Fashion – Fashion Cycle, role of Fashion Designers, current Fashion trends.,

**Practical** **M.M.50**

1. Construction of garments :

- |                    |                                  |
|--------------------|----------------------------------|
| Children clothing  | A) Pleated A- line frock         |
|                    | B) Yoked frock with sleeves      |
|                    | C) Night suit (Bushirt & Pyjama) |
| Women's Clothing - | A).Plain blouse                  |
|                    | B) Choli cut blouse              |
|                    | D) A-line Kurta/Salwar           |

**Paper VI Nursery School Education** **M.M.50**

#### Unit I

- A) Objectives and importance of Nursery school education.
- B) Characteristics, growth and development of nursery school child and identification of his/her needs.

#### Unit II

- A) Historical development of nursery school education with special reference to the country.
- B) Different methods & philosophies of nursery school education.

#### Unit III

- A) role of government and other agencies in providing nursery school education.
- B) Development of play – meaning, importance and types of play.
- C) Development of creativity – meaning, importance and expressions of creativity.

**Practical** **M.M.50**

- A) Visit to atleast 3 Nursery Schools and submission of report.
- B) Preparation of Teaching aids for Nursery School Children.
- C) Case study of a preschool age child.
- D) Participation in Nursery School organization and submission of report.

## SEMESTER VI

### PAPER I TEXTILE DESIGNING

M.M. 50

#### Unit I

- A) Elements and principles of design in relation to textiles.
- B) History of textile design. Classification of textile design – woven and printed. Methods of getting design of textile and their comparison.



- C) Preparation of fabric before dyeing and printing. Industrial level processing – singeing, desizing, scouring, bleaching, kier boiling, mercerizing. Cottage level processing - desizing, bleaching, carbonizing.

#### Unit II

- A) Dyes – Classification of dyes.
- B) Mode of action and application – on yarn and fabric.
- C) Styles of dyeing – direct, resist, discharge

#### Unit III

- A) Printing – Methods of printing
- B) Hand printing – block, stencil, screen, spray
- C) Machine printing

#### Unit IV

- A) Traditional Textiles of India – Chanderi of Madhya-Pradesh, Brocade of Uttar Pradesh (Banaras) and Andhra-Pradesh ( Hyderabad ) , Patola of Gujrat, Orissa and Andhra-Pradesh, Chamba rumal of Himachal-Pradesh, Balucheri of Bengal, Muslin of Dacca, Kosa silk of Chattisgarh.

#### Unit V

- A) Traditional Embroideries of India – Kashmiri, Phulkari, Chikankari, Kantha, Gujrati, Kasuti.

#### **PRACTICAL**

**M.M.50**

- A) Preparation of samples of all traditional embroideries.
- B) Preparation of samples / articles using various dyeing and printing techniques.

#### **Paper II Interior Decoration & Art Principles**

**M.M.50**

#### Unit I

- A) Basic principles of home furnishing.
  - a) Elements of art - Line, form, colour, pattern, light - characteristics & classification, texture, space.
  - b) Study of colours - classification, colour schemes and their effects.
- B) Principles of design - definition, characteristics and types.
  - a) Balance
  - b) Harmony
  - c) Scale
  - d) Proportion
  - e) Rhythm

f) Emphasis

Unit II

- A) Flower arrangement
- B) Principles, selection and different flower arrangement styles.

Unit III

- A) Lighting arrangement
- B) Natural and artificial arrangement for different rooms and activity centers.

Unit IV

- A) Furnishing materials
- C) Selection, purpose, placement, use and care of furnishing material
  - a) Curtain and draperies
  - b) Floor coverings
  - c) Furniture
  - d) Bed and beddings

**Practical**

**M.M.50**

- A) Drawing of colour wheel and developing colour schemes.
- B) Flower arrangement - fresh and dry.
- C) Floor decoration – Rangoli and Alpana
- D) Preparation & placement of accessories for interior enrichment. (Any two articles)

**Paper III Food Preservation & Protection**

**M.M. 50**

**Unit I**

- A) Food Spoilage – its causes
- B) Perishable, semi perishable and non perishable foods.
- C) Factors affecting the growth of micro-organisms in the food.
- D) Intrinsic and extrinsic parameters.

Unit II

- A) Food Preservation
- B) Importance and principles of food preservation
- C) Methods of food preservation.
- D) Use of low temperature( Refrigeration and freezing)
- E) Use of high temperature( Pasteurization and sterilization)
- F) Use of preservatives.
- G) Drying.

H) Radiation.

Unit III

A) Food Fermentation

B) Microorganisms as food-SCP ( Single cell Protein)

C) Food Adulteration and its household methods of detection.

Unit IV

A) Food Additives – definition and classification.

B) General principles of the use of food additives issued by FAO, WHO.

C) Natural and synthetic preservatives.

Unit V

A) Food Laws and Standards.

B) Responsible agencies for safe food.

C) Present regulations / orders / standards related to food.

**Practical**

**M.M.50**

- A) Preparation of jams, jellies, marmalades, murrabbas, pickles, chutneys, squashes, sauce.  
B) Bottling of fruit juices.

**Paper Entrepreneurship & Motivation**

**M.M.50**

Unit I

A) \_\_\_\_\_ Concept of Entrepreneurship.

B) \_\_\_\_\_ Theories of Entrepreneurship.

Unit II

Classification and types of Entrepreneurship.

Unit III

A) \_\_\_\_\_ Creativity and Innovation.

B) \_\_\_\_\_ Entrepreneurial traits and competencies.

C) \_\_\_\_\_ Entrepreneurial orientation.

Unit IV

A) \_\_\_\_\_ Developing Entrepreneurship through training.

B) \_\_\_\_\_ Motivation

C) \_\_\_\_\_ Different motivational theories.

### Unit V

Entrepreneurship and Economic Development.

### Practical

M.M.50

Project on Entrepreneurship fulfilling following objectives.

- A) To develop skills in entrepreneurship
- B) to understand the principles of planning, organizing and controlling in different units
- C) Gain knowledge to manage manpower and establish good human relations.
- D) Gain experience in financial management

## **Paper V Extension Training & Management**

**M.M.50**

### Unit I

- A) Extension training concept.
- B) Characteristics, principles and psychological concepts used in training.
- C) Characteristics of adult learner.
- D) Factors affecting learner.

### Unit II

- A) Extension training methods - individual, group, mass contact.
- B) Participation techniques (PRA) for training.
- C) Components of training-objectives, methods, instructional materials, monitoring & evaluation.

### Unit III

- A) Training management .
- B) Meaning.
- C) Structure.
- D) System of management.

### Unit IV

- A) Functional aspects of Home Science training management .
- B) Planning.
- C) Steps.
- D) Types.
- E) Decision making process.

### Unit V

- A) Organizing human & non human resource of training.
- B) Behavioural aspects of management - motivation, leadership, strategy, creativity.
- C) Role of government and non-government agencies in regularizing training.
- D) Obstacles in management of training.

E) Role of maintaining and evaluation in training.

**Practical**

**M.M.50**

- A) Preparation of lesson plans.
- B) Development of instructional materials for the lesson.
- C) Planning and organizing group discussion.
- D) Training in use and care of equipment's for extension service including audio-visual aids.

