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CHAUDHARY CHARAN SINGH UNIVERSITY



Bachelor of Science Home Science
(Effective from ACADEMIC YEAR -2023-24)

Bindu Sharma

Ram

Prasad

Sanika

SUN

Syllabus and Scheme of Examination for B.Sc Home Science

B.SC HOME SCIENCE
THREE YEAR FULL TIME PROGRAMME



Bindu Sharma

Ramesh

Prakash

Sanika

DEPARTMENT OF HOME SCIENCE
FACULTY OF SCIENCE
CHAUDHARY CHARAN UNIVERSITY

Sanika

EXORDIUM

The objective of any programme at Higher Education Institute is to prepare their students for the society at large. Chaudhary Charan University envisions all its programmes in the best interest of their students and in this endeavour, it offers a new vision to all its Under-Graduate courses. It imbibes a Learning Outcome-based Curriculum Framework (LOCF) for all its Under Graduate programmes.

The LOCF approach is envisioned to provide a focused, outcome-based syllabus at the undergraduate level with an agenda to structure the teaching-learning experiences in a more student-centric manner. The Under-Graduate Programmes will prepare the students for both, academia and employability.

The new curriculum of B.Sc Home Science will offer the students to gain the requisite knowledge, skills and aptitude in all the areas of Home Science. Home Science has adopted an ecological approach in its curriculum that engages the student through teaching, research and extension. They gain and provide employment in research organizations, food and textile industries, dietetic practice, education and child development domains, accreditation of green buildings, strategic planning and communication technologies. They are prepared to take higher education in their specialization.

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1. Introduction to B.Sc Home Science

Home Science has contributed a great deal towards national development by training students to take up leadership roles in extension and community outreach programs. The students are encouraged to develop a scientific temper. Familiarizing them with the use of newer technologies, methods in family and community linkages and sustainable use of resources for human development are the hallmark of education in Home Science. As a discipline, Home Science integrates the ingredients of the sciences, social sciences and technology to facilitate the study of and enhance the quality of human life. Its approach is therefore inherently interdisciplinary. Traditionally, Home Science has adopted an ecological approach in its curriculum that engages the student through teaching, research and extension. The education process in Home Science underscores the importance of the individual's dynamic relationship with his/her family, community and society as a whole, as well as with the resources in the environment. Higher education learning in Home Science subjects provides students the opportunity to sharpen their capacities with a sense of social responsibility. In contemporary times, Home Scientists promote capacity building of individuals and communities for social and economic empowerment. They train community women and youth from various strata of society for entrepreneurship. Many Home Scientists have done exceptionally well as entrepreneurs themselves. They do not remain job seekers but have also become job creators. They gain and provide employment in research organizations, food and textile industries, dietetic

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practice, education and child development domains, accreditation of green buildings, strategic planning and communication technologies.

Years of national and international experience in the field has contributed to the wisdom that all the five windows of opportunity that Home Science offers be opened for i.e. Food and Nutrition, Human Development and Childhood Studies, Resource Management and Design Application, Development Communication and Extension and Fabric and Apparel Sciences. In this course, the students will learn the fundamental principles and foundations of all the five areas.

They are expected to internalize the principle of a Home Scientist, that is, to give back

to the community from which they draw, for sustainable development. This is a major contribution of Home Science in both developed and developing societies.

2. Learning Outcome Based Approach to Curriculum Planning

2.1 Nature and Extent of the Programme in B.Sc. Home Science

The degree is awarded on the basis of demonstrated achievement of outcomes of knowledge, skill and community interventions and academic standards expected from Home Science. Learning outcomes specify what graduates completing a particular programme of study are expected to know, understand and be able to do at the end of their program of study.

This approach allows for flexibility and innovation in program design and syllabi development, teaching learning process, student assessment at different levels and periodic program review.

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2.2 Aims of Bachelor Degree Programme in B.Sc. Home Science

The aims of the B.Sc. Home Science are to:

- Enable students with knowledge, skills, attitudes and values to do community work in all areas of Home Science
- Ensure global competitiveness and excellence in theory and research.
- Prepare the students for master's program in their respective specialisation.
- Train the students to take science from lab to community to improve quality of life of people.

3. Graduate Attributes in B.Sc. Home Science

Some of the characteristics attributes of B.Sc. Home Science include

- **Disciplinary Knowledge:** Students are able to demonstrate comprehensive knowledge and understanding of major concepts of the five Home Science disciplines (Food & Nutrition, Human Development & Childhood Studies, Fabric & Apparel Science, Development Communication & Extension, Resource Management & Design Application) with support of different allied subjects of Life Science, Physical Science and the Social Science.
- **Communication Skills:** Development of students' communication skills is encouraged through transaction of various Home Science messages in the community through practical. Students do various assignments that enable them to develop skills in public speaking, writing and effective interpersonal communication. This is a core

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area of the disciplines of Home Science. They listen to the community's needs and ascertain their needs.

- **Research related skills:** Students develop a scientific temper and a sense of inquiry through various Home Science courses. They have capabilities in asking relevant questions relating to current issues and themes and state hypothesis and rationale for inquiry. Students are capable of using appropriate research methodology especially for understanding community issues in Home Science and reporting the results in different formats. At UG level, they are offered theory and practical in Research Methods for further clarity.
- **Cooperation/ team work:** Students are capable of effective working in diverse contexts and teams in class rooms, laboratories, industry and the community. They have basic management skills for independently organizing events, resource mobilization and leading community based projects and initiatives.
- **Self-directed learning:** Students are capable of working independently and are able to apply Home Science concepts in an original & creative manner to solve and manage real life issues in the community and industry.
- **Multicultural competence:** Students are confident of working in diverse socio-cultural contexts. They are able to effectively engage with multicultural groups and teams. They have sensitivities of cross-cultural and ethnic diversity which they can apply to different settings. They are able to participate in international student exchange twinning programme. They seek admission in foreign universities and find their basic training excellent.

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- **Moral and ethical awareness/ reasoning:** Students are sensitized of ethical conduct in different situations (academic and personal). They have skills in understanding and avoiding unethical behavior such as misrepresentation, plagiarism and environmental misuse and violence. They are formally taught ethics of research and human interventions as a part of core paper.
- **Leadership qualities:** Students have leadership qualities in organizing teams and their mobilization for effective problem solving in Home Science areas. Students apply creative leadership for realization of various goals. As a leader, they are trained to have greater community sensitivity and connect.
- **Lifelong learning:** Students are capable of self-directed/ self-paced learning for the continued learning and holistic development for meeting their professional and personal needs in varying environment and changing contexts.

4. Qualification Descriptors for B.Sc. Home Science

Following descriptors indicate the expectations from B.Sc. Home Science -

- Demonstrate systematic, extensive and coherent knowledge in one of the five disciplines of Home Science namely Food and Nutrition, Human Development and Childhood Studies, Development Communication and Extension, Resource Management and Design Application, and Fabric and Apparel Science.
- Ensure basic understanding of all five areas to be able to work in national development programs with multi-disciplinary acumen.

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- Demonstrate skill in profession, community outreach, policy and research in their specialization area.
- Demonstrate community and laboratory-based data collection, analysis and interpretation.
- Enhance communication skills for research findings and critique of life processes in community education.
- Demonstrate subject related skills for employment opportunities.

5. Programme Learning Outcomes in B.Sc. Home Science

The learning outcome of the course are-

- Understand and appreciate the role of interdisciplinary sciences in the development and well-being of individuals, families and communities
- Understand the sciences and technologies that enhance the quality of life of people
- Acquire professional and entrepreneurial skills for economic empowerment of self in particular, and community in general
- Develop professional skills in food, nutrition, textiles, housing, product making, communication technologies and human development
- Take science from the laboratory to the people and enhance quality of life.

The academic audit enables and enhances quality in most of these outcomes.

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B.Sc Home Science

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
	IIrd Semester	
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
	IIIrd Semester	
1.	Family Dynamics	P-301

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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.	HouseHold 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
S.No.	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

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6.	Nursery School Education	P-506

S.No.	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

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B.Sc. Home Science

S.No.	1stSemester.	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			
	Total	300	200	500
	IInd Semester.			
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
	Total	300	200	500
	IIIrd Semester.			
1	Family Dynamics	50	-	50
2	Child Development	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
	Total	300	200	500

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
	Total	300	200	500
	V Semester			
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
	Total	300	200	500
	VIth Semester			
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
	Total	250	250	500
	Grand Total	1750	1250	3000

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Semester I

PAPER I ENGLISH LANGUAGE & COMMUNICATIONS 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) Precise writing

COURSE OUTCOME

1. To develop reading comprehension skill through non –technical texts.
2. Enables better decision-making by providing access to accurate and timely information.
3. To enhance the learner's communication skills by giving adequate exposure in reading, writing, speaking and listening skills.

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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) Organizational
- 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

D) To develop ability to prepare and present individualized and group instruction.

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Course outcome

1. To create engaging, effective learning experiences using available technological tools for pedagogical purposes and motivation.
2. To impart knowledge of audio-visual aids and their importance for communication.
3. To discuss the role of communication in imparting ones message to other

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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 substages.
- C) Factors affecting prenatal development

Unit V- Care of the newborn

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

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(INTERNAL ASSESSMENT)

M.M.25Marks)

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

B) Write critical evaluation of each article.

COURSE OUTCOME

1. To study different domains of development in adolescence- physical, cognitive, language and socio-emotional
2. To understand different domains of development in adulthood- physical, cognitive, language and socio-emotional
3. To familiarize the students in use of different techniques of studying various domains of development in adolescence
4. To familiarize the students in use of different techniques of studying various domains of development in adulthood

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 jaggery.

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Unit III

Cooking

- A) Various methods and principles of cooking various food stuffs— (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) Supplementa
tion

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.

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COURSE OUTCOME

1. Understand the basic concepts of food science and its applications in processing of food.
2. Gain coherent and systematic knowledge of basic food chemistry.
3. Understand role of micro-organisms in relation to processing and spoilage.
4. Understand basic principles involved in preservation and spoilage.
5. Impart knowledge about the national and international food laws
6. Perform basic sensory and objective evaluation of food.

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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

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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.

Course Outcome-

- *Understand the current state of knowledge about the functional organization of the human body.*
- *Develop insight of normal functioning of all the organ systems of the body and their interactions.*
- *Correlate physiology with various disorders and their pathogenesis.*
- *Understand and interpret common medical diagnostic tests and reports.*

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

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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 Slide Show

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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

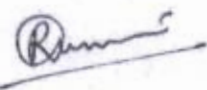
- A) Creating new word document, Open existing document, Save, Print, Page Setup, Close, Exit.
- B) Edit, View, Insert, Format, Tools menus

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

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- 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

COURSE OUTCOME-

1. Understanding the concept and input and output devices of computers
2. Learn the functional units and types of different operating system.
3. Be updated with different advanced network technology that can be used to connect different network.

SemesterII

PaperI Introduction to Textiles

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UnitI

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.

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UnitII

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, grand ellechennille. Methods of spinning.

Unit IV

Fabric Construction

A) Study on Handloom-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

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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-Waterproof, mothproof, acid and basic finishes.

Practical

M.M.50

A) Identification of textile fabrics by -visual, burning, microscopic and chemical tests.

B) Laboratory test 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.

Course Outcome-

- Describe textile fibres in terms of their production and properties
- Understand production techniques and properties of yarns
- Explain various methods of fabric construction and relate them to specific uses keeping in mind fabric properties

Recall various dyeing, printing and finishing techniques

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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 homemaker.
- 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.

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Unit IV

Family Resources

- A) Classification and characteristics of resources.
- B) Time Management - Time demand in different stages of the family life cycle.

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c) Energy Management-
Energy demands in different stages of family lifecycle, 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 situations.
- B) Making of waste material article.
- C) Making of a decorative article.
- D) Cards and bookmarks.

Course Outcome-

1. Comprehend the concept, scope and theories of management.
2. Learn decision making abilities through various management skills.
3. Learn the tools and techniques of money, time and energy management.
4. Understand classification, characteristics and management of resources

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UnitI

Simple Machines

A) Machines and their principles, efficiency, mechanical advantage, lever pulley and
axe

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

Unit III

Heating & Cooling Machines

- A) Functioning, utility and maintenance of- Heater, Iron, Water Geysers, OTG and Induction cooktop.
- 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, adapter, 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.

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- 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.

Course outcome-

1. To develop basic understanding of different physical concepts and to relate the with practical life.
2. To enhance their skills in handling different equipment.
3. Demonstrate their knowledge of the process of science by performing science practices.

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 III

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, nail paints, shampoo, sun creams and hair color, hair oil and dyes.
- B) Precautions while purchasing cosmetics and while using them.

Unit V

Paints and Vanishes

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A) Composition and Types.

B) Elementary knowledge of cement and glass.

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- A) Maintenance and handling of physical and chemical balance.
- B) Qualitative analysis of chloride, acetate, phosphate, sulphate, sulphide as acid radicals, basic radicalas aluminum, chromium, zinc, copper, iron, nickel, lead.
- c) Determination of pH
- D) Qualitative analysis of preservative-nitrate, sulphites, salicylate, benzoate.

Course Outcome-

1. The study of chemistry is important because it enables people to develop a wide variety of useful materials, such as medicines for the treatment of diseases, materials that can be used as sources of alternative energy, materials that protect the environment, and structures that are advanced in building technology.
2. Common outcomes of general chemistry should include knowledge of basic chemical concepts, strength in quantitative problem solving, preparation for higher-level course work, maturation of students' knowledge of chemistry, and application of mathematical skills.

Unit-I

Health

- A) Conceptofpositivehealth,goodhealth,mentalhealth,schoolhealth.
- B) Factorsaffectinghealth

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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, foodborne diseases-cholera, dysentery, tuberculosis, hepatitis, diarrhea.
- B) Airborne 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.

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Course Outcome-

1. Identify measures/procedures that will reduce or eliminate accidents in food preparation and service areas.
2. Present the rules of personal hygiene and the importance of adhering to safety rules and regulations.
3. Identify the types of cleaning agents and sanitizers that may be used safely in a food handling operation

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, undernutrition, dietary fiber, water, acid- base balance, electrolyte balance.

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Unit II-

A) Energy value of foods and energy requirement,

B) Basal metabolism, factors affecting basal metabolic rate, calorific 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.

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Course Outcome-

1. To provide food that will ensure the physical and mental growth of the person, his social development and well-being, with a reasonable expenditure of available resources.
2. To understand the role of nutrition in different stages of life cycle.
3. The major objectives of food management are procurement of food grains from farmers at remunerative prices, distribution of food grains to consumers, particularly the vulnerable sections of society at affordable prices and maintenance of food buffer stock for food security and price stability.

Bindu Sharma

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Sanjay

Sanjay

SW

Semester III

Paper I Family Dynamics

M.M.50

Unit I - Family

- A) Meaning, definition and structure of family.
- B) Changing trends in family constitution, roles, demand and responsibilities.
- C) nuclear and joint families - Structure, role, interaction and hierarchy of dominance in joint and nuclear families.

Unit II - Marriage and Indian Society

- A) Meaning, definition and institution of marriage.
- B) Readiness for Marriage
 - a) Psychological
 - b) Social
 - c) Physiological
 - d) Economical
- C) Preparation for Marriage
 - (a) Selecting a suitable partner
 - (b) Premarital association
 - (c) Premarital guidance and counseling

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Ramesh

Praveen

Janki

SW

Unit III-Marital Adjustment

A) Areas of adjustment within the family at different stages of family life cycle.

B) Legal aspects of marriage-

(a) Hindu law of Marriage.

(b) Muslim law of Marriage.

(c) Christian law of Marriage.

Unit IV-Families at risk-

A) Marital disharmony

B) Separation

C) Violence and distress

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Unit V

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

COURSE OUTCOME-

1. Exploring family dynamics with a young person helps you to understand their behaviour and difficulties in context and enables more effective interventions
2. Family dynamics include family alignments, hierarchies, roles, ascribed characteristics and patterns of interactions within a family.
3. Discuss the concept of family dynamics and Identify the macro level changes and its impact on Indian family.

PaperII HumanDevelopmentII

M.M.50

UnitI-EarlyChildhoodperiod

A) Physicalandmotordevelopment-
changeinheight,weight,bodyproportionandmotordevelopment.

B) Social and emotional

development:-

a)Socializationandparentchildre

lation.

b) Roleofplayactivitiesandtheoriesofplay.

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

Bindu Sharma

Ram

Praveen

Samir

Sun

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 factors affecting emotions.

Unit IV-

- A) Physically Challenged
- B) Emotionally Challenged
- C) Mentally Challenged

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Course outcome-

1. Understand emergent issues in human development and child studies with respect to human life span and culture and demonstrate the ability to transact knowledge of childhood development and culture with in every day social context and workspaces.
2. Understanding Physical, Motor, Emotional, Cognitive, Moral, Language, Personality and Social Development in childhood and adolescence. Making

students aware about importance of Play in child's life. Common behavioural problems and their remedies in various stages of life are explained which empower the students to help their dear ones and pupils to come out of their problems. By learning these students may become better parents and teachers.

3. Child psychology, Learning methods, Concept of intelligence and its measurement also form part of the syllabus which make students understand childhood in a better way.

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.

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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.

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Sanika

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- 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

COURSE OUTCOME-

1. Understand the importance, causes and impact of population growth and its distribution, translate and relate them with economic development.
2. Develop ideas of the basic characteristics of Indian economy, its potential on natural resources.
3. To explain the function of market and prices as allocative mechanisms

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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 soluble and water soluble)

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.

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- 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.

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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.

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COURSE OUTCOME

- *Develop an understanding of the principles of biochemistry (as applicable to human nutrition).*
- *Obtain an insight into chemistry of major nutrients and physiologically important biomolecules.*
- *Understand the biological processes and systems as applicable to nutrition.*
- *Apply the knowledge acquired to human nutrition and dietetics.*

Unit I-Introduction

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

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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-

Wrinkleresistant, waterresistant and repellent, flame retardant crease resistance.

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-fertilizers.

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- 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.

COURSE OUTCOME-

- 1. To impart knowledge about different fiber, yarns and fabrics along with their properties.**
2. Understand the current processes and trends, new developments and technological changes in the field of textiles and apparel.
3. Apply creative, managerial and technical skills for careers and entrepreneurship in the field of apparel and textiles

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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 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.

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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.

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E) Collection of ornamental plants and vegetables,
common Weed

COURSE OUTCOME-

1. To gain experience working in a laboratory setting and operate equipment
2. Students learn to carry out practical work, in the field and in the laboratory, interpreting plant morphology and anatomy, Plant identification, Vegetation analysis techniques
3. This course aims to educate student about the mechanism and physiology life processes in plants. It focuses on the plant nutrient uptake and translocation, photosynthesis, respiration and nitrogen metabolism.

Semester IV

Paper I Introduction to clothing construction M.M.50

Unit I

A) sewing machine and its part command 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

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A) basic seams and seams finishes

b) fullness—gathers, pleats, darts and tuck etc.

c) placket opening and its variations

D) fasteners and pockets

E) finishing of necklines—various techniques including collars

Practical

M.M.50

1. sewing techniques – basic seams and seams finishes, fullness – gathers, pleats, darts, tuck etc. 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.

Course outcome-

1. To introduce the methods of garments construction which includes drafting, cutting and sewing of garments for industrial as well as home production.
2. To explore the creative skills of candidate up to fullest potential and guide them to sketch their ideas related to apparels
3. To make students understand the relevance, specifications and importance of quality in apparel industries.
4. To sensitize the students towards their role in society for women and for rural upliftment of people.

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Unit I

Meaning, definition, working principle, use and care of household equipment in terms of - Unit I

A) Electrical-motordriven

(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, ovens simple & microwave

B) Laundry - Electric iron & its types.

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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.

Course outcome

1. provide guidelines for conservation of fuel, electricity and water while using household equipments.
2. explain the points to be kept in mind for correct use of household equipments
3. describe the factors affecting the selection of household equipments

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Unit I

A) Brief history of food microbiology and introduction to important microorganisms 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 microorganisms in foods – use of high and low temperature, dehydration, freezing, irradiation, preservation, sterilization and disinfection.

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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 microorganisms.
- 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, Saccharomyces, Alternaria, Demonstration of microbiological analysis of water, milk.

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Course outcome-

1. This course deals with characteristics, properties and biological significance of the biomolecules of life
2. Apply the knowledge to understand the microbial physiology and to identify the microorganisms
3. Understand the regulation of biochemical pathway and possible process modifications for improved control over microorganisms for microbial product synthesis.

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.

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Unit IV

A) Insect Pest-

knowledge of organism, their control and damage by cockroach, termite, grain moth, weevil, cloth moth

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 beehives and collection of honey.
- C. Insect pest management-
Natural Control, Applied Control and integrated pest management.
- D. Visit to poultry farm.

Course outcome-

- 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.

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UnitI-

A) Adolescence (13 to 18 years) – Definition,

different views

regarding the period, development tasks and character

istics.

UnitII

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

Course outcome-

1. Understand emergent issues in human development and child studies with respect to human life span and culture and demonstrate the ability to transact knowledge of childhood development and culture with in every day social context and workspaces.
2. Understanding Physical, Motor, Emotional, Cognitive, Moral, Language, Personality and Social Development in childhood and adolescence. Making students aware about importance of Play in child's life. Common behavioural problems and their remedies in various stages of life are explained which empower the students to help their dear ones and pupils to come out of their problems. By learning these students may become better parents and teachers.
3. Child psychology, Learning methods, Concept of intelligence and its measurement also form part of the syllabus which make students understand childhood in a better way.

Paper VI Community Nutrition

M.M.50

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.

Course Outcome-

1. To provide information regarding nutritional assessment. To enable students to impart nutrition education among rural and needy people.
2. To acquaint them knowledge regarding food security and government and international
3. program running in the field of community nutrition.

SEMESTER V

PAPER I THERAPEUTIC NUTRITION

M.M.50

Unit I-

A) Therapeutic Nutrition-

Importance, different types of diets, modification of normal diet 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 Association of Pediatricians).

Unit II—

A). Diets in fevers—acute and chronic.

B). Diets during underweight, 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 in Diarrhoea and constipation.

E). Diet

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

Course outcome-

- *Understand the principles of meal planning and factors affecting it.*
- *To gain understanding of the concept of arriving at nutritional requirements*
- *Develop an understanding of nutritional requirements and concerns from childhood to old age*

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.

Course Outcome-

1. Understand emergent issues in human development and child studies with respect to human life span and culture and demonstrate the ability to transact knowledge of childhood development and culture within every day social context and workspaces.
2. Understanding Physical, Motor, Emotional, Cognitive, Moral, Language, Personality and Social Development in childhood and adolescence. Making students aware about importance of Play in child's life. Common behavioural problems and their remedies in various stages of life are explained which empower the students to help their dear ones and pupils to come out of their problems. By learning these students may become better parents and teachers.

3. Child psychology, Learning methods, Concept of intelligence and its measurement also form part of the syllabus which make students understand childhood in a better way.

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.

Course Outcome-

1. **Analyze the key elements that define a community and identify major community and social issues**
2. individuals developing self-esteem and confidence, people participating in social activities to overcome social isolation.
3. increased participation in political and citizenship activities.

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). ModelMaking

Course outcome-

1. Imparting knowledge pertaining to **housing** needs, **house** plans, space planning, selection of site and construction of materials, arrangement of funds.
2. Learning time, money and energy management to live a good quality life.
3. Understanding human and non- human resources for a home. Developing managerial skills in a home maker. Introducing the concepts of values, goals and standards. Learning the process of decision making in the utilization of resources.

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) Nightsuit (Bushirt & Pyjama)

Women's Clothing- A) Plain blouse

B) Cholicut blouse

D) A-line Kurta/Salwar

Course outcome-

1. To introduce the methods of garments construction which includes drafting, cutting and sewing of garments for industrial as well as home production.
2. To introduce the basic concepts related to processing and production techniques of fibers, yarns, fabrics and other textiles products.
3. To familiarize students with the different concepts and processes of the Indian

apparel Industry.

4. To generate skills related to value addition techniques on apparels and textiles.

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 at least 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.

Course outcome-

1. aims to provide high quality care and **education** for children and a secure foundation for **learning** in an encouraging and nurturing ..
2. It consists of introduction, vision for an **Indian child**, rationale and theoretical foundation for ECCE

SEMESTER VI

PAPER 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) Handprinting—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, Chambarumal 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.

Course Outcome-

1. **Student will get basic insight of psychological aspects of clothing and fashion.**
2. . Students will develop understanding regarding the fashion movement and consumer behavior.
3. Student will be able to develop an understanding of International and national fashion brands.

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)

Unit I

- A) Food Spoilage—its causes
- B) Perishable, semiperishable and nonperishable 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.

COURSE OUTCOME

1. Understand what is canning food preservation, drying food preservation and freezing food preservation.
2. Recall food preservatives examples and can explain how they are used to preserve foods.
3. Understand how do microorganisms spoil food.

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

COURSE OUTCOME

- Acquire fundamental knowledge of menu planning and resource management in a food service establishment.
 - Develop understanding of recipe standardization and quantity food production.
 - Understand the making of a business plan for small catering establishments.
- Apply the knowledge gained for starting a successful food service unit

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 I

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

Unit I

V

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

Unit

V

- A) Organizing human & nonhuman 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.

COURSE OUTCOME

1. To impart practical based knowledge on agriculture and allied sectors
2. To impart in-depth practical knowledge in rural development
3. To provide hand hold exposure on agriculture -allied sectors like Diary, Apiculture, Fishery, Poultry science etc.
4. To disseminate different rural technologies through various extension activities

Bindu Sharma

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Home Science Courses (ANNEXURE-II)
C.C.S. UNIVERSITY, CAMPUS
(Eligibility Criteria)

1. Course Name :- B.Sc Home Science (Honours)

Duration :- 3 year programme

Eligibility :- The Candidate should have completed 10 + 2 with 45% marks in PCB/PCM/PCMB or HomeScience in 10th or 12th Class.

Proposed Fees :- Rs. 20,000/- Tuition fees + University fees (12,500 1st year & 10,500 2nd & 3rd year)
 Old fees :- Rs. 25,000/- Tuition fees + University fees (12,500/1st year and 10,500/- 2nd & 3rd year)

Programme Structure Type :- Semester

SEM.	COURSE TITLE	THEORY	PRACTICAL
First	English Language and Communication Skills	50	-
	Basics of Computer Sciences	50	50
	Applied Life Sciences	50	25
	Basics of Food & Nutrition	50	50
	Introduction to Textiles	50	50
	Life Span Development – 1	50	25
		300	200
SECOND	Applied Physical Sciences	50	50
	Management of Family Resources	50	-
	Gender, Media and Society	50	50
	Nutrition – A Life Span Approach	50	50
	Personal Finance and Consumer Studies	50	-
	Psychology for Human Development	50	50
		300	200



 Prof. Bindu Sharma, Janki, Ram, Anurag, etc.

	Textile Design	50	50
THIRD	Advanced Food Science	50	50
	Life Span Development –II	50	50
	Area/Space Planning and Design	50	-
	Human Physiology	50	-
	n Systems and Mass Media	50	50
			300
FOURTH	Nutritional Biochemistry	50	50
	Clothing Construction	50	-
	Entrepreneurship for Small Catering Units	50	50
	Information and Communication Technologies for Development	50	-
	Child Rights/Welfare in India	50	50
	Advertising and Public Relations	50	50
		300	200
FIFTH	Therapeutic Nutrition	50	50
	Family Dynamics	50	-
	Public Health Nutrition and Preventive Healthcare	50	50
	Research Methodology in Home Science	50	-
	Fashion Design Concepts	50	50
	Market Survey/Case Study in any one of the areas of Home Science	-	100
		250	250

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Dr. Bindu Sharma

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	NGO Management and CSR (Corporate Social Responsibility)	50	50
SIXTH	Socio Economic Environment	50	-
	Community Nutrition	50	-
	Internship/Project Report		300
<i>Sande</i>	<i>Sande</i> <i>Sande</i> <i>Bindu Sharma</i>	150	350

Sande

Sande

Bindu

Pitambar

Uma

1.Course Name :- B.Sc Home Science

Duration :- 3 year programme

Eligibility :- The Candidate should have completed 10 + 2 with 45% marks in PCB/PCM/PCMBor Home Science in 10th or 12th Class.

Proposed Fees :- Rs.20,000/= per year Tuition fees + University fees

(Rs.6335/- 1st year and Rs.3925/- 2ndyear & 3rd Year)

University fees Programme Structure Type :- Semester

B.Sc. Home Science

S.No.	1 st 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			
	Total	300	200	500
	IInd Semester.			
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
	Total	300	200	500

IIIrd Semester.				
1	Family Dynamics	50	-	50
2	Child Development	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
	Total	300	200	500

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