KOLHAN UNIVERSITY – CHAIBASA

POST GRADUATE PROGRAMME

CHOICE BASED CREDIT SYSTEM CBCS

SYLLABUS

M.A HOME SCIENCE
(Revised in 2020)

Course structure

Semester	Course Code	Paper Name	Credit	Total hrs.
I	CC101	Food Science	4	60
	CC102	Extension Education	4	60
	CC103	Research Methodology	4	60
	CC104	Advanced Textiles	4	60
	CC(P) 105	Practical based on theory papers	6	120
II	CC201	Statistics	4	60
	CC202	Advanced study in Human Development	4	60
	CC203	Clothing Management	4	60
	CC204	Communication process in development	4	60
	CC(P) 205	Practical based on theory papers	6	120
III	CC301	Applied physiology	4	60
	CC302	Consumer Economics	4	60
	DSE 301	Group A: Community nutrition Group B: Theories of Human development	4	60
	DSE (P) 302	Group A: Practical based on Community nutrition Group B: Practical based on Theories of Human Development	6	120
	PROJECT -1		6	120
IV	CC401	Resource Management	4	60
	CC402	Housing and Interior Design	4	60
	DSE 401	Group A: Advanced Dietetics Group B: Parenting in Early Childhood	4	60
	DSE (P) 402	Group A: Practical based on Advanced Dietetics Group B: Practical based on Parenting in Early Childhood	6	120
	PROJECT -2		6	120
		TOTAL CREDITS	92	

	M.A. HOME SCIENCE SEMESTER-I	**Total Hours 60**
	PAPER CODE CCHOSC101	
Hours 3	**Food Science**	**Full Marks:100 (70+30)**
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To provide an understanding of composition of various food stuffs
2. To familiarize with changes occurring in various foodstuffs as a result of processing and cooking
3. To enable students to use the theoretical knowledge in various applications and food preparations

Theory Unit	

1) **Introduction to food science**: Constituents of foods, properties and significance
2) **Water**: Physical properties of water, chemical nature, structure of water molecule, free and bound water, water activity
3) **Polysaccharides:**

   Starch: structure, gelatinization, characteristics of some food starches

   Cereals: structure and composition of cereal products
4) **Fats and Oils:**

   Sources, composition, functional properties of fat and uses in food preparation, fat substitutes and anti-oxidants
5) **Proteins:**

   Classification, composition, denaturation
6) **Enzymes:**

   Nature, stability and action, proteolytic enzymes, oxidases, lipases
7) **Milk and Milk products and Pulses and legumes:**

Composition, physical and functional properties, denaturation, effect of processing and storage

Dairy products: cultured milk, yoghurt, butter, cheese, concentrated and dried products, frozen desserts, dairy product substitutes

Meat, fish, egg: structure and composition

8) **Processed and traditional processed products**: jam, jelly, squash, pickles **Beverages:** synthetic and natural, carbonated and non-carbonated, coffee, tea, cocoa, confectioneries and bakery products

9) **Traditional Processed Foods:** fermented foods- cereal based, pulse based,

References:	
Foods and Nutrition	M.S. Swaminathan
Food Science	Mudambi S. R
Nutritional Science	B.Srilakshmi
आहार एवं पोषण विज्ञान	वमा´ & पांडेय
पोषण विज्ञान विज्ञान	स.प. सुखिया
आहार पोषण विज्ञान	Dr. Asha Kumari
आहार विज्ञान एवं पोषण	Dr. बृंदा सिंह
पोषण विज्ञान	Dr. बृंदा सिंह

	M.A. HOME SCIENCESEMESTER-I	**Total Hours 60**
	PAPER CODE CCHOSC102	
Hours 3	**Extension Education & Communication System**	**Full Marks:100 (70+30)**
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To enable students to understand the changing concept of extension
2. To get acquainted with the trends in extension approaches and models
3. To identify the support system development for extension education
4. To understand the process of programme planning in extension.
5. To understand the process of Communication.

Theory Unit I	**Extension Education**

1) Extension models

- Models – technology – innovation, transfer model social education model, empowerment, participation model, combination model

2) Extension approaches

- Agricultural extension, commodity, specialized, training and visit, participatory project, educational institution, integrated area, cluster and target approach

3) Support structures and their functions

Panchayat, union and DRDA, National Level Voluntary agencies like CAPART, KVIC, local level voluntary agencies, People's organization at grass roots – SHGs, elected Panchayat

4) Extension system in other countries

Sri Lanka, Indonesia, Philippines, China, Bangladesh, USA and Australia

5) Extension system in India

References:	
Extension Education	Advi Reddy
Extension for Extension Workers	Bacon EL
Handbook of extension education	B. K. Choubey
An Introduction to Extension Technology	V. S. Supe
Fundamentals of teaching Home Science	V. Chandra, A. Shah, and Joshi
Extension and Rural Welfare	O. P. Dahama
प्रसार शिक्षा	Dr. Harpalini.
प्रसार शिक्षा	Dr. बृंदा सिंह
प्रसार शिक्षा एवं संचार व्यवस्था	गीता पुªप शॉ जायस शीला शॉ
Extension and Communication	V.K. Dubey, Indira Bishnoi

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	M.A. HOME SCIENCESEMESTER-I	Total Hours 60
	PAPER CODE CCHOSC103	
Hours 3	Research Methodology	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:
To provide students understandings about the basic concepts, approaches and methods in conducting research thereby enabling them to appreciate and critique the nuances of designing a research study as well the ethical dimensions of conducting researches

Theory Unit

1. **Purpose of Research**
   Definition, objectives and significance of research
   Types of research: Scientific method: induction and deduction
   Research approaches: quantitative, qualitative and mixed

2. **Principles of Research in Quantitative and Qualitative Approaches**
   Research design: Meaning and need of research design
   Types of research design
   Sampling, methods • Concept of sampling, key differences in the two approaches • Sampling methods, sample size and sampling error
3. **Data collection**
   Methods of data collection: Interview, Questionnaire, Schedule, Observation
   Reliability and validity of measurement tools
4. Hypotheses
5. Review of Literature
6. Bibliography, End notes, foot notes and citation
7. Research report writing
8. Plagiarism
9. Research ethics
10. Areas of research in Home Science

References:	
Statistical Methods	S. P. Gupta
Samajik Shodh va sankyaki	Ravindranath Mukherjee
Taxmann's Research Methodology	Dr. Prasant Sarangi
Shodh Padhadhiyan	Dr. B. L. Fadia
Research Methodology (HINDI)	Dr. L N Koli
Research Methodology (HINDI)	Sidram Salvade
Research Methodology and Statistical Analysis (Hindi)	GPH Panel of experts
Basic statistics	B. L. Agarwal

	M.A. HOME SCIENCESEMESTER-I	Total Hours 60
	PAPER CODE CCHOSC104	
Hours 3	Advanced Textiles	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To acquaint the students about the polymers of which textile fibers are made
2. To understand the chemistry, production and fundamental properties of natural and synthetic fibers
3. To familiarize with the chemical processing from de sizing to finishing of textiles
4. To familiarize with the basic concept of clothing construction and care of clothing

Theory Unit I	Textiles

1) Fundamental and chemical concept about textile fibers

- Importance of textile chemistry and its relation with clothing and textiles
- Definition of polymers, co – polymers, oligomer, graft-copolymer, degree of polymerization, molecular weight of polymer
- Polymerization process and method of polymerization
- Orientation and crystallinity of polymer and their influence on fiber properties, general structure of textile fibers

2) Fundamental and chemical concept about textile fibers

- Importance of textile chemistry and its relation with clothing and textiles
- Definition of polymers, co – polymers, oligomer, graft-copolymer, degree of polymerization, molecular weight of polymer
- Polymerization process and method of polymerization
- Orientation and crystallinity of polymer and their influence on fiber properties, general structure of textile fibers

3) Different textile fibers

A) cellulose fibers – introduction, varieties structure (physical, chemical, microscopic), properties (physical, chemical, mechanical) of cotton, hydrocellulose, oxycellulose, mercerization, liquid ammonia treatment

Regenerated cellulose fibers – manufacturing, properties and use of viscose rayon,

cupramenium rayon, cellulose acetate, Chemistry, structure, properties and uses of other cellulose fibers – jute, linen, coir

B)) Protein fibers – chemical composition, molecular structure, physical and chemical properties of wool and silk

c) Synthetic fibers – Chemistry, raw material, manufacturing process, physical and chemical properties of polyester.

4) Yarn Manufacturing

- Principles of yarn manufacturing – yarn processing
- Yarn nomenclature and measurement – yarn numbering system
- Modern yarn production – principles of spinning in production of manmade fibers, hot and cold drawing, spun yarn, blend and bicomponent yarn

5) Principles of fabric manufacturing

- Weaving process and steps of weaving, parts of loom
- Types of weave – basic and decorative, textile designing through weaving

6) Textile finishing

- Classification, purpose/objective of finishing and types of finishing
- Preparatory/routine finishes – scanning, bleaching, mercerization, texturing, shearing, singeing etc.
- Chemical finishes – mercerization, parchmentization, durable press, ant crease/crease recovery, chlorination, wash "n' wear, etc.
- Special purpose finishes – flame retardant, water repellent, antistatic, soil relare, moth proofing, etc.

References:	
Dyeing and Chemical Technology of Textile Fibers	Trotman.E.R
Textiles	Hollen and Saddler
Textile Science: An Explanation of Fiber Properties	Gohl
Textbook of Fabric Science: Fundamentals of Finishing	SekhriSeema
वस्त्र विज्ञानं एवं परिधान	Dr. Brinda Singh
वस्त्र विज्ञानं की सिद्धांत	Reena Khanuja
वस्त्र विज्ञान की मूल सिद्धांत	G.P.Sheri
वस्त्र विज्ञानं	Pramila Varma

	M.A. HOME SCIENCESEMESTER-I	Total Hours 120
	PAPER CODE CC(P)HOSC105	
Hours 3	Practical	Full Marks:100 (70+30)
		CREDITS 6

Objectives:

1. To have practical knowledge of Food Science.
2. To enable students to know about practical approach of Home Science Extension Education System
3. To be able to construct research data collection tools
4. To acquire the ability to identify textile fibers

Practical Unit I **Food Science**

1. Use of Fermentation technique for preparation of food and recipe.
2. Preparation of food product / recipe through enrichment process.

Practical Unit II **Extension Education**

1. Preparation and Use of Audio – Visual Aids.
2. Survey of NGO such as KVK, KVIC, Gram Yuvak Kendras, Mahila Mandal.

Practical Unit III Research Methodology

1. Construct a questionnaire
2. Prepare a schedule for interview

Practical Unit IV Advanced Textiles

1. Observe textile fibers under Microscope and draw its structure.

	M.A. HOME SCIENCESEMESTER-II	**Total Hours 60**
	PAPER CODE CCHOSC201	
Hours 3	**Statistics**	**Full Marks:100 (70+30)**
	Use of simple calculator is allowed	**CREDITS 4**

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To understand the basic concepts, theories and methods in statistic
2. Learn basic statistical procedures for research and understand applications of statistical techniques for analysis and interpretation

Unit I Introduction to Statistics

1. Basic principles of statistics: Definition, Statistical data and methods, Statistics: Science or Art, limitations of statistics, Statistical methods Vs Experimental methods
2. Orientation to qualitative and quantitative research procedures

UNIT II: Organization and Presentation of Data

1. Qualitative and quantitative data- Coding & data reduction strategies
2. Collection and presentation of data- Concept of continuous and dis-continuous data, Tally mark, class limit
3. Classification of data: Meaning and objectives of classification, types of classification, frequency distribution
4. Tabulation of data: Difference between classification and tabulation, role of tabulation, parts of a table,
5. Graphic representation: Graphs, diagrams and charts - including Histogram, Bar chart, Pie chart along with the concepts of frequency polygon, o-give (Level of teaching-Intermediate), significance of diagrams and graphs, limitations of diagrams and graphs, difference between diagrams and graphs

UNIT III: Descriptive Statistics

1. Applications of descriptive statistics
2. Measures of Central tendency and Variability - Mean, median, mode (grouped & ungrouped data)
3. Objectives of averaging, requisites of good average and types of average
4. Merits and limitations of mean, median and mode
5. Correlation and regression- Scatter diagram, Correlation coefficient & Rank correlation coefficient (Spearman's) Regression Analysis. (Level of teaching- Intermediate)

References:	
Statistical Methods	S. P. Gupta
Samajik Shodh va sankyaki	Ravindranath Mukherjee
Sankhyiki Paddhvattiyan	J C Varshney
Principles of Statistics for PG strudents	Dr. S. M shukla
Research Methodology (HINDI)	Dr. L N Koli
Research Methodology (HINDI)	Sidram Salvade
Research Methodology and Statistical Analysis (Hindi)	GPH Panel of experts
Basic statistics	B. L. Agarwal

	M.A. HOME SCIENCESEMESTER-II	Total Hours 60
	PAPER CODE CCHOSC202	
Hours 3	Advanced study in Human Development	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To undertake an advanced study of the stages in Human development with special focus from prenatal development to adolescence
2. To understand the principles and factors influencing human development in these stages

Theory Unit	

1) Principles and concept of development
2) Principles of growth and development, developmental tasks
3) Basic concepts of development – maturation and learning, sensitive periods, individual differences, heredity and environment

1) Prenatal development

- Recapitulation of stages in prenatal development, genetic and environmental factors, mental conditions and teratogens

2) Infancy (Birth – 2 years)

- The new born – birth process and neonate, physical descriptions, sensory capacities and reflexes, becoming coordinated – feeding, sleeping, crying
- Early language development

3) Early Childhood (2 - 6 years)

- Transition from infancy to childhood
- Physical and motor development
- Play and social relationships – the emerging self

4) Middle Childhood (7- 11 years)

- Physical and motor development: changes and challenges
- Cognitive, moral, and language development
- Social relationships – peers, siblings and parents

5) **Adolescence**
   - The concept of adolescence in India – developmental tasks of adolescence
   - Puberty, development of primary and secondary sex characteristics, sexual needs and sexual education
   - Family, peers and friendship, interpersonal relationship
   - Juvenile delinquency, causes and prevention

6) **Adulthood**
   - Introduction, biological and cultural perception on adulthood
   - Physical continuity and changes
   - Menopause in women, health and disease

7) **Old age**
   - Changes in family life cycle
   - Health and disease
   - Physical and psychological changes

References:	
Theories of Development, Concept and Application	Crain w
Theory of Child Development: Revised formulation and Current Issues	Vasta.R
Text Book of Child Development	Devdas.R.P And Jaya.N
Child Development	Hurlock.E.B
बाल विकास	Dr. Brinda Singh
बाल विकास एवं बाल मनोविज्ञान	Dr. Brinda Singh
बाल मनोविज्ञान	जमनालाल बायती
बाल विकास	Nita Agarwal
बाल विकास	A.P. चौबे
बाल विकास	H.B.Bhisht
बाल विकास	Asha Singh
बाल विकास के मनोवैज्ञानिक आधार	R.P. Singh

	M.A. HOME SCIENCESEMESTER-II	Total Hours 60
	PAPER CODE CCHOSC203	
Hours 3	Clothing Management	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To familiarize with the basic concept of clothing construction and care of clothing
2. To know about various traditional Indian textiles and embroideries

Theory Unit Clothing

1) Factors affecting/influencing consumption of textiles and selection of fabric and garment
2) Elements and principles of design – an overview
3) Principles of clothing construction
   Taking body measurements for different types of garments
   Importance of drafting and making paper pattern
   Drafting, pattern layout, marking and cutting, stitching and handling of fabric after cutting
   Preparation of fabric for clothing construction Different
   types of figures and common fitting problems
4) Principles of washing, washing of different kinds of fabric, laundering equipment and agent, water and its softening, soaps and detergents, stain removal and its properties
5) Care, precaution and storage of garment
6) Indian traditional textiles and embroideries

References:	
Dyeing and Chemical Technology of Textile Fibers	Trotman.E.R
Textiles	Hollen and Saddler
Textile Science: An Explanation of Fiber Properties	Gohl
Textbook of Fabric Science: Fundamentals of Finishing	SekhriSeema
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वस्त्र विज्ञान की मूल सिद्धांत	G.P.Sheri
वस्त्र विज्ञानं	Pramila Varma

	M.A. HOME SCIENCESEMESTER-II	Total Hours 60
	PAPER CODE CCHOSC204	
Hours 3	Communication process in development	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To understand the process of programme planning in extension.
2. To understand the process of Communication.

Theory Unit Communication System

1. Types of Communication Systems-Concept, function and significance
2. Principles of effective Communication
3. Visual Communication
4. Media in development Communication-Role of traditional and modern media in development of Communication
5. Traditional Media-Puppetry, folk media
6. Modern media of communication-
7. Print media-books, newspapers, magazines. Leaflets and pamphlets Electronic Media-Radio, T.V, Video, and Computer based technologies Outdoor media- Exhibitions and fairs

References:	
Communication Development	Narula.U
Communication systems	A.B.Carlson
Communication systems	A.B.Carlson and Paul B.Crilly
प्रसार शिक्षा एवं संचार व्यवस्था	गीता पुष्प शॉ जायस शीला शॉ
Education and Communication for Development	O.P. Dhahama, O.P. Bhatnagar
Extension and Communication	V.K. Dubey, Indira Bishnoi

	M.A. HOME SCIENCESEMESTER-II	**Total Hours 120**
	PAPER CODE CC(P)HOSC205	
Hours 3	**Practical based on Theory**	**Full Marks:100 (70+30)**
		CREDITS 6

Objectives:

1. To acquire skill in classification and tabulating raw data.
2. To learn to prepare a few types of graphs
3. To understand the process of programme planning in extension.
4. To understand the process of Communication.
5. To do in depth analysis of a few traditional Indian Textiles
6. To know about the problems of adolescents, adults and old age persons

Unit I Statistics

1. Classify and tabulate raw data
2. Prepare a sample of all types of graphs

Unit II Advanced Human development

1. Interview a few adolescents and know their problems in various areas.
2. Find out the various problems in women due to menopause through review of literature
3. Visit old age home and organize a programme for them

Unit III Clothing Management

1. Prepare a report on any two types of traditional embroideries

Unit IV Communication System

1. Prepare Audio Visual aids and use them in a community development programme

	M.A. HOME SCIENCESEMESTER-III	Total Hours 60
	PAPER CODE CCHOSC301	
Hours 3	Applied Physiology	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To advance their understanding of some of the relevant issues and topics of human physiology
2. To enable the students to understand the integrated functions of all systems and the grounding of nutritional science in physiology
3. To understand the attractions of structure and functions in various organs and systems in diseased conditions

Theory Unit	

1) **Cell structure and functions**: cell membrane, transport across cell membrane and intercellular communication
2) **Endocrine System**: endocrine glands – structure, functions, disorders of endocrine glands, emphasis on physiology of diabetes and stress hormones
3) **Respiratory system**: Transport of oxygen and buffer system
4) **Circulatory system**: structure and functions of heart, blood pressure, heart failure, hypertension, blood formation, composition, blood clotting and hemostasis, and anemia
5) **Digestive system**: review of structure and function, digestive and absorptive functions, role of liver, pancreas and gall bladder and their dysfunction
6) **Excretory system**: structure and functions of nephron, electrolyte and acid base balance
7) **Immune system**: activation of WBC and production of anti- bodies
8) **Reproductive system**: menstrual cycle, physiological changes in pregnancy

References:	
Handbook of Physiology	Jaypee Brothers
Foundation of Anatomy and Physiology	Ross and Wilson
Parks Textbook of Preventive and Social Medicine	J.E.Park and K.Park
Review of Medical Physiology	Ganong.W.F

	M.A. HOME SCIENCESEMESTER-III	Total Hours 60
	PAPER CODE CCHOSC302	
Hours 3	Consumer Economics	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To have an overview of the consumer behaviour and the consumer movement

Unit I Consumer in Indian Market

1 Consumer, definition, and characteristics of consumer, role of consumers in the economy of a nation
2 Market, meaning, definition, characteristics and types
3 Changing business environment – tele-markets, global, e business and e commerce

Unit II Market practices and exploitation of consumer

1 Types of exploitation, causes, adulteration, packaging, labels, weights and measures, advertising and sale gimmicks
2 Consumer problem and solution

Unit III Consumer Behaviour

1 Determinants of consumer behaviour, opinion, leadership, group influence, social class and culture, consumer dissatisfaction
2 Market strategies influencing consumer behaviour
3 Guidelines for wise purchasing practices

Unit IV Consumer Protection

1 Role of consumer organization, national, regional and international
2 Role of Government agencies, legislation
3 Empowerment of consumers, consumer protection act.

References:	
Professional Management	S.K. Kapur
Homan Resource Management	M.S. Saiyadain
Dynamics of Human Resource Development	R. Dayal
Financial Management, Function, Planning,	Prophalia Et. Al.
Home Management	Vargese M.A.
Parivarik Samsadhan Prabhandh	Dr. Brinda Singh
Grih prabhandh yevam antarik sajja	Dr. Brinda Singh
Parivarik samsadhan vyavastha	Dr. Brinda Singh

	M.A. HOME SCIENCESEMESTER-III	Total Hours 60
	PAPER CODE DSE HOSC 301	
Hours 3	Group A Community Nutrition	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To enable students to understand the importance of nutrition in national progress and their significance in assessment of nutrition status and to overcome problem of malnutrition in National and International basis

1. A) **Nutrition and health in National development**.

B) **Nutrition problems confronting our country** – The causes of malnutrition in India, balance between food production and population growth.

2.Methods of assessment of nutrition status – sampling techniques, Identification of risk groups, Direct assessment – Direct survey, Anthropometry, Clinical and Biochemical estimation, Indirect Assessment – Food Balance Sheets and Agriculture data, Ecological parameters and vital statistics, use of growth chats.

3. Nutrition Intervention Schemes in India – Community lecture and demonstration, Nutrition Exhibition and Visual Aids.

4. National and International Agencies in Community Nutrition, - ICDS, SNP, AN, Midday meal program, FAO, WHO, UNICEF, CARE, AID, ICMR, CSIR, NIN, CFTRI

5. Breast Feeding and its implication, hazards of bottle feeding.

6. Weaning foods – planning, formulating and preparing – Importance of correct and timely weaning.

7. Nutrition and Infection – Relationship, Immunization and its importance.

8. Recent advances in community nutrition research – Fortification and Enrichment of foods.

References:	
Community nutrition an Entrepreneurial approach	Marie A.Boyle
Food and nutrition	M.S. Swaminathan
ManavVingyan evam samudayik poshan	Asha Kumari
Samudayon keliye Poshan	Gullybaba Publishers

	M.A. HOME SCIENCESEMESTER-III	**Total Hours 60**
	PAPER CODE DSE HOSC 301	
Hours 3	**Group B Theories of Human development**	**Full Marks:100 (70+30)**
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To understand the need for theory in human development
2. To examine historical perspective in evaluation of theory
3. To understand the practical applications of a theory
4. To critically evaluate the cross – cultural applicability of theory

Theory unit

1) **Early theories** – Locke, Rousseau
2) **Ethological theories** – Darwin, Bowlby
3) **Freud's psychoanalytic theory** – Freudian theory
4) **Learning theory** – Pavlov, skinner
5) **Cognitive development theory** – Piaget's theory, cross – cultural relevance and current status
6) **Social learning and social cognition theories** – Bandura's theory, cross – cultural relevance and current status
7) **Theories of the self** – Mead, kohut

References:	
Theories of Development, Concept and Application	Crain W
The Inner World	Karkar .S
In Search of Self in India and Japan	Ronald A
Culture and Psyche-Selected Essay	Karkar.S

	M.A. HOME SCIENCESEMESTER-III	Total Hours 120
	PAPER CODE DSE(P) HOSC 302	
Hours 3	Group A Practical Based on Community Nutrition	Full Marks:100 (70+30)
		CREDITS 6

Objectives:

1. To acquire skill in assessing nutritional status
2. To be able to develop low cost nutritious weaning foods

Practical Unit Community Nutrition

1. Assessment of nutritional status of Children using Anthropometric measurements and Diet surveys
2. Development and preparation of low-cost recipe for the population groups vulnerable to nutritional deficiencies
3. Market survey of fortified and enriched foods
4. Organize Nutrition Intervention programme in the community

	M.A. HOME SCIENCESEMESTER-III	Total Hours 120
	PAPER CODE DSE(P) HOSC 302	
Hours 3	Group A Practical Based on Theories of Human Development	Full Marks:100 (70+30)
		CREDITS 6

Objectives:

- To gain practical Knowledge of the Subject

Practical Unit Theories of Human Development

1. By interviewing adolescents find out changes-Personal and Social
2. By interviewing juvenile delinquent children find out their problems and causes.
3. Planning activities for cognitive development among children from one to ten years

	M.A. HOME SCIENCESEMESTER-III	Total Hours 60
	PAPER CODE CCHOSC401	
Hours 3	Resource Management	Full Marks:100 (70+30)
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To enable the students to acquire knowledge of the Principles of Home Management and Interior decoration.
2. To develop the ability to manage the Family Resources and Home.

Theory Unit		

1. Fundamental concepts in Management in the Home.

Introduction, meaning, scope, importance, of family life in changing world, Philosophy, Values, Standards and Goals, Decision making in family living, Nature and Role of management process.

2. Management of Family Resources

a. Introduction, classification of Family resources, meaning and importance,
b. Time management
c. Energy management, Work simplification – Techniques and studies applied at home
d. Money management Family finance management, the family's use of credit,
e. Budget
f. Savings
g. Supplementation of family income

References:	
Home Management	Dr.BeteGargaw
Home Management	Dr.Kanti Pandey
Home Management	Dr.Asha Parikh and Dr.Chandrakant Mehta
Household Management and household art	Dr.G.P.Shari
Home Management	Vargese M.A.
Parivarik Samsadhan Prabhandh	Dr. Brinda Singh
Grih prabhandh yevam antarik sajja	Dr. Brinda Singh
Parivarik samsadhan vyavastha	Dr. Brinda Singh

	M.A. HOME SCIENCESEMESTER-III	**Total Hours 60**
	PAPER CODE CCHOSC402	
Hours 3	**Interior Decoration**	**Full Marks:100 (70+30)**
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. Learn aesthetic skills in applying principles of Interior Decoration
2. Apply practical knowledge and skill in treating home decoration and commercial centres.
3. Become a good Interior Designer

Theory Unit I Interior Design

1. Importance of good taste.
2. Definition and classification of design types – i) structural (functional) ii) ornamental (decorative) – Naturalistic, stylized, Geometrical, Historical, Traditional, Modern, and Abstract
3. Elements of design - line, form, colour, texture, light, space.
4. Principles of design- balance, rhythm, proportion, harmony and emphasis.
5. Application of design principles in interiors.

Theory Unit II Colour

1. Prang colour system, Munsell colour system
2. Value and intensity
3. Pastel colours and Neutral colours
4. Warm and cool colours
5. Colour harmonies Monochromatic, Analogous, Direct complementary, Double complementary Split Complementary, triads and tetrads

Theory Unit III Accessories in Interior

1. Definition, classification, selection and placement of accessories; pictures, art, crafts, sculptures, antiques, indoor plants.
2. Flower arrangements.

Theory Unit IV Space Saving Techniques

1. Need for saving indoor space, technique such as combination/multipurpose rooms, combination/multipurpose furniture, in-built furniture
2. Techniques of creating illusion with the help of lighting effect, mirror use and colour use.

References:	
Home Management	Dr.BeteGargaw
Home Management	Dr.Kanti Pandey
Home Management	Dr.Asha Parikh and Dr.Chandrakant Mehta
Household Management and household art	Dr.G.P.Shari
Home Management	Vargese M.A.
Parivarik Samsadhan Prabhandh	Dr. Brinda Singh
Grih prabhandh yevam antarik sajja	Dr. Brinda Singh
Parivarik samsadhan vyavastha	Dr. Brinda Singh

	M.A. HOME SCIENCESEMESTER-IV	**Total Hours 60**
	PAPER CODE DSE HOSC 401	
Hours 3	**Group A Advanced Dietetics**	**Full Marks:100 (70+30)**
		CREDITS 4

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To obtain knowledge regarding metabolic processes of normal and diseased organ and tissues
2. To understand the role of dietician and gain knowledge in diet counselling and educating patients

Theory Unit	

1. **Nutrition and Diet Counselling**: Nutritional assessment of patients, Dietary Prescription and counselling follow up, patient education and diet.
2. **Routine Hospital Diet**: Pre – operative diets, study and review of hospital diet, basic concept and methods; i) Oral feeding ii) Tube feeding iii) Parenteral nutrition and intravenous feeding, diets in surgical conditions, burns and cancer.
3. **Obesity and leanness**: Causes, complications and health effects, dietary treatment and other recommendations.
4. **Diets in Fever and Infections**: Types, metabolism in fevers, general dietary considerations, diet in influenza, typhoid, fever, recurrent malaria and tuberculosis.
5. **Diets in gastritis and peptic ulcer** (gastric and duodenal): Etiology, symptoms and clinical findings, treatment, dietary notifications, adequate nutrition, amount of food, intervals of food, comically and thermally irritating foods. A four-stage diet – liquid, soft, convalescence and liberalized.
6. **Diseases of the gastro – intestinal tract**: Effect on digestion, absorption and nutritional status. Implication of diet therapy.
    - Diarrhoea, Constipation
    - Gastritis and Ulcers
    - Colitis
    - Malabsorption syndromes
    - Diarrhoea (child and adult) – Classification, modification of diet, fiber, residue, fluids, nutritional adequacy.
    - Constipation, flatulence – Dietary considerations
    - Ulcerative colitis (adults), symptoms and dietary treatment
    - Spruce, celiac disease and disaccharide intolerance and dietary treatment

7. **Diet in the disease of liver, gall bladder and pancreas:**
    - Etiology, symptoms, metabolic and nutritional implication. Dietary treatment in jaundice, hepatitis, cirrhosis of liver and hepatic coma.
    - Role of alcohol in liver diseases.
    - Dietary treatment in cholecystitis, cholelithiasis and pancreatitis.
8. **Disorders of metabolism**
    a) Diabetes mellitus – Incidence and predisposing factors.
        - Symptoms, types and test for detection
        - Metabolism in diabetes
        - Dietary treatment and meal management
        - Hypoglycemic agent, Insulin and its types
        - Complication of diabetes.

    b) Gout – Nature and occurrence of uric acid, causes, symptoms and diet.
9. **Diet in renal diseases**
   Basic renal function – Etiology, symptoms, metabolic and nutritional implication and dietary treatment
10. **Diet in Cardio – Vascular diseases**: Role of Nutrition in cardiac efficiency
    - Atherosclerosis – incident and dietary principles.
    - Hyperlipidemia and hypertension – dietary treatment, dietary management of acute and chronic diseases of the heart, Sodium Restricted diets, level of Sodium restriction, source of Sodium and danger of sodium restriction.
11. **Diet in allergy and skin disturbances** – Definition, classification, manifestation, common food allergies, test and dietary treatment.
12. **Diet and Drug interactions** – Effect of drug therapy on intake absorption and utilization of nutrients.

References:	
The nutritive value of Foods	M.S. Swaminathan
Child Nutrition	Niraj Sharma
Dietetics	B.Srilakshmi
Dietetics and Therapeutic Nutrition	B.D.Harplani
Textbook of Nutrition and Dietetics	Khanna K, Gupta S, Seth R, Passi SJ, Mahna R, Puri S
Poshan Vygyan	S.P. Sukiya
ICMR (2011) Dietary Guidelines for Indians.	Published by National Institute of Nutrition, Hyderabad.
Aahar poshan vigyan	Dr. Asha Kumari
Aahar vigyan yevam poshan	Dr. Brinda Singh
Aahar vigyan	Dr. Brinda Sing

	M.A. HOME SCIENCESEMESTER-IV	Total Hours 120
	PAPER CODE DSE HOSC 401	
Hours 3	Group B Parenting in Early Childhood	Full Marks:100 (70+30)
		CREDITS 6

Eight questions *will be set in which Question 1 will be Objective Type Question (MCQ/ True-False/ Fill in the blanks etc.) consisting 10 questions of 1 mark each and will be* ***compulsory.*** *Any* ***four*** *questions shall have to be answered by the examinees out of the remaining* ***seven*** *questions carrying* ***15 marks each***

Objectives:

1. To understand the significance of parents' role in early childhood
2. To develop skills to involve parents in early childhood programmes
3. To learn to conduct parent education programmes

Theory Unit		

1) **Introduction** – the task of parenting and the concept of parenting skills, changing concept of parenthood and childhood
2) **Individual parenting roles** – determinants of parenting behaviour, characteristics of the parenting role, the mothering role, the fathering role
3) **Concept of family, the family life cycles**
4) **Development in early childhood years –**
    - Parents' role in developing self-awareness in children
    - Family relations and communications
    - Helping the child to learn to express and control emotions
    - Helping children, discover personnel capabilities
    - Establishing routines and showing responsible behaviour
    - Learning social role and interaction with others
5) **Techniques of parent education in preschool setting**
    - Informal meeting – occasional/accidental meeting
    - Written/printed newsletters, circulars, notices, etc
    - Parent library, toy library, workshop/demonstration center
    - Parents' corner, open house
    - Large/small group meetings – home visits, individual sessions
6) **Parent education and support** – parents as family workers, personal development for parents
7) **Influence of child rearing practices, family and culture**
8) **Early experiences and developmental consequences** – optimal and non-optimal growth, influence on physical, psychomotor and cognitive growth and development

References:	
Parents Education Perspective and Approaches	Kulkarni.S
Mental Health in You	GopalKrishnan. N
Speaking of Child care, everything you wanted to know	Gupte
Child Rearing and Psycho-Social Development	Lidhop.M

	M.A. HOME SCIENCESEMESTER-IV	Total Hours 120
	PAPER CODE DSE (P) HOSC 402	
Hours 3	Group A Practical based on Advanced Dietetics	Full Marks:100 (70+30)
		CREDITS 6

Objectives:

1. To gain practical knowledge of the Subject
2. To enable students to do diet counselling
3. To develop skills in prescribing diets for various disease conditions

Practical Unit Group A Advanced Dietetics

i. Visit to hospital dietary department
ii. Dietary management of constipation, Diabetes, fever, liver disease, renal problems and heart diseases
iii. Meal planning- different types of diet
iv. Counselling- Patients of different diseases and special conditions
v. Drawing layout of hospital kitchen

	M.A. HOME SCIENCESEMESTER-III	Total Hours 60
	PAPER CODE DSE (P) HOSC 402	
Hours 3	Group B Practical based on Parenting in Early Childhood	Full Marks:100 (70+30)
		CREDITS 4

Objectives:

1. To gain practical knowledge of the Subject
2. Understand the need of ECCE Set up
3. Plan programme for Ecce settings and programme

Practical unit Group B Parenting in Early Childhood

.1. Visit to various centres, which caters to the pre-school stage (Day care Centre, balwadi, Anganwadi, mobile crèche etc

2. Preparing teaching material kit and Presentation in mock set up-
-Story and their techniques

-Types of puppets and mobiles

-Song booklets and low-cost musical instruments

-Painting, games and materials

-Picture talk and object talk, related materials

3. Arranging workshop with children through- art and creative activities

4. Visit to home of mentally challenged children.