

# **KURUKSHETRA UNIVERSITY KURUKSHETRA**



## **Scheme of Examination and Syllabus**

**For**

**Under-Graduate Programme**

**Subject: Home Science**

**Scheme - A**

**Under Multiple Entry-Exit**

**Internship and CBCS-LOCF in accordance to NEP-2020**

**w.e.f. 2023-24 (in phased manner)**

**KURUKSHETRA UNIVERSITY KURUKSHETRA**  
**Scheme of Examination For Under-Graduate Programme in Subject Home**  
**Science as per NEP 2020**

Under multiple Entry-Exit, Internship & CBCS-LOCF-CCF in accordance to  
w.e.f. 2023-24 (in phased manner)

**Home Science**  
**SEMESTER-1**

Course	Paper(s)	Nomenclature of Paper	Credits	Hours / Week	Internal marks	External Marks	Total Marks	Exam Duration
<b>CC-1</b> <b>4 credit</b>	B23-HSE-101	Home and Interior Decor'	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	4 hrs.
<b>CC-M1</b> <b>2 credit</b>	B23-HSE-102	Elementary Home Science I	1	1	10	20	30	3hrs.
		Practical	1	2	5	15	20	4hrs.
<b>MDC-1</b> <b>3 credits</b>	B23-HSE-103	Basics of Home Science I	2	2	15	35	50	3 hrs.
		Practical	1	2	5	20	25	4 hrs.
<b>AEC-1</b> <b>2 credit</b>	From available AEC-1 pool list of two credit as per NEP							
<b>SEC-1</b> <b>3 credit</b>	From Available SEC-1 pool list of two credit as per NEP							
<b>VAC-1</b> <b>2 credit</b>	From Available VAC-1 pool list of two credit as per NEP							

**SEMESTER-2**

Course	Paper(s)	Nomenclature of Paper	Credits	Hrs/ Week	Internal marks	External Marks	Total Marks	Exam Duration
<b>CC-2</b> <b>4 credit</b>	B23-HSE-201	Nutrition Science	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	4 hrs.
<b>CC-M2</b> <b>2 credit</b>	B23-HSE-202	Elementary Home Science II	1	1	10	20	30	3hrs.
		Practical	1	2	5	15	20	4hrs.
<b>MDC-2</b> <b>3 credits</b>	B23-HSE-203	Basics in Home Science II	2	2	15	35	50	3 hrs.
		Practical	1	2	5	20	25	4 hrs.
<b>AEC-2</b> <b>2 credit</b>	From Available AEC-2 pool list of two credit as per NEP							
<b>SEC-2</b> <b>3 credit</b>	From Available SEC-2 pool list of three credit as per NEP							
<b>VAC-2</b> <b>2 credit</b>	From Available VAC-2 pool list of two credit as per NEP							

**Internship of 4 credits of 4-6 weeks duration after 2nd semester**

**SEMESTER-3**

Course	Paper(s)	Nomenclature of Paper	Credits	Hours/Week	Internal marks	External Marks	Total Marks	Exam Duration
<b>CC-3 4 credit</b>	B23-HSE-301	Basics of Clothing Construction & Apparel Designing	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	4 hrs.
<b>MDC-3 3 credits</b>	B23-HSE-302	Basics in Home Science- III	2	2	15	35	50	3 hrs.
		Practical	1	2	5	20	25	4 hrs.
<b>AEC-3 2 credit</b>	From Available AEC-3 pool list of three credit as per NEP							
<b>SEC-3 3 credit</b>	From Available SEC-3 pool list of three credit as per NEP							

**SEMESTER-4**

Course	Paper(s)	Nomenclature of Paper	Credits	Hours/Week	Internal marks	External Marks	Total Marks	Exam Duration
<b>CC-4 4 credit</b>	B23-HSE-401	Advanced Apparel & Textile Designing	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	4 hrs.
<b>CC-M4(V) 4 credit</b>	From Available CC-M4(V) pool list of four credit as per NEP							
<b>AEC-4 2 credit</b>	From Available AEC-4 pool list of three credit as per NEP							
<b>VAC-3 2 credit</b>	From Available VAC-4 pool list of two credit as per NEP							

**Internship of 4 credits of 4-6 weeks duration after 4<sup>th</sup> semester (If not done in 2<sup>nd</sup> Semester)**

**SEMESTER-5**

<b>Course</b>	<b>Paper(s)</b>	<b>Nomenclature of Paper</b>	<b>Credits</b>	<b>Hours/Week</b>	<b>Internal marks</b>	<b>External Marks</b>	<b>Total Marks</b>	<b>Exam Duration</b>
<b>CC-A5 4 credit</b>	B23-HSE-501	Normal & Therapeutic Nutrition I	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	4 hrs.
<b>CC-M5(V) 4 credit</b>	From Available CC M5(V) pool list of four credit as per NEP							

**SEMESTER-6**

<b>Course</b>	<b>Paper(s)</b>	<b>Nomenclature of Paper</b>	<b>Credits</b>	<b>Hours/Week</b>	<b>Internal marks</b>	<b>External Marks</b>	<b>Total Marks</b>	<b>Exam Duration</b>
<b>CC-6 4 credit</b>	B23-HSE-601	Family Dynamics & Counseling	3	3	20	50	70	3 hrs.
		Practical	1	2	10	20	30	4 hrs.
<b>CC-M7(V) 4 credit</b>	From Available CC-M7(V) pool list of four credit as per NEP							

**Session: 2023-24****Part A - Introduction**

Subject	Bachelor of Home Science		
Semester	I		
Name of the Course	Home and Interior Décor'		
Course Code	B23-HSE- 101		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-1 (Core Course)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	Senior Secondary (10+2)		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"><li>1.To encourage experimentation with traditional and contemporary materials, technical processes and methods</li><li>2. To impart knowledge and skills for making different floor plans for different income groups.</li><li>3.To develop skills, abilities &amp; knowledge that enable artistic production &amp; creative problem solving skills.</li><li>4. To develop and apply concepts of art &amp; design to create aesthetically pleasing interiors.</li></ol> <hr/> <p>5*.To acquire professional and entrepreneurial skills like interior decoration, use of waste material and decorative pieces for economic empowerment.</p>		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5

<b>Max. Marks:100</b> <b>Internal Assessment Marks:20(T)+10(P)=30</b> <b>End Term Exam Marks: 50(T)+20(P)=70</b>		<b>Time:3hrs (T)</b> <b>4hrs(P)</b>
<b>Part B- Contents of the Course</b>		
<b><u>Instructions for Paper- Setter</u></b> The examiner will set nine questions in all, selecting four questions from each unit and one compulsory objective type question.		
<b><u>Instructions for the candidate:</u></b> The candidates will attempt five questions in all, selecting two questions from each unit as well as compulsory questions.		
<b>Unit</b>	<b>Topics</b>	<b>Contact Hours</b>
I	<ul style="list-style-type: none"> <li>➤ Interior decoration: Objectives, importance of elements of art in interior decoration.</li> <li>➤ Types of design: Structural and decorative and its Application.</li> <li>➤ Elements of art: Line, Form, Texture, Light, Pattern, Colour, Space and its Application in Interior Decoration</li> </ul>	10
II	<ul style="list-style-type: none"> <li>➤ Principles of design: Rhythm, Balance, Proportion, Emphasis, Harmony and its Application in Interior Decoration</li> <li>➤ Colour: Properties of Colour, Psychological Effect of Colour, Color Schemes and its Application in the Interior of a House.</li> <li>➤ Lighting: <ul style="list-style-type: none"> <li>a) Types and requirement for various activities</li> <li>b) Lighting fixtures in the home</li> </ul> </li> </ul>	10
III	<ul style="list-style-type: none"> <li>➤ Table setting and table manners: Informal and Formal Table Settings (Buffet Style, Indian Style Restaurant Style, Cafe Style)</li> <li>➤ Furniture: Types of Furniture, Furniture Arrangement for Different Areas (Bedroom, Drawing Room, Dining Room, Kitchen And its Types) Factors Affecting the Selection and Purchase of Furniture, Care and Maintenance of Furniture.</li> </ul>	10

IV	<ul style="list-style-type: none"> <li>➤ Flower arrangement: <ul style="list-style-type: none"> <li>a) Different types of Flower Arrangement</li> <li>b) Accessories used and points to be considered for Flower Arrangement</li> <li>c) Flower Decoration for different Occasions</li> </ul> </li> <li>➤ Furnishings: <ul style="list-style-type: none"> <li>a) Soft Furnishing (curtains, cushions, pillow and material for upholstered furniture)</li> <li>b) Wall Treatment and its types</li> <li>c) Window Treatment and Decoration</li> <li>d) Types of Floor Coverings</li> </ul> </li> </ul>	10
V*	<ul style="list-style-type: none"> <li>➤ Preparation of house plans for different income groups (manual/computer aided).</li> <li>➤ Floor decoration: Alpana and Rangoli.</li> <li>➤ Pottery Painting and Decoration.</li> <li>➤ Creating various art pieces/accessories using various types of materials and techniques like Paper cutting, Collage, Candle making, , Stone painting, Gift wrapping, Greeting cards with Decorative envelopes , Shopping bags/Decorative pouches, Accessories for Fashion Designing including Jewellery making (any 5).</li> <li>➤ Table setting and Napkin folding.</li> <li>➤ Flower arrangement for different Rooms and Occasions.</li> <li>➤ Planning color Schemes for different Rooms manual/computer aided).</li> </ul>	30

**Suggested Evaluation Methods**

<p><b>Internal Assessment:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation: 05</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:05</li> <li>● Mid-Term Exam: 10</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:10</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>	<p><b>End Term Examination:</b></p> <p><b>50</b></p> <p><b>20</b></p>
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**Part C-Learning Resources**

**Recommended Books/e-resources/LMS:**

- **Seetharaman P.(2019), Interior Design And Decoration,India:CBS.**
- **M.Pratap Rao (2020),Interior Design: Principles And Practice, India, Standard Publishers and Distributors Pvt Ltd**
- **Frida Ramstedt (2020), The Interior Design Handbook: Furnish, Decorate, and Style Your Space,Clarkson Potter publishing.**
- **Dr. Bhargava B. (2007), Principles of art,University Book House Pvt. Ltd.**
- Lawrence M, (1987), Interior Decoration, New Jersey: Chartwell Books.
- Riley &Bayen., (2003), The Elements of Design, Mitchell Beazley.
- Rutt Anna Hong (1961): Home furnishing,Wiley Eastern Pvt.Ltd.
- Bhat Pranav and Goenka Shanita (1990): The foundation of art and Design, Bombay: Lakhani Book Depot.

\*Applicable for courses having practical component.

<b>Session: 2023-24</b>			
<b>Part A - Introduction</b>			
Subject	Bachelor of Home Science		
Semester	II		
Name of the Course	Nutrition Science		
Course Code	B23- HSE-201		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-2(Core Course)		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary(10+2)		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li>1. To understand basic concepts of nutrition &amp; importance of water &amp; carbohydrates.</li> <li>2. To understand the functions, sources, requirements and effects of excess and deficiency of different nutrients.</li> <li>3. The students will be able to know the functions, sources, requirements and effects of excess and deficiency of different vitamins.</li> <li>4. To understand the functions, sources, requirements and effects of excess and deficiency of different minerals..</li> </ol> <hr/> <p>5*.To impart practical knowledge about preparation of nutrient rich and some other recipes</p>		
Credits	<b>Theory</b>	<b>Practical</b>	<b>Total</b>
	3	1	4
Contact Hours	3	2	5
<b>Max. Marks:100</b> <b>Internal Assessment Marks:20(T)+10(P)=30</b> <b>End Term Exam Marks: 50(T)+20(P)=70</b>		<b>Time:3hrs (T)</b> <b>4hrs(P)</b>	

## Part B- Contents of the Course

**Instructions for Paper- Setter :** The examiner will set nine questions in all, selecting two questions from each unit and one compulsory.

**Instructions for the Candidate:** The candidates will attempt five questions in all, selecting one question from each unit and the compulsory question as well.

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> <li>➤ Definition of Nutrition, nutrients, recommended dietary allowance, balanced diet, health., reference man &amp; reference woman and BMR-Definition and factors affecting BMR</li> <li>➤ Water: Functions and sources of water for human body</li> <li>➤ Carbohydrates: Classification, functions, sources &amp; requirement, effects of deficiency and excess (in brief)</li> <li>➤ Fibre: Types, functions, sources &amp; requirement and health problems associated with excess and deficiency of fiber</li> </ul>	10
II	<ul style="list-style-type: none"> <li>➤ Protein: Classification. functions, sources &amp; requirement</li> <li>➤ Fats/ Lipids: Classification, functions, sources and requirements and health problems associated with excess and deficiency of lipids.</li> <li>➤ Vitamins: Definition and classification of vitamins, difference between fat soluble &amp; water soluble vitamins</li> <li>➤ Fat soluble Vitamins: Functions, sources, recommended dietary allowances, effects of excess &amp; deficiency (in brief) of: Vitamin A, D, E &amp; K</li> </ul>	11
III	<ul style="list-style-type: none"> <li>➤ Functions, sources, recommended dietary allowances, effects of excess &amp; deficiency (in brief) of various water soluble vitamins : Vitamin C, Vitamin B1 (Thiamine), Vitamin B2, (Riboflavin), Vitamin B6 (Pyridoxine), Vitamin B12 (Cyanocobalamin), Niacin and Folic acid.</li> </ul>	11

IV	<ul style="list-style-type: none"> <li>➤ Definition and Classification of Minerals</li> <li>➤ Macro minerals: Functions, Sources, RDA, Effect of Excess and low intake of Calcium, Phosphorus, Magnesium, Sodium and Potassium</li> <li>➤ Micro Minerals: Functions, sources and RDA, Effect of Excess and low intake of Iron, Iodine Fluorine &amp; Zinc</li> </ul>	10
V*	<ul style="list-style-type: none"> <li>➤ Controlling Techniques: Weights and Measures, Standard and household measures for raw and cooked foods</li> <li>➤ Classify foods on the basis of nutrients:-Protein, Iron, Calcium, Vitamin A, Vitamin C</li> <li>➤ Planning, Calculation of nutritive value and Preparation of the following:             <ol style="list-style-type: none"> <li>1. Paranthas/Poories – (simple &amp; stuffed)</li> <li>2. Sandwiches</li> <li>3. Soups</li> <li>4. Desserts</li> <li>5. Sponge Cake</li> <li>6. Main Course Dishes (any 2)</li> </ol> </li> <li>➤ Planning and preparing nutrient rich dishes: Protein, calcium, iron &amp; vitamin A</li> </ul>	28
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment:</b> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation: 05</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:05</li> <li>● Mid-Term Exam: 10</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:10</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>		<b>End Term Examination:</b>  <b>50</b>  <b>20</b>
<b>Part C-Learning Resources</b>		

**Recommended Books/e-resources/LMS:**

- Srilakshmi, B. (2017). Nutrition Science. New Age International Limited, Publishers, New Delhi.
- Agarwal,A. and Udipi, S. (2014). Text Book of Human Nutrition, Jaypee Medical Publication, New Delhi.
- Bamiji, M.S.; Rao, N.P. and Reddy, V. (Editors) (1999). Textbook of Human Nutrition. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
- ICMR (2010). Nutrient Requirements and Recommended Dietary Allowance for Indians. A Report of the Expert Group of ICMR. NIN, Hyderabad.
- Maney S (2008). Foods, Facts and Principles, 3 rd Edition Published by Wiley Eastern, New Delhi.
- Mahtab, S. Bamji, Kamala Krishnasamy, Brahmam G.N.V (2012) Text Book of Human Nutrition, Third Edition, Oxford and IBH Publishing Co. P. Ltd., New Delhi.
- Sunetra Roday (2017). Food Science and Nutrition, Oxford University Press, New Delhi.
- Longvah, T, Ananthan, R., Bhaskarachary, K., Venkaiah, K (2017). Indian Food Composition Tables (IFCT), Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.
- Raina U, Kashyap S, Narula V, Thomas S Suvira, VirS, Chopra S (2010) Basic Food Preparation: A Complete Manual, 4th Edition, Orient Black Swan Ltd, Mumbai.
- Tikoo,S.S.( 2022 ).Foods and Nutrition. Modern Publishers Jullunder.

\*Applicable for courses having practical component.

<b>Session: 2023-24</b>			
<b>Part A - Introduction</b>			
Subject	Bachelor of Home Science		
Semester	III		
Name of the Course	Basics of Clothing Construction and Apparel Designing		
Course Code	B23-HSE- 301		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-3(Core Course)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	Senior secondary (10+2)		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li>1. Acquire the knowledge of application of elements of arts and principles of design in clothing construction and techniques of dress designing.</li> <li>2. Students get aware about the fabric construction techniques and Non woven fabrics.</li> <li>3. Gains information about the methods of developing design.</li> <li>4. Students understand the concept of fashion, figure types and fitting.</li> </ol> <hr/> <p>5*Students gain practical knowledge of drafting, cutting and stitching of basic children's garments.</p>		
Credits	Theory	Practical	Total
	3	1	4
Contact Hours	3	2	5
<b>Max. Marks:</b> <b>Internal Assessment Marks:20(T)+10(P)=30</b> <b>End Term Exam Marks: 50(T) +20(P) =70</b>		<b>Time:3hrs (T)</b> <b>4hrs(P)</b>	

## Part B- Contents of the Course

**Instructions for Paper-Setter:** The examiner will set nine questions in all, selecting four questions from each unit and one compulsory objective type question.

**Instructions for the candidate:** The candidates will attempt five questions in all, selecting atleast one question from each unit and the compulsory question as well.

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> <li>➤ Importance of Apparel Designing &amp; its Role in Personality Development.</li> <li>➤ Application of Elements of Arts and Principles of Designs in Clothing Construction</li> <li>➤ Types of Designs: Structural &amp; Decorative</li> <li>➤ Wardrobe Planning: Principles, Steps involved and Importance.</li> </ul>	10
II	<ul style="list-style-type: none"> <li>➤ Fabric construction :                             <ul style="list-style-type: none"> <li>● Weaving : Parts and function of loom</li> <li>● Types of weaves (plain, twill and their variation, satin and sateen weave.)</li> </ul> </li> <li>➤ Knitting : Types, characteristics, stitches used in knitting</li> <li>➤ Non wovens fabrics: Felting, bonding, netting, braiding, laces</li> </ul>	10
III	<ul style="list-style-type: none"> <li>➤ Anthropometry: Definition, Importance and Equipment required                             <ul style="list-style-type: none"> <li>● Types of Anthropometric Measurements (vertical, horizontal, girth/round measurement)</li> <li>● Care to be taken while taking Body Measurement</li> </ul> </li> <li>➤ Methods of developing Design/ Pattern:                             <ul style="list-style-type: none"> <li>● Drafting: Drafting Tools, Techniques, Advantages and Disadvantages of Drafting.</li> <li>● Paper Pattern: Types, Principles, Advantages and Disadvantages of Paper Pattern.</li> <li>● Draping: Techniques of Draping and Advantages And Disadvantages Of Draping.</li> </ul> </li> <li>➤ Preparation of Fabric: Preshrinking, Straightening The Grain, Pressing, Identify Face And Back, Square Up, Marking, Pinning, Types of Markings,</li> <li>➤ Methods And Precautions For Cutting, Sewing &amp; Finishing</li> </ul>	11

IV	<ul style="list-style-type: none"> <li>➤ Fashion: Concept , Importance and Terminology { Fad ,Style, Classic ,Silhouette Vogue ,Haute Couture, Niche ,Brand}</li> <li>➤ Fashion Cycle and Fashion Favoring and Retarding Factors</li> <li>➤ Figure Analysis and Fitting: Figure Types, Common Fitting Problems, Reason for Poor Fitting and their Remedies</li> </ul>	9
V*	<ul style="list-style-type: none"> <li>➤ Prepare Samples of Different Types Of Weaves.</li> <li>➤ Prepare a Sample of Knitting (Any Two).</li> <li>➤ Prepare a Sample Consisting of Ten Basic Embroidery Stitches : Stem Stitch, Chain Stitch, Feather Stitch, Herringbone, Stitch, Satin Stitch, Lazy Daisy Stitch, French Knots, Bullions Stitch, Cross Stitch, Long And Short Stitch.</li> <li>➤ Drafting of Child's Bodice Block.&amp; Sleeves Block.</li> <li>➤ Cutting and Stitching of Napkins, Bib, Jhabla.</li> </ul>	30
<b>Suggested Evaluation Methods</b>		
<b>Internal Assessment:</b> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation:05</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:05</li> <li>● Mid-Term Exam:10</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:10</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>		<b>End Term Examination</b> 50  20
<b>Part C-Learning Resources</b>		

**Recommended Books/e-resources/LMS:**

- Sushma Gupta, Neeru Garg and Renu Saini Test book of clothing and textiles and laundry Kalyani Pub.
- Doongaji S., Deshpande R., 1989. Basic processes and clothing construction. 2nd ed. New raj book depot, New delhi.
- Nornia D'Souza, 1998. Fabric Care, New Age International Pvt. Ltd., New Delhi
- G.J. Sumathi, 2022. Elements of fashion and apparel design, New Age International Publishers 2cc
- Ireland Patric, 1972. Basic Fashion Design, London, B.T. Bastford Ltd.
- W.S. Murphy, 2003. Textile weaving and design, Abhishek Publication.
- Hideaka Chijiwa, Colour Harmony- A Guide to creative colour combination
- Dantyagi, S. (1996). Fundamentals of Textiles and their Care. India: Orient Black swan Private Limited. D'Souza, N. (2014). Fabric Care. New Delhi: New Age International Publishers.
- Tikoo, S.S. (2022). Clothing and Textiles. Modern Publishers Jullunder.

\*Applicable for courses having practical component.

<b>Session: 2023-24</b>			
<b>Part A - Introduction</b>			
Subject	Bachelor of Home Science		
Semester	IV		
Name of the Course	Advance Apparel and Textile Designing		
Course Code	B23-HSE-401		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	CC-4(Core Course)		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	Senior secondary(10+2)		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li>1. Gain knowledge about different types of finishes given to fabrics.</li> <li>2. Get acquainted with different types of dyes and methods of dyeing.</li> <li>3. Acquire the technique of different types of printing.</li> <li>4. Equipped with the knowledge of laundry process, soap making , stiffening and bluing agents.</li> </ol> <hr/> <p>5*Students become able to do the drafting of various sleeves,collars and implement the technique of tie\ dye and printing on fabric ,and acquire knowledge of the process of stain removal.</p>		
Credits	<b>Theory</b>	<b>Practical</b>	<b>Total</b>
	3	1	4
Contact Hours	3	2	5

<b>Max. Marks:</b> <b>Internal Assessment Marks:20(T)+10(P)=30</b> <b>End Term Exam Marks: 50(T) +20(P) =70</b>	<b>Time:3hrs (T)</b> <b>4hrs(P)</b>
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**Part B- Contents of the Course**

**Instructions for Paper-Setter:**The examiner will set nine questions in all, selecting four questions from each unit and one compulsory objective type question.

**Instructions for the candidate:** The candidates will attempt five questions in all,selecting atleast one question from each unit and the compulsory question as well.

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> <li>➤ Fabric finishes: Definition and Objectives</li> <li>➤ Classification of Finishes: <ul style="list-style-type: none"> <li>• Physical: Singeing, Napping, Brushing, Shearing, sizing, Tentering, and Calendaring</li> <li>• Chemical: Mercerising, Durable finishes,</li> <li>• Special-purpose finishes: Wrinkle resistant , Water Resistant, Soil repellent, and Flame repellent</li> </ul> </li> <li>➤ Bleaching &amp; its Types.</li> </ul>	10
II	<ul style="list-style-type: none"> <li>➤ Dyeing: Definition Classification of Dyes: (in Brief):</li> <li>➤ On the Basis of Source of Dye: <ul style="list-style-type: none"> <li>• Natural: Vegetable, Animal &amp; Mineral</li> <li>• Synthetic Dye: Basic, Acidic &amp; Neutral Dye</li> </ul> </li> <li>➤ On the Basis of Method of Dyeing: Sulphur Dyes, Direct Dyes, Vat Dyes, Mordant Dyes &amp; Developed Dyes</li> <li>➤ On the Basis of Stages of Dyeing: Raw Stock Dyeing, Skein Dyeing, Cloth Dyeing</li> <li>➤ Simple Dyeing: Principles and Methods of Dyeing, Faults in Dyeing and Remedies</li> <li>➤ Resist Dyeing: Tie and Dye, Batik and Screen</li> </ul>	11

III	<ul style="list-style-type: none"> <li>➤ Printing: Definition, Classification</li> <li>➤ Methods of Printing: <ul style="list-style-type: none"> <li>• Hand Printing: Block, Stencil, Screen</li> <li>• Machine Printing: Roller, Screen, Discharge, Resist and Duplex Printing.</li> </ul> </li> <li>➤ Care (Darning, Mending &amp; Renovation) and Storage of Fabrics</li> <li>➤ Dry Cleaning: Principle, Process (In Brief) and Advantages</li> </ul>	10
IV	<ul style="list-style-type: none"> <li>➤ Laundry: Process of Laundry, Laundry Equipment and their Uses.</li> <li>➤ Stain Removal: <ul style="list-style-type: none"> <li>• Types of Stains &amp; Methods of Removing Stains( Solvent, Absorbent &amp; Chemical Methods)</li> <li>• Removal Of Different Stains( Tea, Coffee, Fruits, Blood, Oil/ Ghee, Turmeric, Colour, Egg, Ink, Iron Rust, Lipstick, Nail Paint, Sweat, Perfume &amp; Stain of Hot Iron)</li> </ul> </li> <li>➤ Soaps and Detergents: Types and Manufacture of Soap and Detergents.</li> <li>➤ Stiffening Agent and Blueing Agent.</li> </ul>	9
V*	<ul style="list-style-type: none"> <li>➤ Drafting Of Sleeves: Puff, Umbrella, Raglan, Ruffle, Kimono.</li> <li>➤ Drafting Of Collars: Baby Collar, Flat Peter Pan, Raised Peter- Pan, Chinese Band And Sailor's Collar.</li> <li>➤ Drafting And Construction Of Children's Garment Frock (Any One ) : A Line / Gathered / Party Wear.</li> <li>➤ Prepare Samples And One Article Of Tie &amp; Dye.</li> <li>➤ Prepare A Sample of Batik.</li> <li>➤ Prepare Samples of Block, Stencil And Screen Printing.</li> <li>➤ Prepare Samples of Darning, Mending (Patching) and Renovation.</li> <li>➤ Removal of Different Types of Stains : Tea, Coffee, Oil/ Ghee, Curry, Blood, Ink, Iron Rust, Lipstick, Nail Paint.</li> </ul>	30
<b>Suggested Evaluation Methods</b>		

<p><b>Internal Assessment:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation: 05</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:05</li> <li>● Mid-Term Exam: 10</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:10</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>	<p><b>End Term Examination:</b></p> <p><b>50</b></p> <p><b>20</b></p>
<p><b>Part C-Learning Resources</b></p>	
<p><b>Recommended Books/e-resources/LMS:</b></p> <ul style="list-style-type: none"> <li>➤ Sushma Gupta, Neeru Garg and Renu Saini Test book of clothing and textiles and laundry Kalyani Pub.</li> <li>➤ Doongaji S., Deshpande R., 1989. Basic processes and clothing construction. 2nd ed. New raj book depot, New delhi.</li> <li>➤ Nornia D'Souza, 1998. Fabric Care, New Age International Pvt. Ltd., New Delhi</li> <li>➤ G.J. Sumathi, 2022. Elements of fashion and apparel design, New Age International Publishers2cc</li> <li>➤ Ireland Patric, 1972. Basic Fashion Design ,London, B.T. Bastford Ltd.</li> <li>➤ W.S. Murphy, 2003. Textile weaving and design, Abhishek Publication.</li> <li>➤ Hideaka Chijiwa, Colour Harmony- A Guide to creative colour combination</li> <li>➤ Dantyagi, S. (1996). Fundamentals of Textiles and their Care. India: Orient Black swan Private Limited. D'Souza, N. (2014). Fabric Care. New Delhi: New Age International Publishers</li> <li>➤ Tikoo, S.S. ( 2022 ). Clothing and Textiles. Modern Publishers Jullunder</li> </ul>	

\*Applicable for courses having practical component.

**Session: 2023-24****Part A - Introduction**

Subject	Home Science		
Semester	I		
Name of the Course	Elementary Home Science I		
Course Code	B23-HSE-102		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VAC)	CC-M1		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	12 <sup>th</sup>		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the concept and scope of Home Science</li> <li>2. Learn about Elements and Principles of Art</li> <li>3. Acquire knowledge about the role of Food , Balanced diet and Macronutrients in Human Body</li> <li>4. Get acquainted with basic concepts of Textile fiber, Yarn and Weaving</li> <li>5. Study about the concept of Human Development and Prenatal development</li> </ol> <hr/> <p>5* Learn making of Colour wheel, Flower arrangement, Rangoli, Decorative article; Practice Weight &amp; Measures, Sewing Machine, different seams, stitches and embroideries</p>		
Credits	Theory	Practical	Total
	1	1	2
Contact Hours	1	2	3

<b>Max. Marks:50</b> <b>Internal Assessment Marks:10(T)+5(P)=15</b> <b>End Term Exam Marks: 20(T)+15(P)=35</b>		<b>Time: 1hrs (T)</b> <b>2hrs(P)</b>
<b>Part B- Contents of the Course</b>		
<b>Instructions for Paper- Setter:</b> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory.		
<b>Instructions for the Candidate:</b> The candidates will attempt five questions in all, selecting one question from each unit and the compulsory question as well.		
Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> <li>➤ Introduction to Home science: Concept and Scope</li> <li>➤ Elements of Art</li> <li>➤ Principles of Art</li> </ul>	4
II	<ul style="list-style-type: none"> <li>➤ Classification and Function of Food, Balanced Diet</li> <li>➤ Macro Nutrients: Definition, Classification, Source, Function, Daily Requirement and Deficiency of Carbohydrate, Protein, Fat</li> </ul>	4
III	<ul style="list-style-type: none"> <li>➤ Textile Fibre: Definition and Classification</li> <li>➤ Yarn: Definition, Properties and Types</li> <li>➤ Weaving: Definition, Types and Variations</li> </ul>	4
IV	<ul style="list-style-type: none"> <li>➤ Meaning, Definition, Scope and Stages of Human Development</li> <li>➤ Prenatal Development : Conception, Course of prenatal development</li> </ul>	4
V*	<ul style="list-style-type: none"> <li>➤ Draw a Colour Wheel</li> <li>➤ Making of Flower arrangement for different occasions - Fresh &amp; Dry</li> <li>➤ Making Rangolies of different types</li> <li>➤ One decorative/utility article from waste material</li> <li>➤ Study of Weights and Measures- Raw and Cooked food (Rice, dal, chapatti, egg, seasonal vegetables and fruits etc.)</li> <li>➤ Practice sewing machine, Plain seam, Run and Fell, French seam, Different necklines, Gathers, Pleats, Tucks, Basic Hand stitches for sewing.</li> </ul>	15
<b>Suggested Evaluation Methods</b>		

<b>Internal Assessment:</b>	<b>End Term Examination:</b>
➤ <b>Theory</b> <ul style="list-style-type: none"> <li>• Class Participation: 00</li> <li>• Seminar/presentation/assignment/quiz/class test etc.:05</li> <li>• Mid-Term Exam: 05</li> </ul>	<b>20</b>
➤ <b>Practical</b> <ul style="list-style-type: none"> <li>• Class Participation:</li> <li>• Seminar/Demonstration/Viva-voce/Lab records etc.:05</li> <li>• Mid-Term Exam:</li> </ul>	<b>15</b>

### **Part C-Learning Resources**

#### **Recommended Books/e-resources/LMS:**

- Varghese, M. A., Ogale, N.N., Srinivasan, K. (1917). Home Management. New Age International (P) Limited, New Delhi.
- Srilakshmi, B. (2017). Nutrition Science. New Age International Limited, Publishers, New Delhi.
- ICMR (2010). Nutrient Requirements and Recommended Dietary Allowance for Indians. A Report of the Expert Group of ICMR. NIN, Hyderabad.
- Maney S (2008). Foods, Facts and Principles, 3 rd Edition Published by Wiley Eastern, New Delhi.
- Longvah, T, Ananthan, R., Bhaskarachary, K., Venkaiah, K (2017). Indian Food Composition Tables (IFCT), Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.
- Raina U, Kashyap S, Narula V, Thomas S Suvira, VirS, Chopra S (2010). Basic Food Preparation: A Complete Manual, 4th Edition, Orient Black Swan Ltd, Mumbai.
- Bhatnagar P. (2004), Traditional Indian Costumes and Textiles, Abhishek Publications, New Delhi.
- Dawson, R. (1976). A Complete Guide to Embroidery. London & New York: Marshall Cavendish Publishers.
- Karolia, A. (2019). Traditional India Handcrafted Textiles: Techniques, Processes and Designs Vol.I and II, Niyogi books, Delhi
- Gupta, S., Garg, N., Saini, R. (2000). Text Book of Clothing & textiles, Kalyani Pub; New Delhi.
- Feldman, R., & Babu, N. (2009). Discovering the life span. New Delhi: Pearson
- Walsh, B.A., Deflorio, L., Burnham, M.M., & Weiser, D.A. (2017). Introduction to Human Development and Family Studies. NY: Routledge.
- Tikoo, S.S. (2022). Family Resource Management. Modern Publishers Jullunder.
- Tikoo, S.S. (2022). Foods and Nutrition. Modern Publishers Jullunder.
- Tikoo, S.S. (2022). Clothing and Textiles. Modern Publishers Jullunder.
- Tikoo, S.S. (2022). Human Development. Modern Publishers Jullunder.

<b>Session: 2023-24</b>	
<b>Part A - Introduction</b>	
Subject	Home Science
Semester	II
Name of the Course	Elementary of Home Science II
Course Code	B23-HSE-202
Course Type: (CC/MCC/MDC/CCM/DSEC/ VOC/DSE/PC/AEC/VAC)	CC-M2
Level of the course (As per Annexure-I)	100-199
Pre-requisite for the course (if any)	12 <sup>th</sup>
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the concept of Work Simplification and Consumer Education</li> <li>2. Acquire knowledge about the Micro Nutrients: Definition, Classification, Sources, Functions, Daily Requirements, Deficiency and Toxicity</li> <li>3. Get acquainted with basic concepts of Traditional Textile, Hand Embroideries and Stitches</li> <li>4. Understand the Concepts of Early Childhood and Adolescence</li> </ol> <hr style="width: 20%; margin-left: 0;"/> <p>5* Learn Preparing Time plans, Scrap book showing different nutrients, Articles of embroidery, Samples of Tie &amp; Dye, Block Printing and Placket Opening</p>

Credits	Theory	Practical	Total
		1	1
Contact Hours	1	2	3
<b>Max. Marks:50</b> <b>Internal Assessment Marks:10(T)+5(P)=15</b> <b>End Term Exam Marks: 20(T)+15(P)=35</b>		<b>Time: 1hrs (T)</b> <b>2hrs(P)</b>	
<b>Part B- Contents of the Course</b>			
<p><b>Instructions for Paper- Setter:</b> The examiner will set nine questions in all, selecting two questions from each unit and one compulsory.</p> <p><b>Instructions for the Candidate:</b> The candidates will attempt five questions in all, selecting one question from each unit and the compulsory question as well.</p>			
Unit	Topics		Contact Hours
I	<ul style="list-style-type: none"> <li>➤ Work simplification: Meaning and Methods</li> <li>➤ Consumer Education; Definition, Consumer Problems, Rights and Responsibilities of consumer, Consumer protection</li> </ul>		4
II	<ul style="list-style-type: none"> <li>➤ Micro Nutrients: Definition and Classification of Vitamin and Mineral</li> <li>➤ Source, Function, Daily Requirement, Deficiency and Toxicity of Vitamin: A,D, B, C</li> <li>➤ Source, Function, Daily Requirement, Deficiency and Toxicity of Minerals: Calcium, Iron, Iodine</li> </ul>		4
III	<ul style="list-style-type: none"> <li>➤ Introduction to traditional textiles of India (with reference to origin, production centres, techniques, designs and colours): Brocades, Baluchari, Jamdani, Bandhni</li> <li>➤ Introduction to Hand Embroideries of India (with reference to Motifs, Color combination, Type of thread used, Stitches): Kantha, Phulkari, Kashida, Mirrorwork (Gujarat)</li> </ul>		4
IV	<ul style="list-style-type: none"> <li>➤ Early Childhood :Characteristics, Developmental tasks and Behaviour problems</li> <li>➤ Adolescence: Characteristics, Developmental tasks and Socio emotional problems</li> </ul>		4

V*	<ul style="list-style-type: none"> <li>➤ Preparing time plans for adolescents and home makers</li> <li>➤ Preparation of scrap book showing rich sources of different nutrients from all Food Groups</li> <li>➤ Make one article of fancy embroidery using at least four stitches</li> <li>➤ Preparation of samples: Tie and Dye, Block Printing</li> <li>➤ Placket opening (continues, wrap and two piece placket)</li> </ul>	15
<b>Suggested Evaluation Methods</b>		
<p style="text-align: center;"><b>Internal Assessment:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation: 00</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:05</li> <li>● Mid-Term Exam: 05</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:05</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>		<p style="text-align: center;"><b>End Term Examination:</b></p> <p>20</p> <p>15</p>
<b>Part C-Learning Resources</b>		

<b>Recommended Books/e-resources/LMS:</b>
<ul style="list-style-type: none"> <li>➤ Varghese, M. A., Ogale, N.N., Srinivasan, K. (1917). Home Management. New Age International (P) Limited, New Delhi.</li> <li>➤ Srilakshmi, B. (2017). Nutrition Science. New Age International Limited, Publishers, New Delhi.</li> <li>➤ ICMR (2010). Nutrient Requirements and Recommended Dietary Allowance for Indians. A Report of the Expert Group of ICMR. NIN, Hyderabad.</li> <li>➤ Maney S (2008). Foods, Facts and Principles, 3 rd Edition Published by Wiley Eastern, New Delhi.</li> <li>➤ Longvah, T, Ananthan, R., Bhaskarachary, K., Venkaiah, K (2017). Indian Food Composition Tables (IFCT), Indian Council of Medical Research, National Institute of Nutrition, Hyderabad.</li> <li>➤ Raina U, Kashyap S, Narula V, Thomas S Suvira, VirS, Chopra S (2010). Basic Food Preparation: A Complete Manual, 4th Edition, Orient Black Swan Ltd, Mumbai.</li> <li>➤ Bhatnagar P. (2004), Traditional Indian Costumes and Textiles, Abhishek Publications, New Delhi.</li> <li>➤ Dawson, R. (1976). A Complete Guide to Embroidery. London &amp; New York: Marshall Cavendish Publishers.</li> <li>➤ Karolia, A. (2019), Traditional India Handcrafted Textiles: Techniques, Processes and Designs Vol.I and II, Niyogi books, Delhi</li> <li>➤ Gupta, S., Garg, N., Saini, R. (2000). Text Book of Clothing &amp; textiles, Kalyani Pub; New Delhi.</li> <li>➤ Feldman, R., &amp; Babu, N. (2009). Discovering the life span. New Delhi: Pearson</li> </ul>
<ul style="list-style-type: none"> <li>➤ Walsh, B.A., Deflorio, L., Burnham, M.M., &amp; Weiser, D.A. (2017). Introduction to</li> </ul>

Human Development and Family Studies. NY: Routledge.

- Tikoo,S.S.(2022 ).Family Resource Management. Modern Publishers Jullunder.
- Tikoo,S.S.( 2022 ).Foods and Nutrition. Modern Publishers Jullunder.
- Tikoo,S.S.( 2022 ).Clothing and Textiles. Modern Publishers Jullunder.
- Tikoo,S.S.(2022 ).Human Development. Modern Publishers Jullunder

<b>Session: 2023-24</b>			
<b>Part A - Introduction</b>			
Subject	Bachelor of Home Science		
Semester	I		
Name of the Course	Basics of Home science I		
Course Code	B23- HSE-103		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	MDC-1		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	Senior Secondary(10+2)		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li>1. To acquire knowledge of various concepts of food &amp; nutrition science.</li> <li>2. To enable the students to have basic knowledge of textiles fibres, yarn and various stitches</li> <li>3. To have knowledge of and basic concepts related to human development</li> <li>4. To have knowledge of family resource Management and extension education</li> </ol> <hr/> <p>5*.To impart practical training on various aspects of home science</p>		
Credits	Theory	Practical	Total
	2	1	3
Contact Hours	2	2	4
<b>Max. Marks: 75</b> <b>Internal Assessment Marks:15(T)+5(P)=20</b> <b>End Term Exam Marks: 35(T)+20(P)=55</b>		<b>Time:3hrs (T)</b> <b>4hrs(P)</b>	

## Part B- Contents of the Course

### Instructions for Paper- Setter

**Instructions for Paper- Setter:** The examiner will set nine questions in all, selecting four questions from each unit and one compulsory objective type question.

**Instructions for the candidate:** The candidates will attempt five questions in all, selecting atleast one question from each unit as well as compulsory questions.

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> <li>➤ Introduction to Home Science: Concept And Its Job Opportunities</li> <li>➤ Basic Terminology: Food, Nutrients, Nutrition, Health, Balanced Diet, Malnutrition (Over &amp; Undernutrition),</li> <li>➤ Classification and Function of Food</li> <li>➤ Carbohydrate, Protein, Fat: Source, Function &amp; Effect of Deficiency</li> </ul>	10
II	<ul style="list-style-type: none"> <li>➤ Definition and Classification and Uses of Textile Fibers: (Cotton, Jute, Wool, Silk, Rayon, Nylon and Polyester) .</li> <li>➤ Yarn: Definition and Classification ( Simple, Novelty and Complex).</li> <li>➤ Sewing Machine: Parts and Functions, Care and Maintenance</li> </ul>	8
III	<ul style="list-style-type: none"> <li>➤ Human Growth and Development: Meaning and Concept, Factors Influencing Growth &amp; Development</li> <li>➤ Developmental Milestones of Infancy (0-2 Years) and Early Childhood (3-6 Years):               <ul style="list-style-type: none"> <li>● Physical and Motor Development</li> <li>● Social and Emotional Development</li> <li>● Cognitive and Language Development</li> </ul> </li> </ul>	9
IV	<ul style="list-style-type: none"> <li>➤ Resource Management - Definition and Importance .</li> <li>➤ Process of Time, Energy and Money Management.</li> <li>➤ Extension Education: Meaning and Importance</li> <li>➤ Qualities of an Extension Worker</li> </ul>	9
V*	<ul style="list-style-type: none"> <li>➤ Cooking Terminology</li> <li>➤ Cooking of Following Recipes: Paratha, Pulao, Raita, Sandwich, Manchurian, Chocolates.</li> <li>➤ Basic Stitches: Hemming, Buttonhole Stitch, Blanket Stitch, Running Stitch</li> <li>➤ Prepare a Play Material for Infants/Preschoolers</li> <li>➤ Prepare Immunization Chart For a Child Up To 5 Years.</li> </ul>	28

<b>Suggested Evaluation Methods</b>	
<p><b>Internal Assessment:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation: 04</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:04</li> <li>● Mid-Term Exam: 07</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:05</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>	<p><b>End Term Examination:</b></p> <p><b>35</b></p> <p><b>20</b></p>
<b>Part C-Learning Resources</b>	
<p><b>Recommended Books/e-resources/LMS:</b></p> <ul style="list-style-type: none"> <li>➤ Srilakshmi, B. (2001) Food Science (2nd edition). New Age International Pvt. Ltd. Publishers: New Delhi.</li> <li>➤ Mudambi, S.R. and Rao S. Fundamentals of Food &amp; Nutrition. (2nd ed.) Wiley Eastern Ltd.: New Delhi.</li> <li>➤ Bamiji, M.S.; Rao, N.P. and Reddy, V. (Editors) (1999). Textbook of Human Nutrition. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.</li> <li>➤ Saraswathi, T.S. &amp; Kaur, B. (1993): The development of Children, New York: Scientific American Books.</li> <li>➤ Srivastava S., Rani K.S. (2014): Textbook of Human Development, S.Chand publication, New Delhi.</li> <li>➤ Tara L. Kuther (2022).Lifespan Development: Lives in Context. A Topical Approach,Second Edition.Western Connecticut State University, USA.</li> <li>➤ Bela Bhargava (2005). Family Resource Management and Interior decoration. Apple Printer and V.R. Printers, Jaipur.</li> <li>➤ Premalatha Mullick (2011). Textbook of Home Science, Kalyani Publishers, New Delhi.</li> <li>➤ Sushma Gupta, Neeru Garg and Amita Aggarwal (1993). Home Management, Hygiene and Physiology. Kalyani Publishers, Ludhiana.</li> <li>➤ Sushma Gupta, Neeru Garg and Renu Saini, 2013. Text book of clothing,textiles and laundry Kalyani Pub.</li> <li>➤ Ray, G.L. (2004). Extension education and Management. Kalyani Publisher, New Delhi.</li> <li>➤ Reddy, A.A.(2001).Extension Education. Bapatla : Sri Lakshmi Press.</li> </ul>	

\*Applicable for courses having practical component.

<b>Session: 2023-24</b>			
<b>Part A - Introduction</b>			
Subject	Bachelor of Home science		
Semester	II		
Name of the Course	Basics of Home science II		
Course Code	B23- HSE-203		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	MDC-2		
Level of the course (As per Annexure-I)	100-199		
Pre-requisite for the course (if any)	Senior Secondary(10+2)		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ul style="list-style-type: none"> <li>● To understand the functions, sources, requirements and effects of excess and deficiency of different nutrients</li> <li>● To gain knowledge about clothing &amp; fabric construction</li> <li>● To gain knowledge about development during childhood and adolescence.</li> <li>● To learn the relationships that characterize art and design practice and impart knowledge about consumer education</li> </ul> <p>5*.To impart practical training on various aspects of home science</p>		
Credits	<b>Theory</b>	<b>Practical</b>	<b>Total</b>
	2	1	3
Contact Hours	2	2	4
<b>Max. Marks: 75</b> <b>Internal Assessment Marks:15(T)+5(P)=20</b> <b>End Term Exam Marks: 35(T)+20(P)=55</b>		<b>Time:3hrs (T)</b> <b>4hrs(P)</b>	

## Part B- Contents of the Course

### Instructions for Paper- Setter

**Instructions for Paper- Setter:** The examiner will set nine questions in all, selecting four questions from each unit and one compulsory objective type question.

**Instructions for the candidate:** The candidates will attempt five questions in all, selecting atleast one question from each unit as well as compulsory questions.

Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"><li>➤ Micro Nutrients: Definition and Classification of Vitamin and Mineral</li><li>➤ Source, Requirement and Deficiency of Vitamin: A,D, E, K, B, C (In Brief)</li><li>➤ Source, Requirement, Deficiency of Minerals: Calcium, Iron, Iodine, Sodium, Potassium</li></ul>	7
II	<ul style="list-style-type: none"><li>➤ Factors Affecting Selection of Clothing., Weaving- Definition and Different Types of Weaves</li><li>➤ Meaning and Objectives of Application of Finishes</li><li>➤ Different Types of Finishes- Wrinkle Resistant , Water Resistant, Soil Repellent and Flame Repellent Finishes</li></ul>	8
III	<ul style="list-style-type: none"><li>➤ Major Physical , Motor, Emotional and Cognitive Development Milestones Through Middle School Age.</li><li>➤ Role of the Family and Community in Socialization of the Child.</li><li>➤ Developmental Changes During Adolescence: Social, Emotional, Cognitive and Moral Development.</li></ul>	6
IV	<ul style="list-style-type: none"><li>➤ Importance of Interior Decoration, Elements of Arts and Principles of Design. Consumer Protection Act &amp; Consumer Rights, Standardized Marks {AGMARK, FPO, WOOL MARK, ECOMARK, ISI}</li></ul>	9
*V	<ul style="list-style-type: none"><li>➤ Preparation of Vitamin Rich Recipes and Sponge Cake</li><li>➤ Prepare Samples of Basic Weaves</li><li>➤ Prepare a Teaching Aid For Children</li><li>➤ Prepare a Color Wheel</li><li>➤ Make Illustration of Following Standardized Marks: AGMARK, FPO, WOOL MARK, ECOMARK, ISI</li></ul>	30
<b>Suggested Evaluation Methods</b>		

<p><b>Internal Assessment:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation: 04</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:04</li> <li>● Mid-Term Exam: 07</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:05</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>	<p><b>End Term Examination:</b></p> <p><b>35</b></p> <p><b>20</b></p>
<p><b>Part C-Learning Resources</b></p>	
<p><b>Recommended Books/e-resources/LMS:</b></p> <ul style="list-style-type: none"> <li>➤ Srilakshmi, B. (2002). Nutrition Science. New Age International Limited, Publishers, New Delhi.</li> <li>➤ Srilakshmi, B. (2001) Food Science (2nd edition). New Age International Pvt. Ltd. Publishers: New Delhi.</li> <li>➤ Khader, V.(2011) Text book on Food Storage &amp; Preservation. Kalyani Publishers, New Delhi</li> <li>➤ Rajalakshmi, R. (1990) Applied Nutrition (3rd ed.) Oxford and IBH Pub. Co. Pvt. Ltd.: New Delhi.</li> <li>➤ Swaminathan, M. (1988). Essentials of Food and Nutrition - An Advanced Text Book Vol. I and II. (2nd ed.) BAPPCO: Bangalore.</li> <li>➤ Srivastava S., Rani K.S. (2014): Textbook of Human Development, S.Chand publication, New Delhi</li> <li>➤ Kumar,K.(1993): Study of childhood and family. In T.S Saraswathi &amp; B. Kaur (Eds).Human development and family studies in India: An agenda for research and policy New Delhi:Sage.</li> <li>➤ Bela Bhargava (2005). Family Resource Management and Interior decoration. Apple Printer and V.R. Printers, Jaipur.</li> <li>➤ Home Management- A Textbook of Home Science for Senior Students. The Educational Planning Group, Arya Publishing House, Karol Bagh, New Delhi.</li> <li>➤ Sushma Gupta, Neeru Garg and Amita Aggarwal (1993). Home Management, Hygiene and Physiology. Kalyani Publishers, Ludhiana.</li> </ul>	

\*Applicable for courses having practical component.

<b>Session: 2023-24</b>			
<b>Part A - Introduction</b>			
Subject	Bachelor of Home science		
Semester	III		
Name of the Course	Basics of Home Science III		
Course Code	B23 -HSE- 302		
Course Type: (CC/MCC/MDC/CC- M/DSEC/VOC/DSE/PC/AEC/VA C)	MDC-3		
Level of the course (As per Annexure-I	100-199		
Pre-requisite for the course (if any)	Senior Secondary(10+2)		
Course Learning Outcomes(CLO):	<p>After completing this course, the learner will be able to:</p> <ol style="list-style-type: none"> <li>1.To obtain knowledge about dietary management of diseases and modifications of normal diet for therapeutic purposes and preservation.</li> <li>2.To impart knowledge about traditional embroideries of India and stain removal</li> <li>3.To inculcate the skills of effective guidance &amp; counseling</li> <li>4.To impart knowledge about traditional embroideries of India and stain removal</li> </ol> <hr style="width: 20%; margin-left: 0;"/> <p>5*.To impart practical training on various aspects of home science</p>		
Credits	Theory	Practical	Total
	2	1	3
Contact Hours	2	2	4

<b>Max. Marks: 75</b> <b>Internal Assessment Marks:15(T)+5(P)=20</b> <b>End Term Exam Marks: 35(T)+20(P)=55</b>		<b>Time:3hrs (T)</b> <b>4hrs(P)</b>
<b>Part B- Contents of the Course</b>		
<b><u>Instructions for Paper- Setter:</u></b> The examiner will set nine questions in all, selecting four questions from each unit and one compulsory objective type question.		
<b><u>Instructions for the candidate:</u></b> The candidates will attempt five questions in all, selecting atleast one question from each unit as well as compulsory questions.		
Unit	Topics	Contact Hours
I	<ul style="list-style-type: none"> <li>➤ Meal Planning: Its Meaning &amp; Principles</li> <li>➤ Planning Diet for School Going Children &amp; Adolescents; Food Preservation</li> <li>➤ Principles and Home Scale Methods</li> </ul>	8
II	<ul style="list-style-type: none"> <li>➤ Traditional Embroideries of India: Chikankari, Phulkari, Kantha, Chamba And Kasuti.</li> <li>➤ Soaps and Detergents, Starches, Blues And Bleaches</li> <li>➤ Stain Removal-Classification of Stains, Methods of Removing Different Types of Stain</li> </ul>	7
III	<ul style="list-style-type: none"> <li>➤ Physical Changes, Health Problems and Adjustments in Old Age</li> <li>➤ Guidance: Meaning and Its Types</li> <li>➤ Skills and Characteristics of Effective Counseling</li> </ul>	9
IV	<ul style="list-style-type: none"> <li>➤ Various Color Schemes and its Application. Table Etiquettes and Table Setting – Formal and Informal</li> <li>➤ Communication- Meaning, Importance and Types</li> <li>➤ .Major Nutritional Problems in India; PEM, IDD, Anemia</li> </ul>	8
V*	<ul style="list-style-type: none"> <li>➤ Prepare a Counseling Aid for Children</li> <li>➤ Preparation of Chocolate Cake &amp; Pineapple Cake</li> <li>➤ Make Rangoli/Alpana on Floor</li> <li>➤ Prepare Samples of Embroidery Stitches / Tie &amp; Dye</li> </ul>	30
<b>Suggested Evaluation Methods</b>		

<p><b>Internal Assessment:</b></p> <ul style="list-style-type: none"> <li>➤ <b>Theory</b> <ul style="list-style-type: none"> <li>● Class Participation: 04</li> <li>● Seminar/presentation/assignment/quiz/class test etc.:04</li> <li>● Mid-Term Exam: 07</li> </ul> </li> <li>➤ <b>Practical</b> <ul style="list-style-type: none"> <li>● Class Participation:</li> <li>● Seminar/Demonstration/Viva-voce/Lab records etc.:05</li> <li>● Mid-Term Exam:</li> </ul> </li> </ul>	<p><b>End Term Examination:</b></p> <p><b>35</b></p> <p><b>20</b></p>
<p><b>Part C-Learning Resources</b></p>	
<p><b>Recommended Books/e-resources/LMS:</b></p> <ul style="list-style-type: none"> <li>➤ Srilakshmi, B. (2001) Food Science (2nd edition). New Age International Pvt. Ltd. Publishers: New Delhi.</li> <li>➤ Mudambi, S.R. and Rao S. Fundamentals of Food &amp; Nutrition. (2nd ed.) Wiley Eastern Ltd.: New Delhi.</li> <li>➤ Bamiji, M.S.; Rao, N.P. and Reddy, V. (Editors) (1999). Textbook of Human Nutrition. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.</li> <li>➤ Saraswathi, T.S. &amp; Kaur, B. (1993): The development of Children, New York: Scientific American Books.</li> <li>➤ Srivastava S., Rani K.S. (2014): Textbook of Human Development, S.Chand publication, New Delhi.</li> <li>➤ Tara L. Kuther (2022).Lifespan Development: Lives in Context. A Topical Approach,Second Edition.Western Connecticut State University, USA.</li> <li>➤ Bela Bhargava (2005). Family Resource Management and Interior decoration. Apple Printer and V.R. Printers, Jaipur.</li> <li>➤ Premalatha Mullick (2011). Textbook of Home Science, Kalyani Publishers, New Delhi.</li> <li>➤ Sushma Gupta, Neeru Garg and Amita Aggarwal (1993). Home Management, Hygiene and Physiology. Kalyani Publishers, Ludhiana.</li> <li>➤ Sushma Gupta, Neeru Garg and Renu Saini, 2013. Text book of clothing, textiles and laundry Kalyani Pub.</li> <li>➤ Ray, G.L. (2004). Extension education and Management. Kalyani Publisher, New Delhi.</li> <li>➤ Reddy, A.A.(2001).Extension Education. Bapatla : Sri Lakshmi Press.</li> </ul>	

\*Applicable for courses having practical component.