

Saurashtra University

**SYLLABUS**

**B.Sc (Home Science)  
Semester III & IV**

**W.E.F. June – 2020**

SAURASHTRA UNIVERSITY, RAJKOT ANNEXURE 'A'  
S.Y.B.H.SC. (HOME SCIENCE)  
SEMESTER – III

Semester	Paper no.	CORE/ELEC	Subject	Credits T + P	Total Credits	Hours/week
03	01	CORE	Entrepreneurship Development in Women	3+2	5	6
03	02	CORE	Meal Planning	3+2	5	6
03	04	CORE	Textile Process	3+2	5	6
03	03	CORE	General Science (Basic and Applied Chemistry)	3+2	5	6
<b>OR MAJOR FN</b>						
03	05	ELEC	Modern Cookery	3+2	5	6
03	06	ELEC	Quality Food Production & Service	3+2	5	6
<b>OR MAJOR HM</b>						
03	05	ELEC	Household Equipment	3+2	5	6
03	06	ELEC	Residential Space Design	3+2	5	6
<b>OR MAJOR GEN</b>						
03	05	ELEC	Communication Process In Development	3+2	5	6
03	06	ELEC	Early Child Care and Education	3+2	5	6
<b>OR MAJOR C.T.</b>						
03	05	ELEC	Apparel Making -1	3+2	5	6
03	06	ELEC	Dress Designing	3+2	5	6
<b>OR MAJOR H.D.</b>						
03	05	ELEC	Family And Child Welfare	3+2	5	6
03	06	ELEC	Early Child Care and Education	3+2	5	6
<b>OR MAJOR ED.EX.</b>						
03	05	ELEC	Communication Process In Development	3+2	5	6
03	06	ELEC	Programme For Urban And Rural Development	3+2	5	6
			Total	18+12	30	36

### SEMESTER – IV

Semester	Paper no.	CORE/ELEC	Subject	Credits T + P	Total Credits	Hours/week
04	01	CORE	Travel and Tourism	3+2	5	6
04	02	CORE	Public Nutrition	3+2	5	6
04	03	CORE	Organization and Management of E.C.C.E	3+2	5	6
04	04	CORE	General Science (Microbiology)	3+2	5	6
<b>OR MAJOR FN</b>						
04	05	ELEC	Diet Therapy - I	3+2	5	6
04	06	ELEC	Food Science - I	3+2	5	6
<b>OR MAJOR HM</b>						
04	05	ELEC	House Keeping	3+2	5	6
04	06	ELEC	Consumer in the Market	3+2	5	6
<b>OR MAJOR GEN</b>						
04	05	ELEC	Fashion Studies	3+2	5	6
04	06	ELEC	Communication Systems And Social Change	3+2	5	6
<b>OR Major C.T.</b>						
04	05	ELEC	Fashion Studies	3+2	5	6
04	06	ELEC	Laundry science	3+2	5	6
<b>OR MAJOR H.D.</b>						
04	05	ELEC	Methods And Materials For Working With Young Children	3+2	5	6
04	06	ELEC	Adolescent Period	3+2	5	6
<b>OR MAJOR ED.EX.</b>						
04	05	ELEC	Information Education Communication Material for Development	3+2	5	6
04	06	ELEC	Communication Systems And Social Change	3+2	5	6
			Total	18+12	30	36

Saurashtra University, Rajkot Annexure 'B'

S.Y.B.H.Sc. (Home Science)

Semester – III

Semester	Paper No.	CORE/ELEC	Subject	PM	IM	EM	TM	Credits T + P	Total Credits
03	01	CORE	Entrepreneurship Development in Women	20	30	50	100	3+2	5
03	02	CORE	Meal Planning	20	30	50	100	3+2	5
03	03	CORE	Textile Process	20	30	50	100	3+2	5
03	04	CORE	General Science III (Basic and Applied Chemistry)	20	30	50	100	3+2	5
<b>OR MAJOR FN</b>									
03	05	ELEC	Modern Cookery	20	30	50	100	3+2	5
03	06	ELEC	Quality Food Production & Service	20	30	50	100	3+2	5
<b>OR MAJOR HM</b>									
03	05	ELEC	Household Equipment	20	30	50	100	3+2	5
03	06	ELEC	Residential Space Design	20	30	50	100	3+2	5
<b>OR MAJOR GEN</b>									
03	05	ELEC	Communication Process In Development	20	30	50	100	3+2	5
03	06	ELEC	Early Child Care and Education	20	30	50	100	3+2	5
<b>OR MAJOR C.T.</b>									
03	05	ELEC	Apparel Making -1	20	30	50	100	3+2	5
03	06	ELEC	Dress Designing	20	30	50	100	3+2	5
<b>OR MAJOR H.D</b>									
03	05	ELEC	Family And Child Welfare	20	30	50	100	3+2	5
03	06	ELEC	Early Child Care and Education	20	30	50	100	3+2	5
<b>OR MAJOR ED.EX.</b>									
03	05	ELEC	Communication Process In Development	20	30	50	100	3+2	5
03	06	ELEC	Programme For Urban And Rural Development	20	30	50	100	3+2	5
			<b>Total</b>	120	180	300	600	18+12	30

Saurashtra University, Rajkot Annexure 'B'  
S.Y.B.H.Sc. (Home Science)  
Semester – IV

Semester	Paper No.	CORE/ELEC	Subject	PM	IM	EM	TM	Credits T + P	Total Credits
04	01	CORE	Travel and Tourism	20	30	50	100	3+2	5
04	02	CORE	Public Nutrition	20	30	50	100	3+2	5
04	03	CORE	Organization and Management of E.C.C.E	20	30	50	100	3+2	5
04	04	CORE	General Science IV (Microbiology)	20	30	50	100	3+2	5
<b>OR MAJOR FN</b>									
04	05	ELEC	Diet Therapy - I	20	30	50	100	3+2	5
04	06	ELEC	Food Science - I	20	30	50	100	3+2	5
<b>OR MAJOR HM</b>									
04	05	ELEC	House Keeping	20	30	50	100	3+2	5
04	06	ELEC	Consumer in the Market	20	30	50	100	3+2	5
<b>OR MAJOR GEN</b>									
04	05	ELEC	Fashion Studies	20	30	50	100	3+2	5
04	06	ELEC	Communication Systems And Social Change	20	30	50	100	3+2	5
<b>OR MAJOR C.T</b>									
04	05	ELEC	Fashion Studies	20	30	50	100	3+2	5
04	06	ELEC	Laundry science	20	30	50	100	3+2	5
<b>OR MAJOR H.D.</b>									
04	05	ELEC	Methods And Materials For Working With Young Children	20	30	50	100	3+2	5
04	06	ELEC	Adolescent Period	20	30	50	100	3+2	5
<b>OR MAJOR ED.EX.</b>									
04	05	ELEC	Information Education Communication Material for Development	20	30	50	100	3+2	5
04	06	ELEC	Communication Systems And Social Change	20	30	50	100	3+2	5
<b>Total</b>				120	180	300	600	18+12	30

PM= Practical Marks IM = Internal Marks EM = External Marks TM = total Marks

T = theory P = practical

Saurashtra University, Rajkot Annexure 'C'

S.Y.B.H.Sc. (Home Science)

Semester – III

Semester	Paper No.	CORE/ ELEC	Subject	Total Credits	PM	IM	EM	TM	External Exam Time Duration	Practical Exam Time Duration
03	01	CORE	Entrepreneurship Development in Women	5	20	30	50	100	2 Hours	3Hours
03	02	CORE	Meal Planning	5	20	30	50	100	2 Hours	3Hours
03	03	CORE	Textile Process	5	20	30	50	100	2 Hours	3Hours
03	04	CORE	General Science III (Basic and Applied Chemistry)	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR FN</b>										
03	05	ELEC	Modern Cookery	5	20	30	50	100	2 Hours	3Hours
03	06	ELEC	Quality Food Production & Service	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR HM</b>										
03	05	ELEC	Household Equipment	5	20	30	50	100	2 Hours	3Hours
03	06	ELEC	Residential Space Design	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR GEN</b>										
03	05	ELEC	Communication Process In Development	5	20	30	50	100	2 Hours	3Hours
03	06	ELEC	Early Child Care and Education	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR C.T</b>										
03	05	ELEC	Apparel Making -1	5	20	30	50	100	2 Hours	3Hours
03	06	ELEC	Dress Designing	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR H.D.</b>										
03	05	ELEC	Family And Child Welfare	5	20	30	50	100	2 Hours	3Hours
03	06	ELEC	Early Child Care and Education	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR ED.EX.</b>										
03	05	ELEC	Communication Process In Development	5	20	30	50	100	2 Hours	3Hours
03	06	ELEC	Programme For Urban And Rural Development	5	20	30	50	100	2 Hours	3Hours
				30	120	180	300	600		

S.Y.B.H.Sc. (Home Science)  
Semester – IV

Semester	Paper No.	CORE/ ELEC	Subject	Total Credits	PM	IM	EM	TM	External Exam Time Duration	Practical Exam Time Duration
04	01	CORE	Travel and Tourism	5	20	30	50	100	2 Hours	3Hours
04	02	CORE	Public Nutrition	5	20	30	50	100	2 Hours	3Hours
04	03	CORE	Organization and Management of E.C.C.E	5	20	30	50	100	2 Hours	3Hours
04	04	CORE	General Science IV (Microbiology)	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR FN</b>										
04	05	ELEC	Diet Therapy - I	5	20	30	50	100	2 Hours	3Hours
04	06	ELEC	Food Science - I	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR HM</b>										
04	05	ELEC	House Keeping	5	20	30	50	100	2 Hours	3Hours
04	06	ELEC	Consumer in the Market	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR GEN</b>										
04	05	ELEC	Fashion Studies	5	20	30	50	100	2 Hours	3Hours
04	06	ELEC	Communication Systems And Social Change	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR C.T.</b>										
04	05	ELEC	Fashion Studies	5	20	30	50	100	2 Hours	3Hours
04	06	ELEC	Laundry science	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR H.D.</b>										
04	05	ELEC	Methods And Materials For Working With Young Children	5	20	30	50	100	2 Hours	3Hours
04	06	ELEC	Adolescent Period	5	20	30	50	100	2 Hours	3Hours
<b>OR MAJOR ED.EX.</b>										
04	05	ELEC	Information Education Communication Material for Development	5	20	30	50	100	2 Hours	3Hours
04	06	ELEC	Communication Systems And Social Change	5	20	30	50	100	2 Hours	3Hours
				30	120	180	300	600		

PM= Practical Marks IM = Internal Marks EM = External Marks TM = total Marks

T = theory P = practical

**With Effect from Academic Year 2020 - 2021**

**SEMESTER III, IV**

**NOTES**

**Marks and credits distribution –**

**1) Where the Paper have 5 credits the distribution of marks are as below**

**Theory - 50 Marks**

**Practical – 20 Marks**

**Internal – 30 Marks**

**Total – 100 Marks**

**2) Theory credits – 1 hour /credit so 3 hours/week**

**Practical credits – 1.5 hours/credit, so 3 hours/Batch**

**3) Duration of Theory Examination for 50 marks – 2 hours.**

**4) Duration of Practical Examination for 20 marks – 3 hours**



<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>ENTREPRENEURSHIP DEVELOPMENT IN WOMEN</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>CORE - PAPER NO. 1</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		<b>To enables students to</b> 1. Develop Entrepreneurship Skill 2. Understand the process and procedure of setting up small enterprise 3. Develop managerial skill for entrepreneurship development.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Entrepreneurship development</b>			
		<ul style="list-style-type: none"> <li>• Entrepreneurship development among women</li> <li>• Problems and constraints of women entrepreneurship</li> <li>• Suggestions to improve working efficiency of entrepreneurship</li> <li>• Importance and need for self employment</li> </ul>			
<b>UNIT – II</b>		<b>Establishment of enterprise</b>			
		<ul style="list-style-type: none"> <li>• Quality of good entrepreneur</li> <li>• Establishment of enterprise</li> <li>• Legal aspect and procedure to establish enterprise.</li> </ul>			
<b>UNIT – III</b>		<b>Entrepreneurship programs in India</b>			
		<ul style="list-style-type: none"> <li>• Entrepreneurship Development Institute of India (E.D.I.)</li> <li>• National Institute for Entrepreneurship and small Business Development (NIESBI)</li> <li>• National Institute Development Bank of India (SIDBI)</li> <li>• Small Industry Development Organization. (SIDO)</li> <li>• National Alliance of Young Entrepreneur. (NAYE)</li> <li>• State Bank of India</li> <li>• National Small Industries Corporation National Industry of Small Industry Extension Training (NISIET)</li> <li>• Directorates of Industries of the State Government and State Small Industries Corporation.</li> <li>• Khadi and Village Industries Commission (KVIC)</li> <li>• State Financial Corporation (SFCS)</li> <li>• Jilla Udyog Kendra</li> <li>• Gujarat Agricultural Industries</li> <li>• Industrial Extension Board</li> <li>• Gujarat Industrial and Technical Consultancy Organization</li> </ul>			
<b>UNIT – IV</b>		<b>Project proposal</b>			
		<ul style="list-style-type: none"> <li>• Putting a project proposal</li> <li>• Application form</li> <li>• Viable project proposal</li> <li>• Processing of proposal</li> <li>• License and quota</li> </ul>			

	<ul style="list-style-type: none"> <li>• Registration security - Guarantee returns</li> </ul>
<b>PRACTICALS</b>	
1	Putting a project proposal
2	Training programme - 25 hours <ul style="list-style-type: none"> <li>• Catering</li> <li>• Handicraft</li> <li>• Child care (Day care, Play house)</li> <li>• Health care (Yoga, aerobics, beauty care)</li> </ul>
3	Collect information about the different E.D.P. in your Town/City.
<b>REFERENCES</b>	
1	Parekh U and Rao T.P. 1978 - Personal efficiency in developing Entrepreneurship learning system - New Delhi
2	Parekh U and Rao T.P. - Development Entrepreneurship a handbook learning system, New Delhi
3	B. S. Rathore & J. S. Saini, B. R. Gurjan - Entrepreneurial opportunities in modernizing economy abhishek publication – Chandigadh
4	Women and rural Entrepreneurship in Ind. D. D. Sharma, S. K. Dhameha Abhishekh Publication – NewDelhi
5	Indian entrepreneurship theory practice D. D.Sharma, S. K. Dhameha – Abhishekh Publication - New Delhi.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>MEAL PLANNING</b>		<b>CREDIT</b>	<b>05</b>
<b>SEMESTER</b>	<b>III</b>	<b>CORE - PAPER NO. 2</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		<p><b>This course will enable the students to</b></p> <ol style="list-style-type: none"> <li>1. Understand the importance of meal planning.</li> <li>2. Gain knowledge about dietary management in common ailments.</li> <li>3. Know about RDA and healthy food choices.</li> </ol>			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Basic concepts of meal planning</b>			
		<ul style="list-style-type: none"> <li>• Food groups and concept of balanced diet</li> <li>• Food exchange list</li> <li>• Concept of Dietary Reference Intakes</li> <li>• Factors effecting meal planning and food related behaviour</li> <li>• Dietary guidelines for Indians and food pyramid.</li> </ul>			
<b>UNIT – II</b>		<b>Nutrition during the adult years</b>			
		Physiological changes, RDA, nutritional guidelines, nutritional concerns and healthy food choices. <ul style="list-style-type: none"> <li>• Adult</li> <li>• Pregnant woman</li> <li>• Lactating mother</li> <li>• Elderly</li> </ul>			
<b>UNIT – III</b>		<b>Nutrition during childhood</b>			
		Growth and development, growth reference/ standards, RDA, nutritional guidelines, nutritional concerns and healthy food choices. <ul style="list-style-type: none"> <li>• Infants</li> <li>• Preschool children</li> <li>• School children</li> <li>• Adolescents</li> </ul>			
<b>PRACTICALS</b>					
	1	<b>Introduction to meal planning</b>			
		<ul style="list-style-type: none"> <li>• Use food exchange list</li> </ul>			
	2	<b>Planning and preparation of diets and dishes for</b>			
		<ul style="list-style-type: none"> <li>• Young adult</li> <li>• Pregnant and Lactating woman</li> <li>• Preschool child</li> <li>• School age child and adolescents</li> <li>• Elderly</li> </ul>			
	3	<b>Planning complementary foods for infants</b>			

## REFERENCES

1	Seth V and Singh K (2006). <i>Diet Planning through the Life Cycle: Part I Natural Nutrition. A Practical M rition</i> , ICMR, Hyderabad.
2	Khanna K. Gupta S. Seth R, Passi SJ, Mahna R, Puri S (2013). <i>Textbook of Nutrition and Dieteties</i> . Phoenix Publishing House Pvt. Ltd.
3	Wardlaw GM. Hampi JS. DiSilvestro RA (2204). <i>Perspectives in Nutrition</i> . 6 <sup>th</sup> edition. McGraw Hill.
4	ICMR (2011) <i>Dietary Guidelines for Indians</i> . Published by National Institute of Nutrition. Hyderabad.
5	ICMR (2010) <i>Recommended Dietary Allowances for Indians</i> . Published by National Institute of Nutrition, Hyderabad.
6	Chadha R and Mathur P eds. <i>Nutrition: A Lifecycle Approach</i> . Orient Blackswan, New Delhi. 2015.
7	ICMR (2011) <i>Dietary Guidelines for Indians</i> . Published by National Institute of Nutrition. Hyderabad.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>TEXTILE PROCESS</b>		<b>CREDIT</b>	<b>05</b> <b>(03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>CORE PAPER NO. 3</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. Impart knowledge pertaining to basic principles of dyeing, printing and finishing 2. Help develop creativity in designing for prints. 3. Impart knowledge of care and maintenance of clothes			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Dyeing</b>			
		<ul style="list-style-type: none"> <li>• History of dyeing</li> <li>• Types of dyeing</li> <li>• Application of dyeing</li> </ul>			
<b>UNIT – II</b>		<b>Printing</b>			
		<ul style="list-style-type: none"> <li>• Type of Printing</li> <li>• Screen Print</li> <li>• Block Print</li> <li>• Resist Print</li> <li>• Tie &amp; Dye ( Bandhani)</li> <li>• Discharge Print</li> </ul>			
<b>UNIT – III</b>		<b>Finishing</b>			
		<ul style="list-style-type: none"> <li>• Definition of Finishing</li> <li>• Objective of Finishing</li> <li>• Importance of Finishing</li> <li>• Type of Finishing – (1) Chemical (2) Physical (3) Special Finishing</li> </ul>			
<b>UNIT – IV</b>		<b>Bleaching</b>			
		<ul style="list-style-type: none"> <li>• Definition and Importance of Bleaching</li> <li>• Objective of Bleaching</li> <li>• Types of Bleaching - (1) Oxidizing Bleaching (2) Reducing Bleaching</li> </ul>			
<b>UNIT – V</b>		<b>Fabric construction</b>			
		<ul style="list-style-type: none"> <li>• Weaving: Parts and functions of the loom</li> <li>• Weaves : Classification, construction, characteristics and use</li> <li>• Knitting: Classification, construction, characteristics and use</li> <li>• Non woven and felts-construction, properties and use</li> </ul>			
<b>PRACTICALS</b>					
		1	Dyeing - Simple Dyeing		
		2	Batik Print		
		3	Tie & Dye		
		4	Block Print		
		5	Stencil Print ( Two way)		

6	Visit to Dye /Printing Unit.
<b>REFERENCES</b>	
1	Pattern Making Fashion Design Armstrong, H.J. , 2009 Harper Collins. Publication Inc, New York
2	Evaluating Apparel Quality Stamper, A.A., S.H. Sharp and L.B. Donell . 1996, Fairchild Publication, America

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>BASIC &amp; APPLIED CHEMISTRY</b>		<b>CREDIT</b>	<b>05</b> <b>(03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>CORE PAPER NO. 4</b>		<b>HOURS/</b> <b>WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To develop sound basis for simple chemistry needed to study nutritional aspects of food. 2. To get insight into some aspects of applied chemistry.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Elementary knowledge of Elements</b>			
		Symbols, Valency, Structure of Atoms, Compound and Mixtures, Molecular weight, Equivalent weight, Normality and Molarity			
<b>UNIT – II</b>		<b>Acid, Base and Buffer</b>			
		Definitions of Acid and Base, pH, Buffer solution and their functions, Neutralization			
<b>UNIT – III</b>		<b>Introduction to Hydrocarbons</b>			
		History, classification, Nomenclature of Hydrocarbons: Alkanes, Alkenes, Alkynes, Alcohol, Aldehyde, Ketone, carboxylic acid.			
<b>UNIT – IV</b>		<b>Chemistry of Soap and Detergents</b>			
		Introduction, Different methods of preparation of soaps and detergent powder and cake. Advantages and disadvantages of their use.			
<b>UNIT – V</b>		<b>Common Drugs</b>			
		Meaning of term with one example Analgesic, Antacid, Antibiotic, Anti-inflammatory, Laxatives and Sedatives			
<b>PRACTICALS</b>					
	1	Acid base titration: <ul style="list-style-type: none"> <li>• Titration of 0.1 N NaOH with x N HCl</li> <li>• Titration of 0.1N NaOH with x N H<sub>2</sub>SO<sub>4</sub></li> </ul>			
	2	Preparation of Liquid soap			
	3	Preparation of Soap cake			
	4	Preparation of Detergent powder			
	5	Preparation of Detergent cake			
<b>REFERENCES</b>					
	1	Inorganic Chemistry by Bahl and Tuli			
	2	Basic Chemistry by Shah, Mehta and Jadhav			

<b>B. Sc (HOME SCIENCE)</b>				
<b>YEAR</b>	<b>II</b>	<b>MODERN COOKERY</b>		<b>CREDIT</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (FN) PAPER NO. 5</b>		<b>05 (03+02)</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>
<b>OBJECTIVES</b>		1. To understand cookery as science 2. To apply science to food preparation 3. To familiarize the students with current food preparations		
<b>COURSE CONTENT: THEORY</b>				
<b>UNIT – I</b>		<b>Introduction</b>		
		<ul style="list-style-type: none"> <li>• Cookery as a science</li> <li>• Application of science to food preparation</li> <li>• Advances in food technology</li> </ul>		
<b>UNIT – II</b>		<b>Cooking Materials</b>		
		<ul style="list-style-type: none"> <li>• Foundation ingredients</li> <li>• Fats</li> <li>• Raising agents</li> <li>• Eggs</li> <li>• Salt</li> <li>• Liquid</li> <li>• Flavoring and seasoning</li> <li>• Sweetening</li> <li>• Thickening</li> </ul>		
<b>UNIT – III</b>		<b>Spices used in Indian and Western Cookery</b>		
		<ul style="list-style-type: none"> <li>• Importance of spices</li> <li>• Basic information about               <ul style="list-style-type: none"> <li>– Cloves, nutmeg, mustard, cinnamon, cardamom, pepper, red chillies, coriander, turmeric, ginger, cumin seed, fenugreek, aniseed, fennel seed, caraway seed</li> <li>– Aromatic herbs and plants</li> <li>– Parsley, thyme, capsicum, mint, bay leaves, basil, onions, garlic, shallots</li> </ul> </li> </ul>		
<b>UNIT – IV</b>		<b>Introduction, classification, nutritive value, cooking tips and serving of</b>		
		<ul style="list-style-type: none"> <li>• Beverage (Hot and Cold)</li> <li>• Soups and Sauces</li> <li>• Cereals</li> <li>• Pulses</li> <li>• Vegetables</li> <li>• Salads</li> <li>• Desserts</li> <li>• Snacks</li> <li>• Sandwiches</li> </ul>		



<b>UNIT – V</b>	<b>Bakery products</b>
	<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Ingredients used for bakery items <ul style="list-style-type: none"> <li>– Refined flour, leavening agents, salt, sugar, fat, eggs, moisturising agents, liquids, improvers and preservatives</li> </ul> </li> <li>• Points to consider while making bakery items</li> </ul>
<b>UNIT – VI</b>	<b>Use of Heat in Cookery</b>
	<ul style="list-style-type: none"> <li>• Changes of state and heat</li> <li>• Relation of boiling point to pressure</li> <li>• Kinds of heat transfer</li> <li>• Electronic heat transfer (Microwave)</li> </ul>
<b>PRACTICALS</b>	
	<b>Preparation of-</b>
1	Beverage (Hot and Cold)
2	Soups and Sauces
3	Cereals
4	Pulses
5	Vegetables
6	Salads
7	Desserts
8	Snacks
9	Sandwiches
10	Bakery items
<b>REFERENCES</b>	
1	Foundations of Food Preparation – Peckham. Macmillan Publishing Co. Inc. New York.
2	Modern Cookery Vol. I and II – Thangam E. Phillip. Orient Longman Publication.
3	“Basic Food Preparation” Department of Foods and Nutrition, Orient Longman Publication, New Delhi.
4	Bakery Science and Industry – N.K.Kamaliya, K.B.Kamaliya, Anand

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>QUALITY FOOD PRODUCTION AND SERVICE</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (FN) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To develop skills in menu planning. 2. To understand the basics of table setting. 3. To understand different styles of food service. 4. To understand the principles of food production and quality control to deliver safe food.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Setting The Table</b>			
		<ul style="list-style-type: none"> <li>• Basic principles involved in table setting</li> <li>• Placing linen , placing decoration, laying flatware, placing glassware, placing dinnerware, laying the beverage service, placing the accessories, placing serving dishes of food, setting the serving table</li> </ul>			
<b>UNIT – II</b>		<b>Serving by different methods</b>			
		Self service, Portable service, Cafeteria service, Indian service			
<b>UNIT – III</b>		<b>Etiquette at the table</b>			
		The approach to the table, the use of napkin, the use of the tools for eating; managing glasses, goblets and cups; finger foods; miscellaneous modes and manners			
<b>UNIT – IV</b>		<b>Serving Tray meals</b>			
		Setting the tray for tray meals, service when meals are eaten from trays.			
<b>UNIT – V</b>		<b>Quality food production</b>			
		Food production systems management, Production control, Safeguard in food production.			
<b>PRACTICALS</b>					
	1	Menu plan (A la carte, table de hote and cyclic menu for institution) & Setting up tables – regular (A la carte and Table de hote)			
	2	Tray service – Hospital, Airline,Railway,Breakfast,Family Meal Tray			
	4	Preparation of Punjabi, Madrasi, Chinese, Western and Fast foods and Gujarati (Two preparations each)			
	5	Food Cost Analysis.			

<b>REFERENCES</b>	
1	Foundations of Food Preparation - Peckham C. G., The Mc Millan Co.
2	Entrepreneurship and Food Service Management – MFN 007, IGNOU
4	Fundamentals of Foods & Nutrition – Neelam Buddhdev and Bhavana Vaid
5	Food and Beverage Service – Sudhir Andrews, Tata McGraw Hill Publishing Co. Ltd., New Delhi.
6	Catering Management _ Mohini Sethi and Surjeet Malhan, Wilsby Eastern Ltd., New Delhi
7	Faye K, “Meal management” The MacMillan Company, 1962.
8	Entrepreneurship and Food Service Management – MFN 007, IGNOU.
9	Andrews S “Food and Beverage Service” Tata McGraw Hill Publishing Co. Ltd., New Delhi. Shethi M and Malhan S “Catering Management” Wilsby Eastern Ltd., New Delhi

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>HOUSEHOLD EQUIPMENT</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (HM) - PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		<b>To enable students to:</b> 1. Understand domestic utilities and their availability. 2. Understand design principles for various domestic layouts. 3. Draw service layouts. 4. Learn to project from market surveys about equipment trends.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Importance of studying household equipments</b>			
<b>UNIT – II</b>		<b>Art of buying</b>			
		<ul style="list-style-type: none"> <li>• Factors affecting buying on family</li> <li>• Points to be considered for effective buying</li> </ul>			
<b>UNIT – III</b>		<b>Maintenance and care of household equipments</b>			
		Equipments made from copper, brass, bronze, steel, glass, clay etc.			
<b>UNIT – IV</b>		<b>Classification of household equipments in terms of</b>			
		<ul style="list-style-type: none"> <li>• Portable and non -portable</li> <li>• Electrical- Motor driven and heating</li> <li>• Food related (cooking, devices, cookers)</li> <li>• Laundry</li> <li>• Cleaning</li> <li>• Personal care</li> <li>• Non-electrical</li> </ul>			
<b>UNIT – V</b>		<b>Equipment design and their effect on work and body postures</b>			
<b>UNIT – VI</b>		<b>Problems of consumer and their solutions</b>			
<b>PRACTICALS</b>					
		1	Operative principle of working to be shown as live demonstration		
		2	To teach the use of household electrical equipments <ul style="list-style-type: none"> <li>• Washing Machine</li> <li>• Vacuum Cleaner</li> <li>• Microwave Oven</li> <li>• OTG</li> </ul>		
		3	Market survey of household equipments		
		4	To learn the use of non electrical household equipments to save energy, time and money <ul style="list-style-type: none"> <li>• Solar cooker</li> <li>• Solar heater etc.</li> </ul>		

**REFERENCES**

1	Bellani and Bellani :Practical Physical (Unit V, VI)
2	Peet L.J. Picket M.S. and M.G. (1960) Household Equipment, John Willey and Sons Inc(I-VI)
3	Peet L.J. Picket M.S. (1979) Household Equipment 7 <sup>th</sup> and 8 <sup>th</sup> Edn. John Willey and Sons Inc
4	Bhimd R.H. and Sharma, G.M. (1986): Practical Physics : 2 <sup>nd</sup> Edn. Pragati Prakshan, Bombay
5	Sule P.S. and Swant. K.A. (1979) Practical Physics Lokmitra Press Bombay.
6	Neha Shah- Gruh Upkarano ni Gita, Divine Publications, Ahmedabad

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>RESIDENTIAL SPACE DESIGN</b>		<b>CREDIT</b>	<b>05</b> <b>(03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (HM) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. Gain knowledge in principles of planning various types of residential space 2. Be able to choose materials keeping the financial consideration in mind 3. Develop the skill of drawing house plans.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Family’s housing needs</b>			
		Protective, Economic, Affectional, Social, Standard of living, Housing goal, Style, Function, Occupation.			
<b>UNIT – II</b>		<b>Factors influencing selection and purchase of site for housing</b>			
		Legal aspect, Location, Physical features, Soil condition, Cost, Services			
<b>UNIT – III</b>		<b>House Planning</b>			
		<ul style="list-style-type: none"> <li>• Principle of House Plan :               <ul style="list-style-type: none"> <li>– Grouping of rooms, Orientation, Circulation, Flexibility, Privacy, spaciousness, Services, Aesthetics, Economy, Light and Ventilations</li> </ul> </li> <li>• Planning Different Rooms :               <ul style="list-style-type: none"> <li>– Living room, Dinning Room, Bedroom, Kitchen, Store Room, Toilet, Staircase, Passage</li> </ul> </li> </ul>			
<b>UNIT – IV</b>		<b>Financial Consideration</b>			
		<ul style="list-style-type: none"> <li>• Availability of Fund for Housing :               <ul style="list-style-type: none"> <li>– Housing Development Finance Corporation - HDFC, Co-operative Housing Society, Life Insurance Corporation, Co-operative Banks</li> </ul> </li> <li>• Mortgage to Government :               <ul style="list-style-type: none"> <li>– Private Mortgage, Gujarat Rural and Urban Development Housing GRUH, Housing and Urban Development Co-operation – HUDCO</li> </ul> </li> </ul>			
<b>UNIT – V</b>		<b>Housing problem in India</b>			
		Urban/Rural Housing problem, Causes and remedial measures			
<b>PRACTICALS</b>					
		1	Drawing House plans with standard specification (On graph paper)		
		2	Visit to a housing financial agency		
		3	Survey of problems regarding facilities of urban society or Apartment, such as: Drainage, Waste Disposal, Water Facility, Lighting Security, maintenance		

**REFERENCES**

1	Anna H Rutt (1961); Home furnishing, John Wiley Eastern Private Ltd. New York.
2	Deshpande R. S. (1980) Modern Ideal Homes for India; Smt. L. S. Deshpande for Deshpande Publications Trust.
3	Deshpande R. S. (1980); Building your own Houses; United Book Corporation.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>COMMUNICATION PROCESS IN DEVELOPMENT</b>		<b>CREDIT</b>	<b>05</b> <b>(03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE ( GEN )- PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. Understand the process of communication in development work. 2. Develop skills in the use of methods and media.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Concept of Development Communication</b>			
		<ul style="list-style-type: none"> <li>• Meaning and importance of communication in community development</li> <li>• The purpose of communication</li> </ul>			
<b>UNIT – II</b>		<b>Communication process</b>			
		<ul style="list-style-type: none"> <li>• One-way and Two way or interactive communication.</li> <li>• Gaps in communication or distortions in transmission of message and their causes</li> </ul>			
<b>UNIT – III</b>		<b>Methods of communication</b>			
		<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Demonstration</li> <li>• Workshop</li> <li>• Exhibition</li> </ul>			
<b>UNIT – IV</b>		<b>Media for development communication</b>			
		<ul style="list-style-type: none"> <li>• Audio visual media, classification</li> <li>• Visual Aids poster, folder, booklet, chart</li> <li>• Audio visual T.V.</li> </ul>			
<b>PRACTICALS</b>					
		1	Demonstration		
		2	Workshop		
		3	Exhibitions		
		4	Poster		
		5	Folder		
		6	Chart		
<b>REFERENCES</b>					
		1	Bhatnagar O. P. Dhama Education and communication for development (second edition) New Delhi, Oxford and IBH Publishing Co. Pvt. Ltd..		
		2	V., Text Books of mass communication and Media: Anmol Publications Pvt. Ltd. New Delhi		
		3	Ray G.L. Extension communication and management. (fourth edition), Calcutta: Naya Prakashan.		
		4	Enderson (1972) Introduction to communication theories and practices. Cummings Publishing House, California.		



5	Bernice Hurst (1996): The hand book of communication skills, Kogan page limited, London.
6	Keval Kumar (2010) Mass communication in India, Jaico publishing house Ahmedabad.
7	Chandra A. Shah A. Joshi U. (1989) Fundamentals of teaching home science sterling publishers, New Delhi.

<b>YEAR</b>	<b>II</b>	<b>EARLY CHILD CARE EDUCATION</b>		<b>CREDIT</b>	<b>05</b> (03+02)
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (GEN) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To give the knowledge of early child care education with new concept 2. To give the knowledge to arrange different activities at home and play centre 3. Create awareness of proper early child and education			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Early child care education – Clanging age</b>			
		<ul style="list-style-type: none"> <li>• Objective of ECCE</li> <li>• Principles of ECCE</li> <li>• Long Vision for an Indian Child</li> <li>• Learning and Implication in ECCE</li> </ul>			
<b>UNIT – II</b>		<b>Care and Learning</b>			
		<ul style="list-style-type: none"> <li>• Birth to three years</li> <li>• Three to Six years</li> </ul>			
<b>UNIT – III</b>		<b>Program Planning for ECCE</b>			
		<ul style="list-style-type: none"> <li>• To provide early learning Environment</li> <li>• Learning / Activities centres</li> <li>• Use of audio video aids for learning prose's</li> <li>• Displays on walls</li> <li>• Furniture and Mats</li> </ul>			
<b>UNIT – IV</b>		<b>Role of Educationalist in ECCE</b>			
		<ul style="list-style-type: none"> <li>• Madam Montessori</li> <li>• Taraben Modak</li> <li>• Gijubhai Badeka</li> <li>• Ravindranth Tagore</li> </ul>			
<b>UNIT – V</b>		<b>Contribution of various institutes</b>			
		<ul style="list-style-type: none"> <li>• ICDS</li> <li>• Creche</li> <li>• Play Centres</li> <li>• Day care Centres</li> </ul>			
<b>PRACTICALS</b>					
		1	To make a creative sample from household things		
		2	To make an Educational Activity for ECCE Children		
		3	Arrange a Group Discussion on ECCE and know about student views about ECCE		
		4	Use of any one video Aid to educate the ECCE children in your nearby area		
<b>REFERENCES</b>					
		1	Up and About 20 Activities for primary School – Anna Vidya Education Foundation.		
		2	Play activities for young children – Swaminathan		

3	Stimulation activities for young children – Murlidharan R. Asthana
4	Early childhood education A trainers handboodk - Kaul, V.Bhatnagar.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>APPAREL MAKING – I</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (CT) - PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. Familiarize with the essentials of apparel making. 2. Acquaint with the various steps involved in the apparel making system. 3. To gain knowledge in making certain garments for personal/individual			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Elements of design</b>			
		<ul style="list-style-type: none"> <li>• Line</li> <li>• Shape/Form</li> <li>• Colour</li> <li>• Texture</li> <li>• Design</li> <li>• Light</li> <li>• Space</li> <li>• Elements of design as applied to apparel designing</li> </ul>			
<b>UNIT – II</b>		<b>Principles of design</b>			
		<ul style="list-style-type: none"> <li>• Balance</li> <li>• Proportion</li> <li>• Rhythm</li> <li>• Emphasis</li> <li>• Unity</li> <li>• Harmony</li> <li>• Elements of design as applied to apparel designing</li> </ul>			
<b>UNIT – III</b>		<b>Pattern making for garment</b>			
		<ul style="list-style-type: none"> <li>• Drafting</li> <li>• Paper pattern</li> <li>• Block pattern</li> <li>• Lay out</li> </ul>			
<b>UNIT – IV</b>		<b>Preparation steps for apparel making</b>			
		<ul style="list-style-type: none"> <li>• Selection of fabric</li> <li>• Preparation for layout, cutting, sewing, finishing and packaging</li> </ul>			
<b>PRACTICALS</b>					
		1	Sketching for elements of design		
		2	Sketching for principles of design		
		3	Drafting, paper pattern & lay out for children garment		
		4	Project work: Make an article using smocking /honey comb		

**REFERENCES**

1	Tailoring Mcgraw Hill, Bane A. 1974
2	Dress Pattern Designing London , Crossby Lockwood & Staples
3	Sivan Magdrshika – Nirmla Mistri
4	VastraVigyan ke Sidhdhat – Dr.G.P.Shairy

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>DRESS DESIGNING</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (CT) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To understand basics of dress designing. 2. To develop skills related to design development. 3. To develop confidence through skill in making different garments.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Design development</b>			
		<ul style="list-style-type: none"> <li>• Types of design - Natural, structural, geometrical, abstract</li> <li>• Design development – Making first pattern, sample garment, cost, final style selection, advertising, marketing, final cost</li> </ul>			
<b>UNIT – II</b>		<b>Clothing constructions</b>			
		<ul style="list-style-type: none"> <li>• Standard measurement</li> <li>• Eight head's theory</li> </ul>			
<b>UNIT – III</b>		<b>Study of garment components</b>			
		<ul style="list-style-type: none"> <li>• Types of Necklines</li> <li>• Types of Collars</li> </ul>			
<b>UNIT – IV</b>		<b>Methods of pattern making</b>			
		<ul style="list-style-type: none"> <li>• Drafting</li> <li>• Flat pattern</li> <li>• Draping</li> </ul>			
<b>UNIT – V</b>		<b>Clothing for family</b>			
		<ul style="list-style-type: none"> <li>• Infants, toddlers, adolescents, middle age, old age</li> <li>• Clothing for special needs – sports, pregnancy, lactating, occupational, handicaps</li> </ul>			
<b>PRACTICALS</b>					
	1	Types of design - Natural, structural, geometrical, abstract – with placement effect.			
	2	Sketch of Eight head's theory			
	3	Sketch of variations in bodice, skirts, sleeves, necklines, collars			
	4	Stitch (any one) – Punjabi kurta -- Salwar			
<b>REFERENCES</b>					
	1	Neelima,(2009) Fashion and Textile Design, Sonali Publications, Delhi			
	2	Joshi Dattatraya, (1989) PoshakNirmankeSiddhant (Dress making theory), Tata Mcgraw-hill publishing Co. Ltd., Delhi.			
	3	Mistry Nirmala, Sivan Margdarshan, Navneet Publication, Ltd., Ahmedabad.			
	4	The art of sewing by Anna Jacob Thomas, UBS Publishers and Distributers Ltd., New Delhi (1993).			
	5	Samani Vina, (2005), Dress Designing, Pravin Prakashan Pvt. Ltd. Rajkot.			

<b>B. Sc (HOME SCIENCE)</b>				
<b>YEAR</b>	<b>II</b>	<b>FAMILY AND CHILD WELFARE</b>		<b>CREDIT</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (HD) - PAPER NO. 5</b>		<b>05 (03+02)</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>
<b>OBJECTIVES</b>		To enable the students to - 1. Gain knowledge on the scheme of central and state government for family and child welfare. 2. Student will gain knowledge about the family and children welfare.		
<b>COURSE CONTENT: THEORY</b>				
<b>UNIT – I</b>		<b>Family and Child welfare</b>		
		<ul style="list-style-type: none"> <li>• Meaning of family and child welfare.</li> <li>• Movement of family and child welfare</li> <li>• Child welfare in India</li> </ul>		
<b>UNIT – II</b>		<b>Organization of family and child welfare</b>		
		<ul style="list-style-type: none"> <li>• V.H.A.L. (Voluntary Health Association in India)</li> <li>• N.I.P.C.C.D. (National Institute of public Co-Operation and Child Development)</li> <li>• W.H.O.</li> <li>• U.N.I.C.E.F.</li> <li>• C.A.R.E.</li> </ul>		
<b>UNIT – III</b>		<b>Overview of family and child welfare services</b>		
		<ul style="list-style-type: none"> <li>• Five year plans : allocation of funds, thrust areas</li> </ul>		
<b>UNIT – IV</b>		<b>Family Welfare Services</b>		
		<ul style="list-style-type: none"> <li>• Voluntary action bureau and counselling centres under CSWB Programmers</li> <li>• Maternal and child welfare services</li> <li>• Different programs for mother and child welfare.</li> </ul>		
<b>PRACTICALS</b>				
		1	Collect information about current government welfare schemes	
		2	Visit to Voluntary agency and know their functions in welfare society	
		3	Collect information about Five year plans	
		4	Visit or arrange the expert lecture on mother and child welfare	
<b>REFERENCES</b>				
		1	Family welfare services – Bssantibala Jena	
		2	Welfare of Women and Children – Ray Bharti	
		3	Indian Women Through the Ages – S. K. Ghosh	

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>EARLY CHILD CARE EDUCATION</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE ( HD) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		4. To give the knowledge of early child care education with new concept 5. To give the knowledge to arrange different activities at home and play centre 6. Create awareness of proper early child and education			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Early child care education – Clanging age</b>			
		<ul style="list-style-type: none"> <li>• Objective of ECCE</li> <li>• Principles of ECCE</li> <li>• Long Vision for an Indian Child</li> <li>• Learning and Implication in ECCE</li> </ul>			
<b>UNIT – II</b>		<b>Care and Learning</b>			
		<ul style="list-style-type: none"> <li>• Birth to three years</li> <li>• Three to Six years</li> </ul>			
<b>UNIT – III</b>		<b>Program Planning for ECCE</b>			
		<ul style="list-style-type: none"> <li>• To provide early learning Environment</li> <li>• Learning / Activities centres</li> <li>• Use of audio video aids for learning prose's</li> <li>• Displays on walls</li> <li>• Furniture and Mats</li> </ul>			
<b>UNIT – IV</b>		<b>Role of Educationalist in ECCE</b>			
		<ul style="list-style-type: none"> <li>• Madam Montessori</li> <li>• Taraben Modak</li> <li>• Gijubhai Badeka</li> <li>• Ravindranth Tagore</li> </ul>			
<b>UNIT – V</b>		<b>Contribution of various institutes</b>			
		<ul style="list-style-type: none"> <li>• ICDS</li> <li>• Creche</li> <li>• Play Centres</li> <li>• Day care Centres</li> </ul>			
<b>PRACTICALS</b>					
		1	To make a creative sample from household things		
		2	To make an Educational Activity for ECCE Children		
		3	Arrange a Group Discussion on ECCE and know about student views about ECCE		
		4	Use of any one video Aid to educate the ECCE children in your nearby area		



**REFERENCES**

1	Up and About 20 Activities for primary School – Anna Vidya Education Foundation.
2	Play activities for young children – Swaminathan
3	Stimulation activities for young children – Murlidharan R. Asthana
4	Early childhood education A trainers handbook - Kaul, V.Bhatnagar.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>COMMUNICATION PROCESS IN DEVELOPMENT</b>		<b>CREDIT</b>	<b>05</b> <b>(03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE ( ED.EX.) PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		3. Understand the process of communication in development work. 4. Develop skills in the use of methods and media.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Concept of Development Communication</b>			
		<ul style="list-style-type: none"> <li>• Meaning and importance of communication in community development</li> <li>• The purpose of communication</li> </ul>			
<b>UNIT – II</b>		<b>Communication process</b>			
		<ul style="list-style-type: none"> <li>• One-way and Two way or interactive communication.</li> <li>• Gaps in communication or distortions in transmission of message and their causes</li> </ul>			
<b>UNIT – III</b>		<b>Methods of communication</b>			
		<ul style="list-style-type: none"> <li>• Group Discussion</li> <li>• Demonstration</li> <li>• Workshop</li> <li>• Exhibition</li> </ul>			
<b>UNIT – IV</b>		<b>Media for development communication</b>			
		<ul style="list-style-type: none"> <li>• Audio visual media, classification</li> <li>• Visual Aids poster, folder, booklet, chart</li> <li>• Audio visual T.V.</li> </ul>			
<b>PRACTICALS</b>					
	1	Demonstration			
	2	Workshop			
	3	Exhibitions			
	4	Poster			
	5	Folder			
	6	Chart			
<b>REFERENCES</b>					
	1	Bhatnagar O. P. Dhama Education and communication for development (second edition) New Delhi, Oxford and IBH Publishing Co. Pvt. Ltd..			
	2	V., Text Books of mass communication and Media: Anmol Publications Pvt. Ltd. New Delhi			
	3	Ray G.L. Extension communication and management. (fourth edition), Calcutta: Naya Prakashan.			
	4	Enderson (1972) Introduction to communication theories and practices. Cummings Publishing House, California.			

5	Bernice Hurst (1996): The hand book of communication skills, Kogan page limited, London.
6	Keval Kumar (2010) Mass communication in India, Jaico publishing house Ahmedabad.
7	Chandra A. Shah A. Joshi U. (1989) Fundamentals of teaching home science sterling publishers, New Delhi.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>PROGRAMME FOR URBAN AND RURAL DEVELOPMENT</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>III</b>	<b>ELECTIVE (ED. EX) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. Understand the national efforts towards rural and urban development. 2. Examine the cumulative impact of these development efforts in quantitative and qualitative dimensions			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Rural and Urban life</b>			
		<ul style="list-style-type: none"> <li>• Characteristics of Rural life</li> <li>• Characteristics of Urban life</li> <li>• Contrast between Rural and Urban life</li> </ul>			
<b>UNIT – II</b>		<b>National Programmes</b>			
		<ul style="list-style-type: none"> <li>• Introduction</li> <li>• National Plan in India – Basic Plan in India</li> <li>• Planning machinery and method of making plan</li> <li>• Planning commission</li> <li>• Planning Machinery</li> </ul>			
<b>UNIT – III</b>		<b>Poverty Alleviation Effort</b>			
		<ul style="list-style-type: none"> <li>• Programme for poverty alleviation for Rural and Urban areas</li> <li>• Employment generation social inputs</li> <li>• Concentration of effort in the 1980's</li> <li>• Current programmes for Rural and Urban poor</li> </ul>			
<b>UNIT – IV</b>		<b>Programmes for Women and Children</b>			
		<ul style="list-style-type: none"> <li>• Women as target group – specific measures for women and children Such as DWCRA, ICDS, IMY;</li> <li>• Current programmes for women as initiated and implemented by the different ministries and department.</li> <li>• Shift from “Welfare” approach to “Development” approach to “Empowerment”</li> </ul>			
<b>UNIT – V</b>		<b>Micro credit for women’s employment</b>			
		<ul style="list-style-type: none"> <li>• Meaning</li> <li>• Definition</li> <li>• History</li> <li>• Principles</li> <li>• Classification</li> <li>• Agencies</li> </ul>			
<b>UNIT – VI</b>		<b>Women’s Self Help Group</b>			
		<ul style="list-style-type: none"> <li>• Meaning</li> <li>• Method of Working</li> <li>• Advantages</li> <li>• Role of Supporting Agencies</li> </ul>			

**PRACTICALS**

1	To get information and prepare a report on “ Change in Rural or Urban life with reference to standard of living”.
2	To get information and prepare a report on SHG which is run by women.
3	To know about role of various Government / Voluntary agencies /NGO'S/ Co- operatives bank for micro loan

**REFERENCES**

1	Upadhyaya H.C. (1991) Modernization and Rural Development, New Delhi, Anmol Prakashan
2	Mohsion Nadeen (1985) Rural Development through government programme New Delhi, Mital Publication
3	Dhama O. P. and Bhattnagar O. P. (1991) Education and Communication for development , Oxford and IBH publishing Co. Pvt. Ltd.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>TRAVEL AND TOURISM</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>CORE-PAPER NO. 1</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		<b>To enable students to:</b> 1. Develop an awareness about tourism and its scope in India 2. Understand about various aspects of tourism and to develop various skills required for this trade.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Meaning and nature of Tourism</b>			
		<ul style="list-style-type: none"> <li>• Definition and meaning</li> <li>• Functional identification of social Impacts</li> <li>• Demands for Tourism</li> <li>• Scope of Tourism and opportunities for women</li> </ul>			
<b>UNIT – II</b>		<b>Travel Agencies and Travel Related Products</b>			
		<ul style="list-style-type: none"> <li>• Functions of travel agents</li> <li>• Types of travel agencies.</li> <li>• How Travel Agents are paid?</li> <li>• Travel related products (Passport, Visa)</li> </ul>			
<b>UNIT – III</b>		<b>Transportation</b>			
		<ul style="list-style-type: none"> <li>• Transportation and Transportation Equipments - Air, Sea, Rail, Taxi</li> </ul>			
<b>UNIT – IV</b>		<b>Tourist Places of Gujarat</b>			
		<ul style="list-style-type: none"> <li>• According to religious importance</li> <li>• According to historical importance</li> <li>• Sightseeing places</li> <li>• The facilities by Gujarat Tourism Development</li> <li>• Fairs and Festivals of Gujarat</li> <li>• Handicraft of Gujarat</li> </ul>			
<b>UNIT – V</b>		<b>National Tourism</b>			
		Collect the Information of following states : <ul style="list-style-type: none"> <li>• Delhi</li> <li>• Rajasthan</li> <li>• Kerala and Tamil Nadu</li> </ul>			
<b>PRACTICALS</b>					
		1	Give the detailed information of Gujarat Tourism Development		
		2	How to prepare yourself for national and international Travelling?		
		3	Money Exchange procedure.		
		4	Give information about Tourist Guide		

**REFERENCES**

1	Travel Tourism and Computer Awareness by -Manish N. Khakhar, Bhavna D. Ranch,.Pravin Publication, Rajkot
2	A. K. Bhatia (1983) Tourism Development Principals and practices, 2nd Edition Sterling Publication Co. - New Delhi
3	Dr. S. P. Gupta and Krishnalal (1974) Tourism Museums and Monuments in India Oriental Publisher, Delhi
4	Tourism Development and Management Push. Findea S. Gill - Anand Publication Pvt. Ltd., New Delhi
5	Information Technology - F. Y. B. Com., C. Jamnadas and Co.
6	Information Technology - F. Y. B. Sc., B. S. Shah

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>PUBLIC NUTRITION</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>CORE - PAPER NO. 2</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To orient students to the basic principles of public nutrition 2. To learn about Nutrition-Health-Communication (NHC) programmes and experiences in the developing world of India 3. To gain skills in planning and conducting NHC projects			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I A</b>		<b>Concept and Scope of Public Nutrition</b>			
		<ul style="list-style-type: none"> <li>• Definition and multidisciplinary nature of public nutrition</li> <li>• Concept and scope</li> <li>• Role of public nutritionist</li> </ul>			
<b>UNIT – I B</b>		<b>Health Care of the Community</b>			
		<ul style="list-style-type: none"> <li>• Concept of Health Care</li> <li>• Different Levels of Health Care</li> <li>• Health Care Services at different levels</li> </ul>			
<b>UNIT – II A</b>		<b>Nutritional problems, their implications and related nutrition programmes</b>			
		<ul style="list-style-type: none"> <li>• Protein energy malnutrition</li> <li>• Nutritional Anaemia</li> <li>• Vitamin A deficiency</li> <li>• Iodine deficiency</li> <li>• Zinc deficiency</li> <li>• Obesity</li> <li>• Heart Diseases</li> <li>• Diabetes</li> </ul>			
<b>UNIT – II B</b>		<b>National Nutrition Programmes</b>			
		<ul style="list-style-type: none"> <li>• Integrated Child Development Services(ICDS)</li> <li>• Mid Day Meal Programme</li> <li>• National Anaemia Control Programme</li> <li>• Vitamin A Prophylaxis Programme</li> <li>• Iodine deficiency Disorder Control Programme</li> </ul>			
<b>UNIT – III</b>		<b>Behaviour Change Communications Themes and messages in nutrition and health education</b>			
		<ul style="list-style-type: none"> <li>• Themes in nutrition education.               <ul style="list-style-type: none"> <li>– Theme: nutrition during school age, adolescence, adulthood and old age.</li> </ul> </li> <li>• Themes in health education.               <ul style="list-style-type: none"> <li>– Theme: Preventing and Treating Common sicknesses and problems.</li> </ul> </li> <li>• Messages in nutrition and health education</li> </ul>			



	<ul style="list-style-type: none"> <li>– Messages in nutrition education.</li> <li>– Messages in health education.</li> <li>• How to improve relevance and effectiveness of a message</li> </ul>
<b>UNIT – IV</b>	<b>Nutrition Education Programme – Planning, Implementation and Evaluation</b>
	<ul style="list-style-type: none"> <li>• Need for nutrition and health education Programmes</li> <li>• Essentials of Nutrition – Education Planning</li> <li>• Planning and Implementation of nutrition education Programme</li> <li>• Evaluation of nutrition education Programme</li> </ul>
<b>PRACTICALS</b>	
1	Planning and preparation of snacks for <ul style="list-style-type: none"> <li>a) PEM,</li> <li>b) Vitamin A deficiency (VAD)</li> <li>c) Nutritional anaemia</li> </ul>
2	Prepare messages to educate the community by making different messages on nutrition and health.
3	Visit to any National Programme / Organization working on nutrition and /or health.
<b>REFERENCES</b>	
1	Wadhwa A and Sharma S. (2003), Nutrition in the community- A textbook. Elite publishing house Pvt. Ltd., New Delhi.
2	Park K. (2011). Park’s Textbook of preventive and social medicine., 21 <sup>st</sup> edition. M/S Banarasidas Bhanot Publishers, Jabalpur , India
3	Bamji MS , Krishnaswamy K. and Brahman GNV (Eds) (2009). Textbook of Human Nutrition, 3 <sup>rd</sup> Edition, Oxford and IBH Publishing Co. Pvt. Ltd., New Delhi.
4	IGNOU DNE 2 and 3- Block 2 and 6.
5	Dietary Guideline for Indian A manual of NIN, ICMR (1989) , Hyderabad.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>ORGANIZATION AND MANAGEMENT OF E.C.C.E. CENTRE</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>CORE PAPER NO. 3</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To understanding the concept of management and need for organization and management. 2. To know the different aspects of management. 3. To acquire the skill for organization and management of ECCE canter.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Need and concept of management</b>			
		<ul style="list-style-type: none"> <li>• Need effective and efficient utilization of resources</li> <li>• Concept – Goal orientation, Principles, and issues of process : planning, organization, direction and stimulation, Co ordination, controlling and appraisal</li> </ul>			
<b>UNIT – II</b>		<b>Material management and Documents</b>			
		<ul style="list-style-type: none"> <li>• Place/Building/space – Selection of place,</li> <li>• Aspects to be kept in mind while constructing building.</li> <li>• Furniture</li> <li>• Play ground</li> <li>• Teaching aids</li> <li>• Documents</li> </ul>			
<b>UNIT – III</b>		<b>Programme management</b>			
		<ul style="list-style-type: none"> <li>• Importance of programme management</li> <li>• Planning programme for long term and short term (Annual plans, term plans, monthly plans, weakly and daily plans.</li> <li>• Considerations in planning programmes for young children</li> <li>• Planning of activities for all round development of the child</li> </ul>			
<b>UNIT – IV</b>		<b>Personnel management</b>			
		<ul style="list-style-type: none"> <li>• Importance of personnel for ECCE centre</li> <li>• Co - operation and co – ordination of personnel</li> <li>• Personnel’s qualities and role – principle, teacher and other staffs.</li> <li>• Parents – Teacher co – operation.</li> </ul>			
<b>UNIT – V</b>		<b>Observation of ECCE centre</b>			
		<ul style="list-style-type: none"> <li>• Meaning, need, goals, objectives, principals of ECCE centre</li> <li>• Types and method of ECCE centre observation.</li> <li>• Observer of the ECCE centre – Functions and Qualities</li> </ul>			
<b>PRACTICALS</b>					
	1	Visit ECCE centre of different areas and prepare blue prints for ECCE			
	2	Programme planning for ECCE centre			
	3	Observation and evolution for ECCE centre			
	4	Preparing building plan for ECCE centre			
	5	Preparing list of documents for ECCE centre			

<b>REFERENCES</b>	
1	Skill for preschool teachers – Beaty, J.J.
2	Planning and administering early childhood programs – Decker, C. and Decker, J.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>MICROBIOLOGY</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>CORE PAPER NO. 4</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. Gain knowledge of role of micro-organisms in various spheres of life 2. Understand role of micro-organisms in food spoilage and learn techniques of food preservation			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Introduction - Scope of Microbiology in</b>			
		<ul style="list-style-type: none"> <li>• Medical Microbiology- Diseases, Antibiotics, Vaccines,</li> <li>• Food Microbiology- Food spoilage and Preservation</li> <li>• Environmental Microbiology- Micro-organisms as producers, transformers and decomposers.</li> </ul>			
<b>UNIT – II</b>		<b>Methods of Sterilization</b>			
		<ul style="list-style-type: none"> <li>• Physical methods</li> <li>• Chemical methods</li> </ul>			
<b>UNIT – III</b>		<b>Isolation and cultivation of Micro-organisms</b>			
		<ul style="list-style-type: none"> <li>• Different types of Culture media used for cultivation and isolation of micro-organisms.</li> <li>• Conventional Techniques for isolation- Streak Plate and Pour Plate methods</li> </ul>			
<b>UNIT – IV</b>		<b>Food Spoilage and Preservation</b>			
		<ul style="list-style-type: none"> <li>• Extrinsic and Intrinsic factors affecting growth of micro-organisms in food</li> <li>• Spoilage of vegetables and fruits</li> <li>• Spoilage of Milk and milk products</li> <li>• Spoilage of Canned Foods</li> <li>• Physical and Chemical Methods of Food Preservation</li> </ul>			
<b>PRACTICALS</b>					
		1	Preparation of Vaccination Chart for Pregnant Lady, Mother and Child		
		2	Examination of food samples for spoilage. (Any three)		
		3	Methylene Blue Reduction Test of different milk samples		
		4	Negative Staining		
		5	Expert Lecture or visit to food processing unit		
<b>REFERENCES</b>					
		1	Microbiology by Pelczar and Reid		
		2	Food Microbiolgy by Frazier and Westhoff		
		3	Modern Food Microbiology by Jay James and M. Van		

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>DIET THERAPY - I</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (FN) - PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To understand the role of diet therapy. 2. To gain knowledge on the dietary modifications for various diseases. 3. To acquire the ability to plan and prepare diets for various disease.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Introduction</b>			
		<b>1.Application of the principles of diet therapy</b> <ul style="list-style-type: none"> <li>• Tips for diet prescription</li> <li>• Dietetic care in hospital patients</li> <li>• Team approach to health care &amp; role of dietitian in the hospital &amp; community</li> <li>• Assessment of patient needs</li> </ul> <b>2. Modes of feedings</b> <ul style="list-style-type: none"> <li>• Enteral</li> <li>• Tube Feeding</li> <li>• Composition of tube feeds and their preparation</li> <li>• Parenteral feeding : Indication for use</li> </ul>			
<b>UNIT – II</b>		<b>Risk factors for Chronic Degenerative Disorders</b>			
		<ul style="list-style-type: none"> <li>• Diet for healthy living</li> </ul>			
<b>UNIT – III</b>		<b>Diet in special conditions</b>			
		<ul style="list-style-type: none"> <li>• Dietary Management in febrile conditions, infections and HIV</li> <li>• Diet and surgery – Pre Operative and Post Operative nutrition</li> </ul>			
<b>UNIT – IV</b>		<b>Etiology, Diagnosis and Dietary Management of obesity and Underweight</b>			
		<b>1.Obesity</b> <ul style="list-style-type: none"> <li>• Types and causes of obesity, prevention and treatment</li> <li>• Criteria for obesity and overweight.</li> <li>• Dietary management of obesity, types of diet and desirable rate of loss of weight</li> </ul> <b>2.Underweight</b> <ul style="list-style-type: none"> <li>• The problem of underweight</li> <li>• Definition, etiology and assessment</li> <li>• Anorexia nervosa, bulimia</li> <li>• Dietary management</li> </ul>			

<b>UNIT – V</b>	<b>Etiology, Diagnosis and Dietary Management of common Gastro intestinal disturbances</b>
	<ul style="list-style-type: none"> <li>• Constipation</li> <li>• Diarrhoea</li> <li>• Peptic Ulcer</li> <li>• Ulcerative Colitis</li> </ul>
<b>UNIT – VI</b>	<b>Etiology, Diagnosis and Dietary Management of Anemia</b>
	<ul style="list-style-type: none"> <li>• Nutritional Anemia</li> <li>• Sickle cell Anemia</li> <li>• Megaloblastic Anemia</li> <li>• Pernicious Anemia</li> <li>• Anemia due to acute hemorrhages</li> </ul>
<b>PRACTICALS</b>	
1	Planning and preparation of <ul style="list-style-type: none"> <li>• Clear liquid diet</li> <li>• Full liquid diet</li> <li>• Soft diet</li> <li>• Tube feeding</li> </ul>
2	Planning and preparation of diets for <ul style="list-style-type: none"> <li>• Typhoid</li> <li>• Patient with tuberculosis</li> <li>• Patient with HIV infection</li> </ul>
3	Planning and preparation of diets for <ul style="list-style-type: none"> <li>• Underweight</li> <li>• Obesity</li> </ul>
4	To plan and prepare diets for <ul style="list-style-type: none"> <li>• Constipation</li> <li>• Diarrhoea</li> <li>• Peptic Ulcer</li> <li>• Ulcerative Colitis</li> </ul>
5	Plan & Prepare diet in <ul style="list-style-type: none"> <li>• Nutritional Anemia</li> <li>• Megaloblastic Anemia</li> </ul>
<b>REFERENCES</b>	
1	Corinne H Robinson, Marilyn R Lawler – Normal and Therapeutic Nutrition, 17 <sup>th</sup> Edi Oxford and IBH Publishing Co., New Delhi
2	S.R. Williams – ESSENTIALS OF NUTRITION AND DIET THERAPY, 5 <sup>TH</sup> Edi, Times Mirror / Mosby College Publishing, Boston.
3	Kathleen Mahan, Sylvia Stamp – Food, Nutrition and Diet Therapy – 11 <sup>th</sup> Edi, W.B. Saunders Co., Philadelphia
4	Krause M.V. and Hinster M.- Food, Nutrition and Diet Therapy, W.B. Saunders
5	SOME THERAPETUTIC DIETS, NIN, Hyderabad
6	Vaid B. M. - Diet Therapy, Saurashtra University
7	Vaid B. M. - Therapeutic Nutrition, Saurashtra University

B. Sc (HOME SCIENCE)					
YEAR	III	FOOD SCIENCE – 1		CREDIT	05 (03+02)
SEMESTER	IV	ELECTIVE (FN) PAPER NO. 6		HOURS/ WK	06
Total Marks: 100		Internal: 30	Theory: 50	Practical: 20	
<b>OBJECTIVES</b>		<ol style="list-style-type: none"> <li>1. To impart knowledge pertaining to the basic properties of food.</li> <li>2. To provide basic understanding of principles behind food and also with processing technology used for different foods.</li> <li>3. Understand the application of science principles to experimental study of foods.</li> <li>4. Develop food preparations and evaluate by sensory methods.</li> <li>5. Select food to meet your requirements both in terms of food quality as well as cost.</li> <li>6. Identify the different types of energy giving, body building and regulatory foods available in market.</li> </ol>			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Food acceptability</b>			
		Appearance factors, kinesthetic factor and flavour factor, judged by sensory organs			
<b>UNIT – II</b>		<b>Sensory evaluation of food</b>			
		Definition, practical requirement for conducting sensory test, classification of sensory methods, difference tests.			
<b>UNIT – III</b>		<b>Unconventional foods</b>			
		Soybean, ragi, unconventional leaves, mushroom, spirulina, oats, barley			
<b>UNIT – IV</b>		<b>Energy giving foods</b>			
		<ul style="list-style-type: none"> <li>• <b>Cereals:</b> Selection of cereals and millets. Nutritional factor in selection of cereals.</li> <li>a. <b>Wheat-</b> types, structure, composition and milling. Products of wheat (whole flour, bread flour, self raising flour, all purpose cake flour, maida, semolina), macaroni products.</li> <li>b. <b>Rice-</b>Composition and parboiling.</li> <li>c. <b>Roots and tubers</b> - Selection of roots and tubers.</li> <li>d. <b>Fats and oils</b> : Selection of fats and oils: Nutritional importance of fats and oils, Functions of fats and oils.</li> <li>e. <b>Sugar, jaggery and other sweetening agents</b> - Selection of sugar, jaggery and other sweetening agents. White crystalline sugar, cube sugar, brown sugar, liquid sugar glucose, jaggery, honey and saccharin related products, Indian chikki.</li> </ul>			

<b>PRACTICALS</b>	
1	<b>Sensory Evaluation by Difference Tests –</b> a. Paired Comparison Test b. Triangle Test c. Duo-Trio Test
2	<b>Preparation of Unconventional food (one preparation each)</b> a. Soybean product b. Unconventional leaves c. Ragi & Oats products d. Roots & Tuber products
3	<b>Selecting, preparing and serving items from current restaurant menus. (one preparation each)</b> a. Wheat b. Rice c. Roots & tubers d. Sugar & Jaggery e. Fats & oils
<b>REFERENCES</b>	
1	N Shukuntala Manay, M. Sadaksharaswamy, "Foods –Facts and Principles.
2	M Swaminathan "Food Science and Experimental Food."
3	Peckham G C. "Foundation of Food Preparation" The Mcmillan Co. 1962
4	Norman P N "Food Science" The A V I Publishing Co. 1982
5	Charley H "Food Science" John Wiley and Sons 1982
6	Griswold RM "The Experimental Study of Foods" Houghtan Migglin Co. 1962
7	Lowe B "Experimental Cookery" John Wiley and Sons.1965
8	ANC-1 Nutrition for the Community- Practical manual Part-1 IGNOU.
9	ANC-04 IGNOU.
10	CCCD-02 IGNOU.
11	Srilaxmi- Food Science.



<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>HOUSE KEEPING</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (HM) - PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To become aware of the different areas and functions of House Keeping Department. 2. To develop and acquire skill in house keeping activity.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Introduction to hotels as a service industry</b>			
		<ul style="list-style-type: none"> <li>• Types of services offered in hotels</li> <li>• Types of operations (plans)</li> </ul>			
<b>UNIT – II</b>		<b>House Keeping</b>			
		<ul style="list-style-type: none"> <li>• Introduction and importance of hospitality</li> <li>• Organization of housekeeping department</li> <li>• Duties and responsibilities of housekeeping staff</li> <li>• Co-ordination of housekeeping department with other departments</li> </ul>			
<b>UNIT – III</b>		<b>Cleaning Activity</b>			
		<ul style="list-style-type: none"> <li>• Cleaning agent-selection and use for different surfaces types- Liquid cleaning agents, Powder cleaning agents, Paste cleaning agents</li> <li>• Cleaning equipments - selection, care and maintenance of Mechanical equipment - Vaccum Cleaner, Shampoo machine</li> <li>• Types of cleaning - Daily, Weekly, Yearly</li> </ul>			
<b>UNIT – IV</b>		<b>Linen and Uniform Room</b>			
		<ul style="list-style-type: none"> <li>• Types of linen and their selection: Table linen, Bed linen, Bath Linen</li> <li>• Types of uniform</li> <li>• Selection of uniform</li> <li>• Stock determination, control and distribution, record keeping of linen and uniform.</li> </ul>			
<b>UNIT – V</b>		<b>Accessories</b>			
		<ul style="list-style-type: none"> <li>• Types and their place in interior decoration</li> <li>• Paintings, sculpture and pots and their accessories</li> </ul>			
<b>PRACTICALS</b>					
1		<b>First Aid</b>			
		a. Shock b. Stroke c. Asthma d. Burns e. Heart attack f. Fainting			
2		<b>Cleaning and Care of different materials</b>			
		a. Metal, Glass, Wood, Paints and upholstery b. Floor, Sink c. Decorative articles			

3	<b>Stain Removal</b> Tea-Coffee - Fruit - Lipstick - Blood - Rust - Oil paints and Turmeric
<b>REFERENCES</b>	
1	Asler, (1970) Management of Hospitality Operations, Bobbs Marill London.
2	Andrews Sudhir, (1965) Hotel Housekeeping - Training manual, Tata McGraw - Hill Publishing Co. Ltd., New Delhi
3	Chakravati B. K.: A Technical guide to Hotel operation Metropolitan Book Co. Pvt. Ltd., New Delhi.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>CONSUMER IN THE MARKET</b>		<b>CREDIT</b>	<b>05</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (HM) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		<ol style="list-style-type: none"> <li>1. To understand the role of consumer in the market</li> <li>2. Become aware of marketing conditions and rights and responsibilities of consumers.</li> <li>3. Recognize the problems in buying and know about the means of redressal.</li> </ol>			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Importance of consumer education</b>			
		<ul style="list-style-type: none"> <li>• Consumer - Meaning and Definition</li> <li>• Rights responsibilities of Consumer</li> <li>• Rights - To safety, To choose, To be heard, To get information, To redress and to get healthy environment</li> </ul>			
<b>UNIT – II</b>		<b>Consumer buying problems</b>			
		<ul style="list-style-type: none"> <li>• Adulteration</li> <li>• Faulty weight and measures</li> <li>• Pricing</li> <li>• Other malpractices in markets</li> </ul>			
<b>UNIT – III</b>		<b>Consumer decision making</b>			
		<ul style="list-style-type: none"> <li>• Principles of good buy man ship</li> <li>• Factors affecting consumer decision</li> </ul>			
<b>UNIT – IV</b>		<b>Market</b>			
		<ul style="list-style-type: none"> <li>• Definition</li> <li>• Types of markets</li> <li>• Functions and characteristics of market</li> </ul>			
<b>UNIT – V</b>		<b>Advertisement</b>			
		<ul style="list-style-type: none"> <li>• Meaning, Importance, Characteristics, Advantage and disadvantages</li> <li>• Psychology of advertisement</li> <li>• Types of advertisement <ul style="list-style-type: none"> <li>– Press medium - Radio, T.V., Cinema</li> <li>– Direct publicity - Packaging and Display</li> <li>– Outdoor publicity</li> </ul> </li> </ul>			
<b>UNIT – VI</b>		<b>Consumer Protective services</b>			
		<ul style="list-style-type: none"> <li>• Development and aims of consumer organization in India</li> <li>• Consumer education and research centre - Ahmedabad</li> <li>• Consumer guidance society - Bombay</li> <li>• Educational Institutions</li> <li>• Indian Standard Institution</li> <li>• Consumer Co-operatives</li> <li>• Government Agencies, Municipalities</li> </ul>			

<b>PRACTICALS</b>	
1	Adulteration
2	Visit to a Grahak Suraksha Samiti
3	To get information about - Brand, Trade mark, Agmark, Labelling, Packaging, I.S.I.
4	Effect and impact of advertising on consumer buying
<b>REFERENCES</b>	
1	Sarkar A. (1989); Problems of consumer in modern India, Discovering Publishing House.
2	Consumer Report, CERC, Thakurbhi Desai Smark Bhavan, Ahmedabad
3	Consumer Conformation, CERC, Thakurbhi Desai Smark Bhavan, Ahmedabad.
4	Agrawal V. K. (1989) Consumer protection in India with special reference to unfair trade practices, New Delhi; Deep and Deep Publishers.

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>FASHION STUDIES</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (GEN) - PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		<ol style="list-style-type: none"> <li>1. This course helps in understanding concept of fashion and the factors that affect fashion.</li> <li>2. Its enables the students to familiarize with fashion terminology.</li> <li>3. Understanding of the fashion trends</li> </ol>			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Fashion</b>			
		<ul style="list-style-type: none"> <li>• What is fashion</li> <li>• History of Fashion</li> <li>• Fashion Terminology</li> <li>• Difference between style, fashion and trend.</li> <li>• Selection of clothes for self</li> <li>• Selection and Evaluation of ready-made garments</li> </ul>			
<b>UNIT – II</b>		<b>Components of Fashion</b>			
		<ul style="list-style-type: none"> <li>• Silhouette</li> <li>• Details</li> <li>• Colour</li> <li>• Fabric</li> <li>• Texture</li> <li>• Seams</li> <li>• Trims</li> </ul>			
<b>UNIT – III</b>		<b>Fashion Cycle</b>			
		<ul style="list-style-type: none"> <li>• Steps in Fashion cycle</li> </ul>			
<b>UNIT – IV</b>		<b>Adoption of fashion</b>			
		<ul style="list-style-type: none"> <li>• Consumer groups- fashion leaders, followers</li> <li>• Adoption process- Trickle-down theory, bottom up theory &amp; trickle across theory</li> </ul>			
<b>UNIT – V</b>		<b>Factors Affecting the Fashion</b>			
		<ul style="list-style-type: none"> <li>• The factor of age and gender</li> <li>• The factor of geography</li> <li>• The factor of culture</li> <li>• The factor of economy and class</li> <li>• The factor of technology</li> <li>• The factor of Media &amp; Communication</li> <li>• The factor of Transportation</li> </ul>			
<b>UNIT – VI</b>		<b>Change in Fashion Trend</b>			
		<ul style="list-style-type: none"> <li>• Fashion Change</li> <li>• Fashion Trend in 1940 – 1950 – Period of Independence</li> <li>• Fashion Trend in 1960 – Indo-western Culture</li> </ul>			

	<ul style="list-style-type: none"> <li>• Fashion Trend in 1970 – Mix Match Knit Wear</li> <li>• Fashion Trend in 1980 – Economical Boom</li> <li>• Fashion Trend in 1990 – Millennium Fashion</li> <li>• Fashion Trend in 2000 – Mash up</li> </ul>
<b>PRACTICALS</b>	
1	Collection of photographs of work by famous designers, and garments from internet which are related to the field.
2	To make Fashion Accessories <ul style="list-style-type: none"> <li>• Jewellery</li> <li>• Hand Bag</li> <li>• Purses</li> <li>• Broach</li> <li>• Belt</li> </ul>
3	Video clippings from latest fashion shows to be shown and discussed to make concepts of fashion clear to students. / Visit fashion week/fashion shows being arranged in the town
4	Project work – Fashion Accessories / Fashion Style / Fashion Collection
5	Use of Corel Draw in Fashion Studies
<b>REFERENCES</b>	
1	Fashion Design Essentials:100 Principles of Fashion Design - Rockport   Jay Calderin
2	The culture of Fashion - Christopher Breward
3	Fashion and Modernity - Christopher Breward
4	Fashion logy: An Introduction to Fashion Studies - Yuniya Kawamura
5	Fashion and Its Social Agendas: Class, Gender, and Identity in Clothing - Diana Crane
6	Fashion Cultures: Theories, Explorations and Analysis - Stella Bruzzi
7	Ready to Wear Apparel Analysis. Prentice Hall, Brown, Patty, Rice J., 1998.
8	Individuality in Clothing & Personal, Marshall S G, Jackson H O, Stanley MS, Kefgen M &Specht T, 2009.
9	Appearance, 6 <sup>th</sup> Edition, Pearson Education, USA.
10	The Complete Book of Fashion Design, Harper and Row Publications, Tate S.L., Edwards M.S., 1982, New York

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>COMMUNICATION SYSTEMS AND SOCIAL CHANGE</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (GEN) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. Understand the process of communication in development work. 2. Develop skills in the use of mass media. 3. To know usefulness about mass communication.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Understanding Self</b>			
		<ul style="list-style-type: none"> <li>• Awareness of self in communication</li> <li>• Intrapersonal Communication</li> <li>• Self-concept and self esteem</li> </ul>			
<b>UNIT – II</b>		<b>Interpersonal Communication</b>			
		<ul style="list-style-type: none"> <li>• Concept, types and functions of interpersonal communication</li> <li>• Dyadic, small and large group communication</li> <li>• Stages in human relationship development</li> <li>• Small group communication: types and functions</li> </ul>			
<b>UNIT – III</b>		<b>Organization, Public and Mass Communication</b>			
		<ul style="list-style-type: none"> <li>• Organizational communication: concept, types, functions and networks</li> <li>• Public communication-concept and techniques</li> <li>• Mass Communication- concept, significance, functions and elements</li> <li>• Theories and models of mass communication</li> <li>• Intercultural communication- concept, stages and barriers</li> <li>• Relationship between culture and communication</li> </ul>			
<b>UNIT – IV</b>		<b>Mass Media</b>			
		<ul style="list-style-type: none"> <li>• Mass Media- characteristics and significance of print, electronic and web based media</li> <li>• Print Media: types, nature, characteristics, reach, access.</li> <li>• Radio: types, nature, characteristics, reach, access.</li> <li>• Television and cinema: types, nature, characteristics, reach, access.</li> <li>• ICTs: types, characteristics, reach and access.</li> </ul>			
<b>PRACTICALS</b>					
		1	Exercises for understanding self		
		2	Studying group dynamics in organizations-formal and informal		
		3	Audience analysis- readership, listenership and viewership studies		
		4	Content analysis of mass media		
<b>REFERENCES</b>					
		1	Devito, J. (1998) Human Communication. New York: Harper & Row		
		2	Baran, S. (2014) Mass Communication Theory. Wadsworth Publishing		
		3	Barker, Larry Lee. (1990) Communication, Eaglewood Cliffs, New Jersey: Prentice Hall.		

4	McQuail, D. (2000) Mass Communication Theories. London: Sage Publications
5	Vivian. J. (1991) The Media of Mass Communication
6	Stevenson. D. (2002) Understanding Media Studies: Social Theory and Mass Communication. Sage Publication



<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>FASHION STUDIES</b>		<b>CREDIT</b>	<b>05</b> <b>(03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (CT) - PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		4. This course helps in understanding concept of fashion and the factors that affect fashion. 5. Its enables the students to familiarize with fashion terminology. 6. Understanding of the fashion trends			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Fashion</b>			
		<ul style="list-style-type: none"> <li>• What is fashion</li> <li>• History of Fashion</li> <li>• Fashion Terminology</li> <li>• Difference between style, fashion and trend.</li> <li>• Selection of clothes for self</li> <li>• Selection and Evaluation of ready-made garments</li> </ul>			
<b>UNIT – II</b>		<b>Components of Fashion</b>			
		<ul style="list-style-type: none"> <li>• Silhouette</li> <li>• Details</li> <li>• Colour</li> <li>• Fabric</li> <li>• Texture</li> <li>• Seams</li> <li>• Trims</li> </ul>			
<b>UNIT – III</b>		<b>Fashion Cycle</b>			
		<ul style="list-style-type: none"> <li>• Steps in Fashion cycle</li> </ul>			
<b>UNIT – IV</b>		<b>Adoption of fashion</b>			
		<ul style="list-style-type: none"> <li>• Consumer groups- fashion leaders, followers</li> <li>• Adoption process- Trickle-down theory, bottom up theory &amp; trickle across theory</li> </ul>			
<b>UNIT – V</b>		<b>Factors Affecting the Fashion</b>			
		<ul style="list-style-type: none"> <li>• The factor of age and gender</li> <li>• The factor of geography</li> <li>• The factor of culture</li> <li>• The factor of economy and class</li> <li>• The factor of technology</li> <li>• The factor of Media &amp; Communication</li> <li>• The factor of Transportation</li> </ul>			
<b>UNIT – VI</b>		<b>Change in Fashion Trend</b>			
		<ul style="list-style-type: none"> <li>• Fashion Change</li> <li>• Fashion Trend in 1940 – 1950 – Period of Independence</li> <li>• Fashion Trend in 1960 – Indo-western Culture</li> </ul>			

	<ul style="list-style-type: none"> <li>• Fashion Trend in 1970 – Mix Match Knit Wear</li> <li>• Fashion Trend in 1980 – Economical Boom</li> <li>• Fashion Trend in 1990 – Millennium Fashion</li> <li>• Fashion Trend in 2000 – Mash up</li> </ul>
<b>PRACTICALS</b>	
1	Collection of photographs of work by famous designers, and garments from internet which are related to the field.
2	To make Fashion Accessories <ul style="list-style-type: none"> <li>• Jewellery</li> <li>• Hand Bag</li> <li>• Purses</li> <li>• Broach</li> <li>• Belt</li> </ul>
3	Video clippings from latest fashion shows to be shown and discussed to make concepts of fashion clear to students. / Visit fashion week/fashion shows being arranged in the town
4	Project work – Fashion Accessories / Fashion Style / Fashion Collection
5	Use of Corel Draw in Fashion Studies
<b>REFERENCES</b>	
1	Fashion Design Essentials:100 Principles of Fashion Design - Rockport   Jay Calderin
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3	Fashion and Modernity - Christopher Breward
4	Fashion logy: An Introduction to Fashion Studies - Yuniya Kawamura
5	Fashion and Its Social Agendas: Class, Gender, and Identity in Clothing - Diana Crane
6	Fashion Cultures: Theories, Explorations and Analysis - Stella Bruzzi
7	Ready to Wear Apparel Analysis. Prentice Hall, Brown, Patty, Rice J., 1998.
8	Individuality in Clothing & Personal, Marshall S G, Jackson H O, Stanley MS, Kefgen M &Specht T, 2009.
9	Appearance, 6 <sup>th</sup> Edition, Pearson Education, USA.
10	The Complete Book of Fashion Design, Harper and Row Publications, Tate S.L., Edwards M.S., 1982, New York

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>LAUNDRY SCIENCE</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (CT) - PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		To enable students to, 1. Acquaint with the materials, equipment and processes involved in laundering. 2. Teach differences in laundering process used for different fabrics.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Principle of laundering:</b>			
		<ul style="list-style-type: none"> <li>• Introduction and classification to laundry process. <ul style="list-style-type: none"> <li>– Wet cleaning (hand washing and machine washing)</li> <li>– Dry cleaning</li> </ul> </li> <li>• Materials and equipment used for laundry</li> </ul>			
<b>UNIT – II</b>		<b>Water, soap and detergents</b>			
		<ul style="list-style-type: none"> <li>• Hard and soft water</li> <li>• Definition and types of soap and detergents</li> <li>• Difference between soap and detergents</li> </ul>			
<b>UNIT – III</b>		<b>Additives used in laundry</b>			
		<ul style="list-style-type: none"> <li>• Optical brighteners</li> <li>• Bluing agents</li> <li>• Starches</li> </ul>			
<b>UNIT – IV</b>		<b>Stain Removals</b>			
		<ul style="list-style-type: none"> <li>• Definition and classification of stain</li> <li>• Types of stains</li> <li>• Techniques of stain removal</li> </ul>			
<b>UNIT – V</b>		<b>Laundrying - maintenance and care of clothes</b>			
		<ul style="list-style-type: none"> <li>• Cotton/Linen</li> <li>• Silk</li> <li>• Wool</li> <li>• Synthetics</li> </ul>			
<b>PRACTICALS</b>					
		1	Sketch of equipment used in laundry process.		
		2	Laundrying of cotton, silk, wool and synthetic fabric.		
		3	Stain removal – Tea/coffee, vegetable/Fruits, oil/ghee, turmeric/blood, oil paint, pan, ink, grease, chocolate/ice cream, nail polish, lipstick.		
		4	Starching, bluing and whitening of cotton fabric.		
<b>REFERENCES</b>					
		1	Rastogi, M. (2009) Textile and Laundry, Sonali Publications, Delhi		
		2	Rastogi, M. (2009) Mineral Textile, Sonali Publications, Delhi		
		3	Yadav, Seema (1997), Textbook of textile and laundry, Anmol Publications Pvt. Ltd. Delhi		

4	Alexander, R. R. (1997) Textiles Product selection, use and care Boston Houghton Mifflin Co.
5	Duelkar Durga, (1976) Household textile and laundry work, Delhi Atmaram and Sons.
6	VastraVighyan and Dhulaikala- Dr. Bela Bhargav.

<b>B. Sc (HOME SCIENCE)</b>				
<b>YEAR</b>	<b>II</b>	<b>METHODS AND MATERIALS FOR WORKING WITH YOUNG CHILDREN</b>		<b>CREDIT</b> <b>05</b> <b>(03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (HD) - PAPER NO. 5</b>		<b>HOURS/ WK</b> <b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>
<b>OBJECTIVES</b>		1. To know the requirement of infant and toddler and develop skills to create play materials and designing learning experiences. 2. To understand the significance of various creative activities and teachers' role in implementing them.		
<b>COURSE CONTENT: THEORY</b>				
<b>UNIT – I</b>		<b>Activities for sensory stimulation</b>		
		<ul style="list-style-type: none"> <li>• What is Sensation?</li> <li>• Characteristics of Sensation</li> <li>• Types of Sensation</li> <li>• Different Sensory capacities and its training (Seeing, Hearing, Touch, Tasting Smelling)</li> </ul>		
<b>UNIT – II</b>		<b>Creativity and Art (3 to 6 year)</b>		
		<ul style="list-style-type: none"> <li>• Concept of Creativity</li> <li>• Characteristics of Creativity</li> <li>• Development of Creativity</li> <li>• Creative activities of childhood</li> <li>• Principles of Creativity</li> <li>• Art activities: Painting (brush, blow, spray, finger)                Printing (vegetable &amp; leaf, string, block, coins )                Cutting and Pasting.                Modelling</li> </ul>		
<b>UNIT – III</b>		<b>Music and Rhythm (3 to 6 year)</b>		
		<ul style="list-style-type: none"> <li>• Importance of music in child's life and teacher's role in providing appropriate experiences</li> <li>• Criteria for selection of song</li> <li>• Creating environment for musical growth</li> <li>• Development stages in musical activities</li> <li>• Types of rhymes</li> <li>• Rhythmic movements of body and Musical instruments</li> </ul>		
<b>UNIT – IV</b>		<b>Communication- Language Art</b>		
		<ul style="list-style-type: none"> <li>• Concept of Language</li> <li>• Promoting Language skill</li> <li>• Experiences for Language development: A Picture book B -Story telling Characteristics of good story</li> <li>• Techniques of story telling: (Story book, Flash card, Chart, Puppets)</li> </ul>		
<b>UNIT – V</b>		<b>Literature for children</b>		
		<ul style="list-style-type: none"> <li>• Need of Literature for children</li> <li>• Types of Literature</li> </ul>		

	<ul style="list-style-type: none"> <li>Books for preschoolers (3 to 6 year) (Picture book, story book, information and concept book, number and alphabet book, .poems)</li> <li>Books for school children (6 to 8 years) (Folk story book, fairy story Book, Fantasy)</li> </ul>
<b>UNIT – VI</b>	<b>Games or Play</b>
	<ul style="list-style-type: none"> <li>Meaning of games or play</li> <li>Values of games</li> <li>Types of games</li> </ul>
<b>PRACTICALS</b>	
1	Prepare materials and design activities for- Seeing, Hearing, Touching, Tasting, and Smelling
2	Art activities - List of Art activities, Prepare a variety of brushes & paint with help of them, (Brooms, cotton, wool, strips of cloth, feather ) - Painting : (any one) ( brush, blow, spray, finger) - Printing : (any one) ( vegetable& leaf, string, block, coins ) - Cutting : Cutting a design or Circular ring starting from one corner of the page till centre of the page. - Pasting: paper, cloth, sticks, leaves, mosaic, Paper balls, glass pieces etc. - Modelling: with clay, dough, plastic
3	Music and movement - Learning to sing song in rhythm with action. - Making simple musical instrument
4	Prepare a story with teaching aid, (any one ) - Storybook, Flash card, Chart, Puppets
<b>REFERENCES</b>	
1	Up and About 20 Activities for primary school -Atma Vidya Education Foundation.
2	Play activities for young children -Swaminathan
3	Stimulation activities for young children - Murlitharan R. Asthana
4	Early childhood education A trainers handbook- Kaul, V. Bhatanagar

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>ADOLESCENT PERIOD</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (HD) PAPER NO. 6</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		1. To give awareness about adolescent problems regarding physical and mental aspects 2. To develop the concept of adolescent education at undergraduate level. 3. To give knowledge about adolescent challenges			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Adolescent</b>			
		<ul style="list-style-type: none"> <li>• Introduction and concept</li> <li>• Puberty</li> </ul>			
<b>UNIT – II</b>		<b>Developments of Adolescent</b>			
		<ul style="list-style-type: none"> <li>• Physical development (Sexual maturity)</li> <li>• Emotional development</li> <li>• Social development</li> </ul>			
<b>UNIT – III</b>		<b>Adolescent education</b>			
		<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Concept of Adolescent education</li> <li>• Need of Adolescent education</li> <li>• Role of Parents and Teachers in Adolescent education</li> </ul>			
<b>UNIT – IV</b>		<b>Sexually Transmitted Disease (STD)</b>			
		<ul style="list-style-type: none"> <li>• Introduction</li> <li>• Characteristics of STD</li> <li>• Different types of STD</li> <li>• Gonorrhoea and Chlamydia</li> <li>• Syphilis</li> <li>• Bubo's</li> <li>• AIDS</li> </ul>			
<b>UNIT – V</b>		<b>Problems of adolescents</b>			
		<ul style="list-style-type: none"> <li>• Reproductive Health               <ul style="list-style-type: none"> <li>▪ Drug abuse</li> <li>▪ Anemia – a health problem of adolescents</li> <li>▪ Gender Equality</li> </ul> </li> </ul>			
<b>PRACTICALS</b>					
		1	Expert Lecture : Adolescent Problems and their solutions		
		2	Making Chart/poster of AIDS		
		3	Group Discussion (Control of drug abuse)		
		4	Survey : A study of one problem encountered in raising up adolescent		
<b>REFERENCES</b>					
		1	Child Development Part I- Elizabeth Hurlock		
		2	Child Development Part II- Elizabeth Hurlock		

<b>B. Sc (HOME SCIENCE)</b>					
<b>YEAR</b>	<b>II</b>	<b>INFORMATION EDUCATION COMMUNICATION MATERIAL FOR DEVELOPMENT</b>		<b>CREDIT</b>	<b>05 (03+02)</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE (ED. EX.) - PAPER NO. 5</b>		<b>HOURS/ WK</b>	<b>06</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>	
<b>OBJECTIVES</b>		This course will enable the students to 1. To know the role of IEC material for development 2. To develop skill for selection and preparing IEC materials.			
<b>COURSE CONTENT: THEORY</b>					
<b>UNIT – I</b>		<b>Concept of IEC material</b>			
		<ul style="list-style-type: none"> <li>• Meaning of IEC material</li> <li>• Different types of IEC materials for development.</li> <li>• Role of IEC material for development.</li> </ul>			
<b>UNIT – II</b>		<b>Various types of IEC materials for development</b>			
		<ul style="list-style-type: none"> <li>• Graphic and Audio Visual -- – Chart, Poster, Flashcards, Pamphlets, Leaflets, Brochure, Booklet, Manuals</li> <li>• Mass media:- – IEC materials for Radio, Television, News paper and Magazine. – Script writing for radio – Script writing for T.V. programme – Writing article for News papers, Magazines.</li> </ul>			
<b>UNIT – III</b>		<b>Organization, Public and Mass communication</b>			
		<ul style="list-style-type: none"> <li>• Mass communication--- concept, significance, functions and elements</li> <li>• Theories and models of mass communication</li> </ul>			
<b>UNIT – IV</b>		<b>Extension communication process</b>			
		<ul style="list-style-type: none"> <li>• Visual communication</li> </ul>			
<b>PRACTICALS</b>					
		1	Booklet		
		2	Leaflet		
		3	Brochure		
		4	Flash cards		
		5	Chart		
		6	Magazine articles		
<b>REFERENCES</b>					
		1	Bhatnagar O. P. Dhama Education and communication for development (second edition) New Delhi, Oxford and IBH Publishing Co. Pvt. Ltd..		
		2	V., Text Books of mass communication and Media: Anmol Publications Pvt. Ltd. New Delhi		
		3	Ray G.L. Extension communication and management. (fourth edition), Calcutta: Naya Prakashan.		
		4	Enderson (1972) Introduction to communication theories and practices. Cummings Publishing House, California.		



5	Bernice Hurst (1996): The hand book of communication skills, Kogan page limited, London.
6	Keval Kumar (2010) Mass communication in India, Jaico publishing house Ahmedabad.
7	Chandra A. Shah A. Joshi U. (1989) Fundamentals of teaching home science sterling publishers, New Delhi.

<b>B. Sc (HOME SCIENCE)</b>				
<b>YEAR</b>	<b>II</b>	<b>COMMUNICATION SYSTEMS AND SOCIAL CHANGE</b>		<b>CREDIT</b>
<b>SEMESTER</b>	<b>IV</b>	<b>ELECTIVE ( ED. EX.) - PAPER NO. 6</b>		<b>HOURS/ WK</b>
<b>Total Marks: 100</b>		<b>Internal: 30</b>	<b>Theory: 50</b>	<b>Practical: 20</b>
<b>OBJECTIVES</b>		4. Understand the process of communication in development work. 5. Develop skills in the use of mass media. 6. To know usefulness about mass communication.		
<b>COURSE CONTENT: THEORY</b>				
<b>UNIT – I</b>		<b>Understanding Self</b>		
		<ul style="list-style-type: none"> <li>• Awareness of self in communication</li> <li>• Intrapersonal Communication</li> <li>• Self-concept and self esteem</li> </ul>		
<b>UNIT – II</b>		<b>Interpersonal Communication</b>		
		<ul style="list-style-type: none"> <li>• Concept, types and functions of interpersonal communication</li> <li>• Dyadic, small and large group communication</li> <li>• Stages in human relationship development</li> <li>• Small group communication: types and functions</li> </ul>		
<b>UNIT – III</b>		<b>Organization, Public and Mass Communication</b>		
		<ul style="list-style-type: none"> <li>• Organizational communication: concept, types, functions and networks</li> <li>• Public communication-concept and techniques</li> <li>• Mass Communication- concept, significance, functions and elements</li> <li>• Theories and models of mass communication</li> <li>• Intercultural communication- concept, stages and barriers</li> <li>• Relationship between culture and communication</li> </ul>		
<b>UNIT – IV</b>		<b>Mass Media</b>		
		<ul style="list-style-type: none"> <li>• Mass Media- characteristics and significance of print, electronic and web based media</li> <li>• Print Media: types, nature, characteristics, reach, access.</li> <li>• Radio: types, nature, characteristics, reach, access.</li> <li>• Television and cinema: types, nature, characteristics, reach, access.</li> <li>• ICTs: types, characteristics, reach and access.</li> </ul>		
<b>PRACTICALS</b>				
		1	Exercises for understanding self	
		2	Studying group dynamics in organizations-formal and informal	
		3	Audience analysis- readership, listenership and viewership studies	
		4	Content analysis of mass media	
<b>REFERENCES</b>				
		1	Devito, J. (1998) Human Communication. New York: Harper & Row	
		2	Baran, S. (2014) Mass Communication Theory. Wadsworth Publishing	
		3	Barker, Larry Lee. (1990) Communication, Eaglewood Cliffs, New Jersey: Prentice Hall.	

4	McQuail, D. (2000) Mass Communication Theories. London: Sage Publications
5	Vivian. J. (1991) The Media of Mass Communication
6	Stevenson. D. (2002) Understanding Media Studies: Social Theory and Mass Communication. Sage Publication