

**DRAFT**

**National Education Policy-2020**

**Common Minimum Syllabus for Uttarakhand State Universities and Colleges**

**Four Year Undergraduate Programme- FYUP/Honours Programme/master's in arts**

**PROPOSED STRUCTURE FOR FYUP/MASTER'S HOME SCIENCE SYLLABUS**

**DEPARTMENT OF HOME SCIENCE**

### List of Experts in drafting NEP (2020) syllabus (Home Science)

S.no	Name and Designation of Expert	
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**List of Papers (DSC, DSE, GE) with Semester Wise Titles for ‘Home Science’**

Year	Semester	Course	Paper Title	Theory/ Practical	Credits
<b>FIRST YEAR</b>	I	DSC	Fundamentals of Nutrition and Human Development	Theory	3+1
			Practical (a) Cooking Skills and Healthy Recipe Development	Practical	
		GE	Techniques of Food Preservation	Theory	4
		SEC	House Keeping	Theory	2 (1+1)
	II	DSC	Introduction to Clothing, Fashion and Family Resource Management	Theory	3+1
			Practical (b) Clothing and Textile	Practical	
		GE	Entrepreneurship Management	Theory	4
		SEC	Fruits and Vegetables Preservation	Theory + Practical	1+1
<b>Undergraduate Certificate (in the field of Multidisciplinary study)</b>					
<b>SECOND YEAR</b>	III	DSC	Housing, Interior Decoration and Extension Education	Theory	3+1
			Practical (c) Interior Decoration and Development of Extension Teaching Aids	Practical	
		DSE	Family finance management	Theory	4
		GE	Entrepreneurship for Small Catering units	Theory	4
		SEC	NGO Management and Corporate Social Responsibility	Theory	2
	IV	DSC	Communication Process and Human Development II	Theory	3+1
			Practical (d) Practical based on communication process and Human Development	Practical	
		DSE	Food Processing and storage	Theory	4
		GE	Early Childhood Care and Education	Theory	4
		SEC	Food Safety, sanitation and hygiene	Theory	2
<b>Undergraduate Diploma (in the field of Multidisciplinary study)</b>					

THIRD YEAR	V	DSC	Surface Ornamentation of Fabrics	Theory	3
		DSC	Practical (e) Techniques of Surface Ornamentation of Fabrics	Practical	1 (Compulsory)
		DSE	Community Development and Programme Planning	Theory	4
		GE	Community Development Organizations	Theory	4
	VI	DSC	Dietetics and Therapeutic Nutrition	Theory	3
		DSC	Practical (f) Therapeutic Diet Preparation and Nutrient Evaluation	Practical	1(Compulsory )
		DSE	Family Welfare and Community Education	Theory	4
		GE	Diet and Nutrition Counselling	Theory+ Practical	3+1
Bachelors (in the field of Multidisciplinary study)					

FOURTH YEAR	VII	DSC 01	Advanced fabric and clothing construction	Theory	4
		DSE 1a	Research methods and statistics	Theory	4
		DSE 2a	Theories of human development	Theory	4
		DSE 3a	Advance food science	Theory	4 (Compulsory)
		DSE 4a	PRACTICAL 1- Clothing Construction and Food preparations	Practical	4 (Compulsory)
		GE	Rural Sociology	Theory	4
		DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6
	VIII	DSC 02	Food safety and preservation	Theory	4
		DSE 1b	Life span development	Theory	4
		DSE 2b	Advance home management	Theory	4
		DSE 3b	Extension in home science	Theory	4 (Compulsory)
		DSE 4b	PRACTICAL 2- Practical Aspects of Extension Education	Practical	4 (Compulsory)
		GE	Marriage and Family Dynamics	Theory	4
		DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6
Bachelors with Honors in Home Science					
FIFTH YEAR	IX	DSC 03	Community nutrition	Theory	4
		DSE 1c	Indian embroideries and dying and printing techniques	Theory	4 (Compulsory)
		DSE 2c	Child welfare in India	Theory	4
		DSE 3c	Human physiology	Theory	4
		DSE 4c	PRACTICAL 3- Nutritional Assessment and Surface ornamentation of fabrics	Practical	4 (Compulsory)
		GE	Psychological testing and Measurement	Theory	4

		DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6
	X	DSC 04	Interior decoration	Theory	4
		DSE 1d	Human nutrition and diet therapy	Theory	4 (Compulsory)
		DSE 2d	Children with special needs	Theory	4
		DSE 3d	Fashion Design and Development	Theory	4
		DSE 4d	PRACTICAL 04- Interior Decoration and Therapeutic Nutrition	Practical	4 (Compulsory)
		GE	Gender in Extension	Theory	4
		DISSERTATION	Dissertation on Major OR Dissertation on Minor OR Academic Project/Entrepreneurship	Theory	6
<b>Masters of Home Science</b>					

**Abbreviations-**

**DSC-Discipline Specific Course;**  
**DSE-Discipline Specific Electives;**  
**GE-Generic Electives;**  
**SEC-Skill Enhancement Course;**

**Multidisciplinary Course of Study (Three Core Disciplines)**  
**B.A. HOME SCIENCE**  
**(First Draft of Syllabus)**

<b>Semester</b>	<b>Course code</b>	<b>Core (DSC)</b>	<b>Elective (DSE)</b>	<b>Generic Elective (GE)</b>	<b>Skill Enhancement Course (SEC)</b>
<b>I</b>	HSC/DS C/UG 01 (4 credit)	Fundamentals of Nutrition and Human Development- (3TH)		Techniques of Food Preservation (4) HSC/GE/UG 02	House Keeping (2) HSC/SEC/UG 003
		Cooking Skills and Healthy Recipe Development (1 Practical)			
<b>I</b>	HSC/ DSC/ UG 004 (4 credit)	Introduction to Clothing, fashion and Family Resource Management- (3 Th)		Entrepreneurship Management (4) HSC/GE/UG 05	Fruits and Vegetables Preservation (1+1) HSC/SEC/UG 06
		Clothing and Textile- (1Practical)			
<b>I</b>	HSC/DS C/UG 007 (4 credit)	Housing, Interior Decoration and Extension Education-(3Th)	Family finance management HSC/DSE/UG 008 (4)	Entrepreneurship for Small Catering units (4) HSC/GE/UG 009	NGO Management and Corporate Social Responsibility (2) HSC/SEC/UG 010
		Interior Decoration and Development of Extension Teaching Aids-(1Practical)			
<b>I</b>	HSC/DS C/UG 011 (4 credit)	Communication Process and Human Development II (3Th)	Food Processing and storage HSC/DSE/UG 012 (4)	Early Childhood care and Education (4) HSC/GE/UG 013	Food Safety sanitation and hygiene (2) HSC/SEC/UG 014
		Practical (d) Practical based on communication process and Human Development (1Practical)			
<b>V</b>	HSC/ DSC/ UG 015 (4 cred	Surface Ornamentation of Fabrics -(3 Th)	Community Development and Programme Planning- (4) HSC/DSE/UG 016	Community Development Organizations (4) HSC/GE/UG 017	
		Techniques of Surface Ornamentation of Fabrics- (1Practical)			
<b>V</b>	HSC/D SC/UG 018 (4 credit)	Dietetics and Therapeutic Nutrition-(4 Th)	Family Welfare and Community Education- (4) HSC/DSE/UG 019	Diet and Nutrition Counselling (4) HSC/GE/UG 020	
		Therapeutic Diet Preparation and Nutrient Evaluation-(2 Practical)			

Sem ester	Core(DSC)	Elective (DSE)	General Elective (GE)	Ability Enhancement course (AEC)	Skill enhancement course (SEC)	Value addition course (VAC)	Total credit
VII	Advance fabric and clothing construction (4) (HSC/DSC/PG 103)	Research methods and statistics (4) (HSC/DSE/PG 101) Theories of human development (4) (HSC/DSE/PG 102) Advance food science (4) (HSC/DSE/PG 104) (Compulsory) Practical (HSE/ DSE/ PG 105) Compulsory (4)	Rural Sociology (HSC/GE/ PG 106) (4)			Dissertation on major (4+2) Or Dissertation on minor or academic projects / entrepreneurship (HSC/VAC/PG 107)	22
VIII	Food safety and preservation (4) (HSC/DSC/PG 108)	Life span development (4) (HSE/DSE/PG 109) Advance home management (4) (HSE/DSE/PG 110) Extension in home science (4) (HSE/DSE/PG 111)(Compulsory) Practical (HSE/ DSE/ PG 112) Compulsory (4)	Marriage and Family Dynamics (HSC/GE/ PG 113) (4)			Dissertation on major (4+2) Or Dissertation on minor or academic projects / entrepreneurship (HSC/VAC/PG 114)	22
IX	Community nutrition (4) (HSC/DSC/PG 115)	Indian embroideries and dying and printing (4) (HSC/DSE/PG 116) (Compulsory)	Psychological testing and Measurement			Dissertation on major (4+2) Or Dissertation on minor	22



		<p>Child welfare in India (4) (HSC/DSE/PG 117)</p> <p>Human physiology (4) (HSC/DSE/PG 118)</p> <p>Practical (HSE/ DSE/ PG 119) Compulsory (4)</p>	(HSC/GE/ PG 120) (4)			<p>or academic projects / entrepreneurship (HSC/VAC/PG 121)</p>	
X	<p>Interior decoration (4) (HSC/DSC/PG 122)</p>	<p>Human nutrition and diet therapy (4) (HSC/DSE/PG 123) (Compulsory)</p> <p>Children with special needs (4) (HSC/DSE/PG 124)</p> <p>Fashion Design and Development (4) (HSC/DSE/PG 125)</p> <p>Practical (HSE/ DSE/ PG 126) Compulsory (4)</p>	<p>Gender in Extension (HSC/GE/ PG 127) (4)</p>			<p>Dissertation on major (4+2) Or Dissertation on minor or academic projects / entrepreneurship (HSC/VAC/PG 128)</p>	22

**Programme Specific Outcomes (PSOs)**

**(Undergraduate Programme) After this programme, the learners will be**

**able to:**

<b>PSO 1</b>	Learn about the discipline of Home Science, promote all-round development of individuals and families, equip students with practical skills for managing homes and resources, and foster critical thinking and problem-solving abilities, ultimately aiming to improve quality of life and contribute to better society.
<b>PSO 2</b>	Students will be able to develop capabilities to start earning by enhancing their skills in the field of Food and Nutrition, Clothing and Textiles, Human development, Family Resource management and Extension education.
<b>PSO 3</b>	Equip learners with practical skills in meal-planning, preparation of recipes, apparel construction, home management, and child development
<b>PSO 4</b>	Understands the physical, emotional, and cognitive development of children.
<b>PSO 5</b>	Gain knowledge in fabric selection, garment construction, and maintenance.

### Programme Specific Outcomes (PSOs) - MASTER'S IN HOME SCIENCE

**After this programme, the learners will be able to:**

<b>PSO 1</b>	Develop a sophisticated understanding of discipline of Homes Science, including key concepts, methodologies, and debates in the field, and apply these theories effectively to analyze the survey/ practical work.
<b>PSO 2</b>	Investigate significant problems or trends within the field of home science, such as nutritional deficiencies, child development challenges, or effective home management practices.
<b>PSO 3</b>	Promote research and innovation and design (product) development favoring in all the disciplines in home science.
<b>PSO 4</b>	Add to the existing body of knowledge in home science by presenting new findings, theories, or perspectives
<b>PSO 5</b>	Inculcate both generic and subject-specific skills to succeed in the employment market and standards of life.
<b>PSO 6</b>	Assess and aim to improve the social impact of home science practices, focusing on areas like community health, family dynamics, or sustainable living.
<b>PSO 7</b>	Suggest policy changes or new policies that could improve outcomes in areas like public health, family welfare, or consumer rights.

**Department of Home Science**

**Semester-I**

**BACHELOR OF HOME SCIENCE**

**DISCIPLINE SPECIFIC COURSE (DSC)- Fundamentals of Nutrition and Human Development**

**HOME SCIENCE**

Programme: <i>CERTIFICATE</i>		Year: I	Semester: I
Subject: HOME SCIENCE (credit 3+1)			
Course: HSC/DSC/UG 01	Course Title: Fundamentals of Nutrition and Human Development (Theory)		
<b>Course Outcomes:</b> The student at the completion of the course will be able to: <ul style="list-style-type: none"><li>• Students will get familiar with different methods of cooking</li><li>• Acquaint students with practical knowledge of nutrient rich foods</li><li>• Explain the need and importance of studying human growth and development across life span</li><li>• Identify the biological and environmental factors affecting human development</li><li>• Learn about the characteristics, needs and developmental tasks of infancy &amp; early childhood years</li></ul>			
Credits:3+1		Core Compulsory/Elective	
Units	Topic		
Part A- Fundamentals of Nutrition			
I	Traditional Home Science and its relevance in current era. Contribution made by Indian Home Scientists i.e. Swaminathan, C.V. Gopalan, S.K. Dey, Rabindra Nath Tagore, Shanti Ghosh, etc.		
II	Food and Nutrition Food- meaning, Classification and function Basic food groups, Importance of basic food groups, balanced diet Nutrition-Concept of Nutrition, health Nutrients-Macro (Carbohydrates, Fat, Protein and Energy) Micro nutrients (Vitamins and Minerals), sources, functions, requirement and deficiency diseases		
III	Cooking Methods-Objectives, Preliminary preparations-advantages and disadvantages. Methods (Dry and Moist Heat methods), importance, Advantages and Disadvantages. Preservation of Nutrients while Cooking. Traditional methods of enhancing nutritional value of foods-germination, fermentation, etc. Microwave and Solar Cooking		
Human Development			

<b>IV</b>	<p>Introduction to Human Development</p> <ul style="list-style-type: none"> <li>• Concept, Definition and need to study Human Development</li> <li>• Domains, Stages of development.</li> </ul> <p>Principles of Growth and Development. Determinants of Development heredity and environment</p>
<b>V</b>	<p>Prenatal Development and Birth Process:</p> <ul style="list-style-type: none"> <li>• Conception, Pregnancy and Childbirth, Problems of Pregnancy, Stages of prenatal development, Factors affecting pre-natal development</li> <li>• Physical appearance and capacities of the new-born Maternal and Infant mortality.</li> </ul>
<b>VI</b>	<p>Infancy:</p> <ul style="list-style-type: none"> <li>• Developmental task during Infancy and Preschool Stage</li> <li>• Physical and Motor Development</li> <li>• Social and emotional development</li> <li>• Cognitive and language development</li> </ul> <p>Common ailments of baby hood</p>
	<p><b>Suggested Reading</b></p> <ul style="list-style-type: none"> <li>• Dr. Brinda Singh, Manav Sharir evam Kriya Vigyan Panchchee IPrakashan, Jaipur, 2015, 15<sup>th</sup> Ed.</li> <li>• Chatterjee, C.C, "Human Physiology" Medical Allied Agency: Voll, II.</li> <li>• Textbook of Biology for 10+2 Students (NCERT)</li> <li>• Sumati R Mudambi, "Fundamentals of food Nutrition and Diet Therapy", New Age International Pvt. Ltd, New Delhi, 6<sup>th</sup> Ed. (2018)</li> <li>• Punita Sethi and Poonam Lakda, "Aahar Vigyan, Suraksha evam Poshan"; Elite Publishing House, New Delhi; 2015</li> <li>• Dr. Anita Singh, Aahar Evam Poshan Vigyan, star Publication, Agra</li> <li>• Dr. Devina Sahai, Aahar Vigyan, New Age International Publishers, New Delhi</li> <li>• Berk, L.E. Child Development New Delhi: Prentice Hall (2005) (5<sup>th</sup> ed.).</li> <li>• Berk L.E. Child Development Allyn and Bacon 1992 (6<sup>th</sup>) Edition</li> </ul>
	<p>This course can be opted as an elective by the students of the following subjects: Open for all</p> <p>The eligibility for this paper is 10+2 with any subject</p>
	<p>Suggested Continuous Evaluation Methods:</p> <ul style="list-style-type: none"> <li>• Seminar/Presentation on any topic of the above syllabus</li> </ul> <p>Test with multiple choice question/short and long answer questions Attendance</p> <p>Course prerequisites: The eligibility for this paper is 10+2 with any subject</p>

### Practical (a) Cooking skills and Healthy Recipe Development)

Programme/Class: Certificate		Year: I	Semester: I
Subject: Home Science			
Course Code: HSC/DSC/UG/01		Practical (a) Cooking skills and healthy recipe development	
Course Outcomes: <ul style="list-style-type: none"><li>Students will get familiar with different methods of cooking</li><li>Acquaint students with practical knowledge of nutrient rich foods</li></ul>			
Credits:01		Core Compulsory/Elective	
Unit	Topic		
I	Basic Cooking skills <ul style="list-style-type: none"><li>Weighing of raw materials, Preparing of different food items</li></ul>		
II	Preparation of various dishes using different methods of cooking <ul style="list-style-type: none"><li>Boiling/steaming</li><li>Roasting</li><li>Frying-Deep/shallow</li><li>Pressure cooking</li><li>Hot air cooking</li><li>Baking</li></ul>		
III	Different styles of cutting fruits and vegetables <ul style="list-style-type: none"><li>Salad Decoration/Dressing</li><li>Table setting, Napkin Folding</li></ul>		
IV	Preparation of nutrient rich dishes <ul style="list-style-type: none"><li>Protein rich dish</li><li>Carbohydrate rich dish</li><li>Fat rich dish</li><li>Vitamins rich dish</li><li>Minerals rich dish</li><li>Fiber rich dish</li></ul>		
	Suggested Readings: <ul style="list-style-type: none"><li>❖ Dr.Brinda Singh, Manav Kriya Vigran Panchsheel Prakashan, Jaipur; 2015,15<sup>th</sup> Ed.</li><li>❖ Dr.Nitu Singh,Prayogik Grih Vigyan, Sahitya Prakashan, Agra</li><li>❖ Chatterjee,C.C, “Human Physiology” Medical Allied Agency; VolI,II.</li><li>❖ Text Book of Biology for 10+2 Students (NCERT)</li><li>❖ Sumati R Mudami, “Fundamentals of food Nutrition and Diet Therapy”, New Age International Pvt. Ltd, New Delhi, 6<sup>th</sup> Ed. (2018)</li><li>Punita Sethi and Poonam Lakda, “Aahar Vigyan, Suraksha evam Poshan”; Elite Publishing House, New Delhi; 2015</li></ul>		

This course can be opted as an elective by the students of the following subjects: Open for all

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**Suggested Continuous Evaluation Methods:**

- Test with multiple choice question/short and long answer questions
- Menu planning and calculation of nutrient requirement
- Nutritive value calculation of various nutrient rich dish

Course prerequisites: The eligibility for this paper is 10+2 with any subject.

**Suggested equivalent online courses**

I IGNOU and other centrally/state operated Universities/MOOC platforms such as “SWAYAM” in India and abroad.,

<http://heecontent.upsdc.gov.in/Home.aspx>

**Further Suggestions:**

Student may develop their cooking skills with new healthy recipe development after completion of this course and even start their own food service center.

## Generic Elective

**HSC/UG/GE 02- TECHNIQUES OF FOOD PRESERVATION**

Programme/ Class: Certificate		Year: I	
Subject: Home Science			
Course Code: HSC/GE/UG 02		Course Title: <b>TECHNIQUES OF FOOD PRESERVATION</b>	
Credits: 4		Minor Elective	
Unit	Topic		
I	<b>Food Microbiology</b> Principles of Food Preservation, microorganisms associated with foods- bacteria, yeast and mold, Importance of bacteria, yeast and molds in foods. Classification of microorganisms based on temperature, pH, nutrient and oxygen requirements. Classification of food based on pH, Food infection, food intoxication, definition of shelf life, perishable foods, semi perishable foods, and shelf stable foods.		
II	<b>Food Preservation by Low temperature</b> Freezing and Refrigeration: Introduction to refrigeration, cold storage and freezing, definition, principle of freezing, changes occurring during freezing, types of freezing i.e., slow freezing, quick freezing, introduction to thawing, changes during thawing and its effect on food.		
III	<b>Food Preservation by high temperature</b> Sterilization, Pasteurization, and blanching. <b>Food Preservation by Moisture control-</b> Drying and Dehydration - Definition, drying as a means of preservation, differences between sun drying and dehydration (i.e. mechanical drying), heat and mass transfer, factors affecting rate of drying, types of driers used in the food industry.		
V	<b>Food Preservation by Irradiation</b> Introduction, units of radiation, kinds of ionizing radiations used in food irradiation, mechanism of action, uses of radiation processing in food industry.		
VI	<b>Traditional Methods of Food Preservation</b> a) Smoking b) Sun drying c) Pickling/ Salting d) Fermentation		
VII	<b>Project – visit to food processing unit (such as fruit and vegetable Processing Unit, milk processing unit, cold storage plant etc.) observing various production processes and quality control and report writing)</b>		
<b>Suggested Readings:</b> 1. B. Srilakshmi, Food science, New Age Publishers,2002 2. Meyer, Food Chemistry, New Age,2004 3. Bawa. A.S, O.P Chauhan et al. Food Science. New India Publishing agency, 2013 4. Frazier WC and Westhoff DC, Food Microbiology, TMH Publication, New Delhi, 2004			



**Semester I**  
**Skill Enhancement Courses (SECs)**  
**Course HSC/SEC/UG 03: HOUSE KEEPING**

**2(2-0-0)**

**Corse code: HSC/SEC/UG 03**

<b>Course title &amp; Code</b>	<b>Credits</b>	<b>Lecture</b>	<b>Tutorial</b>	<b>Practical\Practice</b>	<b>Eligibility criteria</b>	<b>Pre-requisite of the course (if any)</b>
HSC\SEC\UGC\03- House keeping	2	1		1	Class XII	NIL

**Learning objectives:**

1. To understand the role of house keeping in hospitality industry.
2. To understand the roles and responsibilities of personnel in the housekeeping department.
3. To know more about accidents and fire safety measures in institutions.
4. To understand care of laundry in house keeping.

**Learning outcomes:**

By the end of the course students will:

1. learn about room cleaning procedure. List down the daily, weekly and yearly tasks.
2. About the cleaning procedure and care of glass articles.
3. learn cleaning procedure and care of metals like brass and silver articles.
4. learn the method of cleaning lampshades, fans and other electrical fixtures.
5. learn the method of bed making.
6. learn the method of setting maid cart (trolley).
7. learn the procedure of preparing room inspection check list.

**Theory Topics**

**Unit I Housekeeping Department**

- Role of housekeeping in hospitality industry
- Layout of Housekeeping department
- Planning, organization & communication of House keeping activities.
- Co-ordination with other department
- Roles/responsibilities of personnel in the housekeeping department

**Unit II Cleaning Activity and Pest Control**

- Cleaning agents- selection and use for different surface
- Cleaning equipment- selection, care and maintenance
- Cleaning techniques- Daily, weekly, yearly-procedure for cleaning of guest room and public area
- Types of common pests and effective methods to control

**Unit III In House accidents, Fire safety and First Aid**

- Types of accidents commonly occur in hospitality institution, methods to avoid and/or reduce.

- Fire safety measures in the institution
- First aid for commonly occurring health problems.

#### **Unit IV: Linen and Uniform Room**

- Layout/plan and Physical features of linen and uniform room
- Types of linen and uniform, their selection
- Storage procedure for linen and uniforms
- Stock determination, control and distribution, record keeping, inventory taking
- Linen and Uniform room staff and their duties

#### **Unit V: Laundry**

- Types of laundry systems In House, contracted out and linen on hire
- Layout plan and physical features of a laundry
- Laundry procedure: Collection, sorting & making, stain removal & Prepare washing, extractions & drying, ironing & folding, inspection, packaging, storage delivery
- Laundry supplies and materials: Water, Soaps, Detergents, Bleaches, Laundry blues, Stiffening agents & Iron
- Dry cleaning procedure

#### **Practical**

- Visit to establishment to get familiar with the role of house keeping
- Make a list of activities which house keeper must look after in an establishment
- Prepare a report on job specification and description of various housekeeping personnel
- List the requirements for cleaning unit or laundry unit attached to and establishment
- Visit hospital /clinic and list the disease caused due to neglect of personal hygiene
- Prepare a first aid box learn to operate fire extinguishers and report any emergency
- Practice various means of eradication of pest like cockroaches, mosquitoes, white ants etc.

#### **Suggested Readings**

- Asler, (1970): Management of Hospitality Operations, Bobbs Merrill, London.
- Andrew Sudhir (1985): Hotel Housekeeping- training manual. Tata McGraw-Hill Publishing Co. Ltd., New Delhi.
- Charavarti, B.K.: A technical guide to Hotel Operation, Metropolitan Book Co. Pvt. Ltd., and New Delhi.
- David, M.Allen: Accommodation and cleaning service, Vol. 1 & 2. Hutchinson Publishing Group 17-21 Conway street, London
- Gladwell Derek: Practical Maintenance of equipment for hoteliers, Licenses and caterers, Hutchinson and Co. Pvt. Ltd.
- Hurst Rosemary: Accommodation Management for Hostel and residential establishment.
- Hurst Rosemary: Service and Maintenance for Hotel and Residential establishment. William Heinemann Ltd., 10Upper Grosvenor Street, London.

### **(Home Science) Semester II**

#### **Introduction to Clothing, Fashion and Family Resource Management (Theory)**

Programme/Class: Certificate	Year: I	Semester: II
<b>Subject: Home Science</b>		
Course Code: HSC/DSC/UG 04 <b>Credit 3+1</b>	Course Title: <b>Introduction to Clothing, Fashion and Family Resource Management</b>	

**Course Outcomes:**

- Learn about scope of textile and clothing
- Understanding why fabrics are different
- Learn how fabrics can be manufactured
- Understand basic concepts of clothing and fashion
- Learn basic concepts of family resource management
- Understand the decision making and use of resources throughout the lifecycle

Credits:3+1

Core Compulsory

Unit

Topic

**Part-A (Clothing and Fashion)****I**

**Introduction** a) Introduction to Clothing and Textile (b) Its importance in day-to-day life (c) Scope, (d) Classification of textile fiber on the basis of their source (e) General properties of fibers (f) Identification of fibers: visual test, microscopic test, chemical test and burning test

**II**

**Knowing Fibers-** Manufacture, processing, properties and uses of (a) Cellulosic Fiber -cotton, Linen, Jute, hemp (b) Protein Fibers-Wool, Silk (c) Synthetic/Manmade Fibers-Nylon, Polyester, Acrylic, Rayon

**III**

**Clothing Construction** (a) Tools for Clothing construction (b) Introduction to sewing machine, its parts and maintenance, (c) Importance of Drafting, Flat pattern techniques (d) Fabric preparatory steps for stitching a garment-preshrinking, straightening, layout, pinning, marking and cutting.

**IV**

**Introduction to Fashion and Fashion Illustration-** Fashion terminologies; Theories of fashion adoption- trickle-down theory, trickle across theory, bottom-up theory; factors affecting fashion  
**Fashion Illustration-** importance and scope, tools for sketching, preparation of fashion figures; different poses and style, fashion sketching; shapes and silhouette

**Part B (Family Resource Management)****V**

**Introduction to Home Management:** Basic Concepts, Purpose and Obstacles of Management.  
 Process of Management–Planning, Organization, Controlling and Evaluation.  
 Motivating Factors in Management –Values, Goals and Standards-Definition and Classification.

**VI**

**Resources-**Meaning, Characteristics, Types and Factors affecting the use of Resources.  
**Family lifecycle-**Stages of family lifecycle.

**VII**

**Decision making** –Concept and characteristics, definition, steps and role of decision making in management, types of decision, factors influencing decision process.

**Suggested Readings:**

- ❖ Collmen P Bernard: Textiles Fiber to Fabric
- ❖ Hollen & Saddler: Introduction to Textile
- ❖ Joseph M: Introduction to Textiles

	<p>❖ Trotman: Textile Fiber Science Cutting Tailoring and Dress Making: National open School, B-31-BKailash Colony, New Delhi-96-3</p> <p>❖ R Bhatia &amp; C Arora (1999), Introduction to Clothing and Textile, Printed by Macho Printery, Raopura, Baroda.</p> <p>❖ Complete Guide to Sewing by Reader's Digest: published by the Reader's Digest Association (Canada) Ltd. Montreal-Pleasantville, NY, 2002.</p> <p>❖ Deacon R.E. and Firebaugh F.M. (1998) Family Resource Management-Principles and application. N. Delhi: Roy Houghton Mifflin Company.</p> <p>❖ Faulkner, R.&amp;Faulkner,S.(1961).ManagementforModernFamilies.N.Delhi: SterlingPublisherLtd.</p> <p>❖ MoorthyG.(Ed.).(1985).HomeManagement.N.Delhi.:AryaPublishers,Mullick,P.Textbook of Home Science. Ludhiana. :Kalyani Publishers.</p> <p>❖ Nickell,P.,andDorsey,J,M.(2002).ManagementinFamilyLiving.NewDelhi: CBS Publishers(ISBN13:9788123908519)</p> <ul style="list-style-type: none"> <li>• Patni Manju &amp; Sharma Lalita,Grah Prabandh, Star Publication Agra</li> <li>• Varma, Pramila,Vastra Vigyan Avam Paridhan: Madhya Pradesh Hindi Granth Academy,Bhopal.</li> </ul> <p>❖ Varghese, M.A, Ogale, N.Nand Srinivasan,K. (2001). Home Management. New Delhi, New Age International(P) Ltd.</p> <p>❖ Varghese, M.A. House hold Equipment Manual, S.N.D.TWomen's University, Mumbai.</p> <p>❖ Suggestive digital platform web links-Svayam Portal, <a href="http://heecontent.upsdc">http://heecontent.upsdc</a>.</p> <p><u>This course can be opted as an elective by the students of the following subjects: Open for all</u> .....</p> <p><b><u>Suggested Continuous Evaluation Methods:</u></b></p> <ul style="list-style-type: none"> <li>• <u>Seminar on any topic of above syllabus.</u></li> <li>• <u>Test with multiple choice question/short and long answer questions</u></li> <li>• <u>Attendance</u></li> </ul> <p><u>Course prerequisites: To study this course, a student must have had ALL in class12<sup>th</sup>.</u></p> <p><b><u>Suggested equivalent online courses</u></b> <u>IGNOU and other centrally/state operated Universities/MOOC platforms such as "SWAYAM" in India and abroad.</u></p>
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### Practical (b)Clothing & Textiles

Programme/Class: Certificate		Year: I	Semester: II
Subject: Home Science			
Course Code: HSC/DSC/UG 04		Course Title: Practical (b) Clothing & Textiles	
Course Outcomes:			
<ul style="list-style-type: none"><li>• Ability to identify fibers and fabrics</li><li>• Understanding why fabrics are different</li><li>• Lea</li></ul>			
<ul style="list-style-type: none"><li>• Learn how garments are stitched</li></ul>			
Credits:1		Core Compulsory/Elective	
Total No. of lab. periods-30(60hours)			
Unit	Topic		
I	Identification of fiber sand fabrics (a) Fiber identification tests-Visual burning, solubility and microscopic test-natural and synthetic, pure and blended fibers. (b) Weaves identification and understanding their usage		
II	Learning to Stitch- (a) Knowing how to stitch-straight-line stitching, stitch in gat curves and corners (b)Basic Stitching-Temporary Stitching, Permanent and decorative stitching		
III	Basic Sewing -(a) Seams-Plain seams and its finishing, run and fell seam, French seam (b)Attaching different fasteners (c) Disposal of fullness-darts, gathers, tucks and pleats (d) Neckline Finishing- Facing & Binding		
Suggested Readings:			
<ul style="list-style-type: none"><li>❖ Cutting Tailoring and Dress Making: National open School, B-31-B Kailash Colony, New Delhi-1100048</li><li>❖ RB hatia &amp; C Arora (1999), Introduction to Clothing and Textile, Printed by Macho Printery, Raopura, Baroda.</li><li>❖ Complete Guide to Sewing by Reader's Digest: published by the Reader's Digest Association (Canada) Ltd. Montreal-Pleasantville, NY,2002.</li><li>❖ Helen J Armstrong, Pattern Making for Fashion Design, Prentice Hall.</li><li>❖ Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK,1991</li><li>❖ Metric Pattern cutting &amp; Grading by Winfred Aldrich.</li><li>❖ Suggestive digital platform web links- Svayam Portal,<a href="http://heecontent.upsdc.gov.in/Home.aspx">http://heecontent.upsdc.gov.in/Home.aspx</a></li></ul>			
Suggested Continuous Evaluation Methods:			
<ul style="list-style-type: none"><li>• Preparation of samples of various types on fabrics'</li><li>• Evaluation of Prepared garment</li><li>• Record file preparation and evaluation, Attendance</li></ul>			
Course prerequisites: Class12 <sup>th</sup> with any subject			
<ul style="list-style-type: none"><li>• learning basic sewing skills</li></ul>			

### Entrepreneurship Management (Generic Elective)

Programme/ Class: Diploma		Year: II	
Subject: Home Science			
Course Code: <b>HSC/GE/UG 05</b>		<b>Entrepreneurship Management</b>	
<b>Course Outcomes:</b>		<b>1:</b> - Students will be able to explain the core concepts of entrepreneurship, including its role in economic development, the characteristics of entrepreneurs, and the challenges of entrepreneurial ventures. <b>2:</b> - students will learn to assess and identify viable business opportunities by analysing market needs, customer preferences, and industry trends. <b>3:</b> - Students will acquire the skills to create comprehensive business plans, including market analysis, financial planning, operational strategies, and risk management.	
Credits: 4		<b>Minor Elective</b>	
<b>Unit</b>	<b>Topic</b>		
<b>Part- A (Theory)</b>			
I	Entrepreneurship – Definition, need, scope and characteristics of entrepreneurship development and employment promotion Identification of Opportunities		
II	Entrepreneur and enterprise, entrepreneurial qualities, assessing entrepreneurial qualities, environment scanning and opportunity identification. Methods source and type of opportunity, assessment criteria and profiling opportunities.		
III	Infrastructure and support system, Industrial support agencies, Procedure and steps involved in setting up an enterprise, sources of information and industry organization.		
IV	Project planning and formulation of project, identification and product selection, generating project ideas, short listing, final selection market survey, market alternatives, an overview of the future, Product development, Product Selection, Preparation of project report		
V	Enterprise management, Basic management concepts, personnel management, product management, material management, financial management and accounting, market management, crisis management.		
VI	Interaction with entrepreneurs and report writing, visit to any entrepreneurial unit and report writing		
<b>RECOMMENDED READINGS</b>			
1. Ramachandran, Entrepreneurship Development, Mc Graw Hill			
2. Katz, Entrepreneurship Small Business, Mc Graw Hill			

3. Byrd Megginson, Small Business Management An Entrepreneur's Guidebook 7th ed, McGrawHill
4. Fayolle A (2007) Entrepreneurship and new value creation. Cambridge, Cambridge University Press
5. Hougaard S. (2005) The business idea. Berlin, Springer
6. Lowe R & S Mariott (2006) Enterprise: Entrepreneurship & Innovation. Burlington, Butterworth Heinemann

**Semester II**  
**Fruits and Vegetables preservation**  
**Skill Enhancement course**

Course title & code	Credits	Lecture	Tutorial	Practical\Practice	Eligibility criteria	Pre-requisite of course (if any)
HSC/SEC/UG 06 – Fruits and vegetables preservation	2	1		1	Class XII	NIL

Subject: Home Science		
Course Code: HSC/SEC/UG 06		Course Title: <b>Fruits and Vegetables Preservation</b>
<b>Learning Objectives:</b> <ul style="list-style-type: none"><li>• To know about various types of fruits and vegetables and their nutritive value.</li><li>• To understand the reasons for spoilage of fruits and vegetables.</li><li>• To develop practical skills in preservation of fruits and vegetables.</li><li>• Learn proper storage methods to maintain quality and taste.</li></ul>		
<b>Learning Outcomes:</b> <p>On successful completion of this course the students will be able to</p> <ol style="list-style-type: none"><li>1. Identify various types of fruits and vegetables and explain their nutritive value.</li><li>2. Understand the fragile nature of fruits and vegetables and causes for their damage.</li><li>3. Explain various methods of preservation for fresh fruits and vegetables.</li><li>4. Get to know the value-added products made from fruits and vegetables.</li></ol>		
Credits: 2		<b>Vocational Minor</b>
Units	Topic	
<b>Theory</b>		
<b>I</b>	<b>Introduction to fruits and vegetables</b> <ol style="list-style-type: none"><li>1. Fruits: Definition, elementary knowledge, types and classification of fruits (fleshy and dry) with local /common examples.</li><li>2. Vegetables: Definition, elementary knowledge, types and classification of vegetables (root, leafy, stem, flower and fruit) with local/ common examples.</li><li>3. Importance of fruits and vegetables in human nutrition.</li><li>4. Concept of perishable plant products – maturation and spoilage, shelf life; preservation – need for preservation of fruits and vegetables. Reasons for spoilage of fruits and vegetables.</li></ol>	



<b>II</b>	1. Fruits – ripening and biological aging; storage and preservation concerns. 2. Fruit preservation at room temperature as juices and squashes 3. Preservation of fruits by application of heat; making of fruit products (jams, jellies). 4. Preservation by dehydration, -Drying of fruits and vegetables 5. Pickles and causes of spoilage of pickles.
<b>III</b>	1. Vegetables – losses after harvesting and causes; problems in handling and storage. 2. Modern methods of packaging and storage to reduce losses. 3. Preservation of sliced vegetables in factories by canning and bottling, General steps of canning of fruits and vegetables
<b>Practical</b>	
1. Assignments/Group discussion. 2. Invited lecture and demonstration by local expert. 3. Exhibition and report writing on various types of locally available fruits and vegetables. 4. Hands on training on making fruit juices, jams, jellies and pickles. 5. Preservation of vegetables by drying and dehydration. 6. Report making and presentation of various preserved fruit products available in local market. 7. Hands on training on making of potato, Colocasia, and banana chips.	
<b>Suggested Reading</b> 1. Giridharilal, G. S. Siddappa and G.L.Tandon (2007) Preservation of Fruits and Vegetables, Indian Council of Agri. Res., New Delhi. 2. Srivastava, R.P., and Sanjeev Kumar (2019) Fruit and Vegetable Preservation : Principles and Practices, CBS Publishers & Distributors Pvt., Ltd., New Delhi 3. Thompson, A.K. (1995) Post Harvest Technology of Fruits and Vegetables. Blackwell Sci., U.K. 4. Verma, L.R. and V.K. Joshi (2000) Post Harvest Technology of Fruits and Vegetables. Indus Publ., New Delhi 5. Website links- <a href="https://nchfp.uga.edu/">https://nchfp.uga.edu/</a>	

**B.A. (Home Science) Semester III**  
**Housing, Interior Decoration and Extension Education (Theory) (DSC)**

Programme/Class: Diploma	Year: II	Semester: III
Subject: Home Science		

Course Code: <b>HSC/DSC/UG 07</b>		Course Title: <b>Housing, Interior Decoration and Extension Education (Theory)</b>	
Course outcomes: <ul style="list-style-type: none"><li>• Grasp knowledge of Housing, need &amp; selection of site in real life situations.</li><li>• Comprehending Housing plans for residential purpose.</li><li>• Appreciate principles of design and the contributing factor store fine personal aesthetic senses.</li><li>• Learn the widening concepts of Extension Education.</li><li>• Develop understanding for Effective teaching and learning.</li><li>• Gain skills to use technologically advanced Audio-visual aids.</li></ul>			
Credits:3+1		Core Compulsory/Elective	
Unit	Topic		
Part-A (Housing and Interior Decoration)			
I	Housing: Need and functions; Difference between House and Home, ways to acquire house (Own and rented). Factors influencing selection and purchase of house and site for house building.		
II	House Planning: Principles of house planning, Planning house for different income groups. Types of Kitchens		
III	Interior Designing: Introduction to Interior designing. Objective of interior decoration. Elements of Art- Line, Shape, Texture, Colour, Pattern, Light and Space, types of design. Colour: Importance in home decoration, meaning, functions, principles of colour, Prang's colour system – hue, value and intensity, factors affecting selection of colour in home decoration, colour schemes. Principle of design-Proportion, Balance, Rhythm, Emphasis, Harmony. Elements of Design and types of design – naturalistic, stylized, geometric and abstract Structural and decorative design		
IV	Home Decors: Furniture: importance, selection of furniture, types of furniture Accessories – Importance, classification Flower Arrangement – Importance, styles, classification, care of cut flowers.		
PART B (Extension Education)			
V	Extension Education: Meaning, Concepts, Objective, Scope, Principles, objectives, need and importance. Scope of Extension Education, Early Extension Efforts in India, Formal and Non-Formal Education.		
VI	Extension Teaching & Learning Process: Role and qualities of an extension worker, Steps in Extension Teaching Process, Criteria for Effective Teaching and Learning.		
VII	Extension Teaching Methods- Classification, Factors guiding the selection and use of Extension teaching methods.		

VIII

**Audio- visual Aids:** Definition, Importance,  
Classification, Selection, Preparation and effective use of Audio-visual aids

**Suggested Readings:**

- Khanuja. Reena(2018) Grah Vyavastha avam Grah Sajja .Agarwal Publications,AgraISBN:978-93-81124-96-3
- Patni Manju & Sharma Lalita, Grah Prabandh, Star publications Agra.
- Craig,H.T. and Rush,O.D.(1966).Homes with Character.Heath,1966.
- Faulkner, R., and Faulkner, S., (1961). Inside Todays Home. Rev. ed., New York: Holt, Rinehart & Winston, Inc.
- Goldstein. H& Goldstein.V.(1954) Artin Everyday Life Macmillan Publishers.
- Rutt,A. H. (1963)Home furnishing, John Wiley & Sons, Inc.;
- Supriya ,K.B.(2004).Landscape gardening and designing with plants. Pointer Publishers.
- Teresa ,P.Lanker.(1960).FlowerArranging:Step–by–stepInstructionsforEverydayDesigns Florist Review
- Aggarwal, R.(2008).”Communication-todayandtomorrow”,NewDelhi:SublimeCompany
- Dubey V.K., Srivastava Archana, Agrawal Garima, Grah Vigyan Prasara avam Sampreshan, Star Publications Agra.
- Harpalini B .D.Patni.Manju,(PrasarShikshaAvamSanchar)StarPublications,Agra.ISBN978-93-81246
- Shaw Geeta Pushpa, Shaw Jois Sheela, Prasar Shiksha ,VinodPustakMandirAgra.ISBN81-7457-104-3
- Dhahama,O.P.,&Bhatnagar,O.P.(1988).“EducationandCommunicationforDevelopment”. New Delhi.- Oxford and IBH Publish in Co.Pvt. Ltd.
- Jaipal Singh.”Prasar Shiksha avam Gramin Vikas” SR Scientific publications, Agra
- Reddy A.(1987).”Extension Education”. Bapatha, Andhra Pradesh, India: Sreelakshmi Press.
- SupeA.N.(1983).An introduction to Extension Education, Delhi: Oxford IBH publishing

Suggestive digital platform websites Swayam Portal,

- <https://heecontent.upsdc.gov.in/Home.aspx>

This course can be opted as an elective by the students of following subjects: Open for all

**Suggested Continuous Evaluation Methods**

- Seminar on any topic of the above syllabus
- Test with multiple choice questions/short and long answer questions.
- Preparation of Audio-visual aids.
- Attendance

Course prerequisites: Class12<sup>th</sup>with any subject

**Suggested equivalent online courses:**

IGNOU&Othercentrally/stateoperatedUniversities/MOOCplatformssuchas “SWAYAM  
“in India and Abroad

**Further Suggestions:**

It widens the scope for students to join Government and Non-Government organization, up skilling the people at different level sas per their socio-economic structure. Extension work will speed up the basic structures (Gram Panchayat, Village School and Cooperative Societies) etc.

### Interior Decoration and Development of Extension Teaching Aids (Practical)

Programme/Class: Diploma		Year: II	Semester: III
Course Code: <b>HSC/DSC/UG007</b>		Course Title: <b>Practical (c) Interior Decoration and Development of Extension Teaching Aids</b>	
Course outcomes: <ul style="list-style-type: none"><li>• Developing skills for making time plan for effective balance of work &amp; leisure.</li><li>• Plan &amp; prepare budget for the family.</li><li>• In corporate appropriate work simplification in using house hold equipment's.</li><li>• Develop understanding for house planning &amp; decoration</li></ul>			
Credits:1		Core Compulsory	
Unit	Topic		
I	<ul style="list-style-type: none"><li>• Preparation of Color wheels and Color schemes.</li><li>• Display of following colour schemes through a design Monochromatic, analogous, complementary, tri colour- colour schemes</li><li>• Flower Arrangement and Floor Decoration (Rangoli)-Application of Design principles and Element of Art, Innovation of new styles.</li></ul>		
II	<ul style="list-style-type: none"><li>• Plans and elevation of different furniture pieces.</li></ul> Preparing drawings for furniture arrangements considering incomes, size and needs of family.		
III	Draw House Plans with Standard Specifications and Furniture Layout.		
IV	<ul style="list-style-type: none"><li>• Preparation of Projected (PowerPoint presentation, Slides) and</li><li>• Preparation of non-projected communication aids (chart, poster, flashcard).</li></ul> Construction of message through mobile SMS, email, reels or short video on social and environmental issues		
	<b>Suggested Readings:</b> <ul style="list-style-type: none"><li>• Alexander.N.J.,(1972).DesigningInteriorEnvironment.NewYork:HarcourtBrace,</li><li>• Bhargava,B.(2005). Family Resource Management and Interior Decoration, Jaipur: Apple Printer and V. R. Printers.</li><li>• Faulkner,R.,andFaulkner,S.,(1975).InsideTodaysHome,NewYork:Rinehart</li><li>• Gnndotra,V.andJaiswal,N.(2008).ManagementofWorkinHome,New Delhi:DominantpublishersandDistributors.(ISBNNo. 81-7888-526-3)</li><li>• Harmon,S.and Kennon,K.(2018).The code cguide book for Interiors (5<sup>th</sup>Ed.).New York: Wiley (ISBN:978-1-119-342319-6)</li><li>• JohanovichInc. Ball,V.K.(1982).Art of Interior Design.New York: JohnWiley&amp;Sons.</li><li>• Leach, S. D. (1978). Techniques of Interior Design Rendering and Presentation (1<sup>st</sup>Ed.).Architectural Record Books(ISBN-13:978-0070368057)</li><li>• Mohanty,A.B.(1985).Guide to house buildings. New Delhi: Inter India Publications</li></ul>		

	<ul style="list-style-type: none"> <li>• Patni Manju &amp; Sharma Lalita, Grah Prabandh, Starpublications Agra.</li> </ul> <p>Suggestive digital plat form websites</p> <ul style="list-style-type: none"> <li>• <a href="https://bit.ly/3fJfghi">Bit.ly/3fJfghi</a></li> <li>• <a href="https://bit.ly/39mTwGQ">https://bit.ly/39mTwGQ</a></li> <li>• <a href="https://bit.ly/2JoXB2e">https://bit.ly/2JoXB2e</a></li> <li>• <a href="https://bit.ly/3ljkrWf">https://bit.ly/3ljkrWf</a></li> </ul> <p>Swayam Portal,</p> <ul style="list-style-type: none"> <li>• <a href="https://heecontent.upsdc.gov.in/Home.aspx">https://heecontent.upsdc.gov.in/Home.aspx</a></li> </ul>
	This course can be opted as an elective by the students of following subjects: Open for all
	<p>Suggested Continuous Evaluation Methods</p> <ul style="list-style-type: none"> <li>• Assessment of Time-Energy, Budget &amp; House Plans.</li> <li>• Assessment of Market Survey Records</li> </ul> <p>Assessment of Flower Arrangements and Rangoli.</p>
	Attendance.
	Course prerequisites: To study this course, a student must have had the subject.....in class/12 <sup>th</sup> /certificate
	<p>Suggested equivalent online courses:</p> <p>IGNOU &amp; Other centrally/state operated Universities/MOOC platforms such as “SWAYAM” in India and Abroad</p>
	<p>Further Suggestions:</p> <ul style="list-style-type: none"> <li>• Students may develop their managerial skills &amp; Interior Designing skills after completion of this course with the capability to for a job or start their own ventures.</li> </ul> <p>The program giving an opportunity to advancement their knowledge by enrolling for advanced specialized program of their own areas &amp; interest.</p>

**B.A. (Home Science) Semester III**  
**HSC/DSE/UG 08 Family Financial Management (DSE)**  
**Credit. Hrs. 4**  
**Course code- HSC/DSE/UG 008**

**Course outcomes**

After completing the course, students will be able to:

1. Acquire knowledge of income, saving and investment management in the changing socio-economic environment.
2. Develop an understanding about the issues related to consumer protection, legislative measures and redressal mechanisms.
3. Gain conceptual knowledge of critically evaluating and designing various consumer aids and about consumer education and protection.
4. Learn to undertake food adulteration tests through lab analysis.
5. Understand the schemes and services offered by banks and post office

**HSC/DSE/UG 08 Family Financial Management (DSE)**

**Unit 1. Income-** concepts, productive income, money income, hidden income, limits and factors affecting fluctuations in real income, depreciation in money value, inflation, deflation, consumer price index.  
 2. Money as a crucial resource in economic welfare

**Unit 2 Saving**

Saving, methods of saving, institutions for saving,

Investment: methods of investment- Mutual funds, shares, debentures, dividends

**Unit 3 Budget**

Budget: Definition, Types, Importance, Principles, Characteristics of good budget, steps in making budget and misconceptions, household budget, factor affecting budget

**Unit 4 Financial management**

Financial management, Financial Planning, Family Income, Financial Spending Plans, Methods of handling Money, Family life stages and use of Money, Record keeping, Account keeping

**Unit 5 Taxation**

Taxation, type of taxation and its effect, value added tax, Income Tax: Income tax slabs, Pan card, information regarding taxation, income tax section, tax rebate, tax evasion, advantages and disadvantages, principles of sound taxation system.

spending plan

**Expert lectures to be arranged for students by experts from commerce/economics/financial back ground**

**Suggested Readings:**

1:- Dr F C Sharma & C S Rachit Mittal, financial management, SBPD Publications. 2022

2:- Premavarthy Seetharaman, Preeti Mehra & Sonia Batra *Family Resource Management* , CBS Publisher and Distributors Pvt ltd , 2015

## B.A. (Home Science) semester III

### Course title-Entrepreneurship for Small catering units (GE)

#### HSC/GE/UG 09

#### Course Outcomes

Students will be able to:

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

#### Course Title - Entrepreneurship for Small catering units (GE)

#### Course code - HSC/GE/UG 09

#### Theory (Credit 4)

##### Unit I: Introduction to Food Service Management

Basics of management and food service for a small food establishment

- Principles of Management
- Functions of Management
- Types of food service systems

##### Unit II: Production Process in a Food Service Establishment

Components of food production cycle to run a small-scale food service unit.

- Menu Planning: Importance of menu, Factors affecting menu planning, Types of menu
- Food purchase and receiving
- Storage
- Quantity food production: Standardization of recipes, Recipe adjustment and portion control, Techniques of quantity food production
- Food service
- Food hygiene and sanitation, National food regulations

##### Unit III: Resource Management in a Food Service Unit

Understanding fundamentals of space, personnel and financial management

- Types of kitchen areas, Flow of work and work area relationship
- Equipment: Factors affecting selection of equipment, Equipment needs for different situations
- Personnel Management: Functions of a personnel manager, Factors to consider while planning the kind and number of personnel
- Financial Management: Importance of financial management, Budgets and budgeting process, Cost concepts

##### Unit IV: Planning a Food Service Unit

Developing business plan and strategies for establishing a small-scale food service unit

- Identifying resources, developing project plan, Determining investments
- Basics of marketing: 4P's
- Development of a business plan

##### Unit V: project -: Visit to a catering unit, studying its functioning and various operations and report writing

#### Suggested Readings

1:- Sanjeet sharma & Prerna, udhyamita awam laghu stariya vyawsay , VK Global Publication private Limited, 2023

2:- Lora Arduser and Douglas Robert Brown, The Professional Caterer's Handbook, Atlantic Publishing Company, 2006

3:-Dr Avinav Sharma, Udhyamita awam laghu vyawsav pravandhan, Educreation publishing, 2017



**Semester III**  
**Skill Enhancement Course**

Course title and code	Credits	Lecture	Tutorial	Practical\ Practice	Eligibility criteria	Pre-requisite of the course (if any)
HSC/ SEC/UG 10- NGO Management and corporate social responsibility	2	1		1	Class XII	NIL

Subject: Home Science	
Course Code: HSC/ SEC/UG 10	Course Title- NGO Management and corporate social responsibility
<b>Learning Objectives:</b> <ul style="list-style-type: none"> <li>To equip students with knowledge and skills to manage NGOs effectively.</li> <li>To help students understand role, structure and function of NGO.</li> <li>To help students understand CSR principles and contribute positively to social change.</li> </ul>	
<b>Learning Outcomes:</b> <b>On completion of this course,</b> <ol style="list-style-type: none"> <li>The student will be able to understand the concept of NGO.</li> <li>Will gain ability to critically analyze challenges face by NGOs.</li> <li>To develop knowledge and skill with regard to fund raise strategies.</li> </ol>	
Credits: 2	<b>Vocational Minor</b>
	Total No. of Lectures-45
Units	Topic
Theory	
<b>I</b>	<b>Concept of NGO</b> <ul style="list-style-type: none"> <li>Meaning of NGO and GO</li> <li>Difference between Government Organizations and NGO</li> <li>Characteristics of good NGO</li> <li>Structure of NGO</li> <li>Functions of NGO</li> <li>Historical Perspective of NGO</li> <li>Advantages of NGO</li> <li>Present status of NGO</li> <li>Contribution of NGO in the Development</li> </ul> <b>Role of Development Communicator in developing NGO</b>

<b>II</b>	<b>Starting of NGO</b> <ul style="list-style-type: none"> <li>• Steps for starting NGO</li> <li>• Registration of NGO</li> <li>• Selection of Personnel</li> <li>• Training of Personnel</li> <li>• Proposal writing under NGO</li> <li>• Identifying Funding agencies</li> <li>• Resource Mobilization</li> <li>• Planning, Implementation and Evaluation strategy under NGO</li> <li>• Documentation</li> <li>• PR in NGO</li> </ul>
<b>III</b>	<b>NGO Management</b> <ul style="list-style-type: none"> <li>• Organizational types and structures</li> <li>• Managing people and teams in NGOs</li> <li>• NGO management competencies</li> <li>• Applying NGO principles and values</li> <li>• Accountability and impact assessment for NGOs</li> </ul>
<b>IV</b>	<b>Problems of NGO</b> <ul style="list-style-type: none"> <li>• Training</li> <li>• Recruitment</li> <li>• Funding</li> <li>• Resource Mobilization</li> <li>• Documentation</li> </ul>
<b>Learning Experiences:-</b> <ol style="list-style-type: none"> <li>1. Visit of Local NGO</li> <li>2. Studying the Annual report of NGOs</li> <li>3. Studying the ongoing Activities</li> <li>4. Studying the problems</li> </ol> <b>Suggested Readings</b> <ul style="list-style-type: none"> <li>• S. Chandra, Guidelines for NGO Management in India (2003), Published by Kanishka Distributors, New Delhi</li> <li>• D. Lewis, Management of Non Governmental Development Organization (2001), Second Edition, Published by Routledge, Newyork.</li> <li>• Abraham, Formation and Management of NGOs (2003), Third Edition, Published by Universal Law Publishing Co. Pvt Ltd., New Delhi.</li> <li>• Sundar, P. 2013, Business and Community: The Story of Corporate Social Responsibility in India , New Delhi, Sage Publication.</li> <li>• Aggarwal, S.2008, Corporate Social Responsibility in India, Sage Publication Pvt. Ltd.</li> </ul>	

### **B.A. (Home Science) Semester IV**

#### **Communication Process and Human Development II (Theory) (DSC)**

Programme/Class: Diploma	Year: II	Semester: IV
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<b>Subject: Home Science</b>		
Course Code: <b>HSC/DSC/UG 11</b>		Course Title: <b>Communication Process and Human Development II (Theory)</b>
<b>Course Outcomes:</b> The student at the completion of the course will be able to: Understand communication process		
Credits:3		Core Compulsory
Unit	Topic	No. of lectures
<b>Part A- (Communication Process)</b>		
<b>I</b>	Communication- Meaning and definition, concept, functions, problems and barriers of communication, elements of communication, types of communication process, classification of communication methods	
<b>II</b>	ICT and New communication media, social networking sites, social awareness regarding cyber-crime and cyber security	
<b>III</b>	Models of Communication- Different models of communication, important characteristics of good communicators, communication barriers and strategies to overcome barriers	
<b>IV</b>	Innovation, Adoption and Diffusion: Innovation, adoption, diffusion of innovation, innovation decision process, factors affecting adoption process, role of extension agent in diffusion process	
<b>Part B (Human Development II)</b>		
<b>V</b>	Middle Childhood Years Development tasks and characteristics of middle childhood period <ul style="list-style-type: none"> <li>• Physical and motor development</li> <li>• Social and emotional development.</li> <li>• Cognitive development</li> </ul> Language development	
<b>VI</b>	Puberty and Adolescence <ul style="list-style-type: none"> <li>• Development tasks and characteristics</li> <li>• Significant physical physiological influencing and hormonal changes in puberty.</li> </ul> Self and Identity, Factors influencing Identity & Personality development. <ul style="list-style-type: none"> <li>• Family and peer relationship</li> </ul> Problems- Drug and Alcohol abuse, STD, HIV/AIDS, Teenage Pregnancy.	

<b>VII</b>	<p>Cognitive, Language and Moral Development during Adolescence:</p> <ul style="list-style-type: none"> <li>• Perspective on cognitive development, development of intelligence and Creativity</li> <li>• Adolescent language</li> <li>• Adolescent Morality</li> </ul>
<b>VIII</b>	<p>Introduction to Adulthood</p> <ul style="list-style-type: none"> <li>• Concept, transition from adolescence to adult hood</li> <li>• Development tasks of Adulthood</li> <li>• Physical and physiological changes from young adulthood to late adulthood</li> </ul> <p>Responsibilities and adjustment-educational, occupational, material and parenthood</p>
	<p><b>Suggested Readings:</b></p> <ul style="list-style-type: none"> <li>• Monaster G.J. 1 Adolescent Development Life Tasks. Mc.Graw Hill (1997)</li> <li>• Ambron S.R. Child Development Holt, Rinehart and Winston 1978 (II Edition)</li> <li>• Mussen P.H. Conger J.J. Kagan J. and Huston A.C. 1990. Child development and Personality (VI Edition) Harper and Row Publishers New York.</li> <li>• Boeknek G. Human Development Book and Cole Publishing Company 1980.</li> <li>• Aadunik Vikasatmak Mano vigyan, Shri Vinod Pustak Mandir Agra Edition 3<sup>rd</sup> 2015.</li> <li>• Harpalani, Aahar vigyaan avam Upchar atmak Poshan, Star Publication, Agra</li> <li>• Suggestive digital platform web links-IGNOU &amp; UPRTOU online study material</li> </ul> <p>Svayan Portal <a href="http://heecontent.upsdc.gov.in/Home.aspx">http://heecontent.upsdc.gov.in/Home.aspx</a></p>

**Suggested Continuous Evaluation Method:**

- Seminar on any topic of the above syllabus.
- Test with multiple choice questions/short and long answer questions
- Attendance

**Suggested equivalent online courses:**

IGNOU&Othercentrally/stateoperatedUniversities/MOOCplatformssuchas “SWAYAM  
“in India and Abroad

**Further Suggestions:**

Students can opt. dietitian; nutrition advisor/Nutritionist as a career in private and government sector as well as extend knowledge by joining advance course in same discipline.  
ItwidensthescopeforstudentstojoinGovernmentandNon-Governmentorganizationupskillingthepeopleatdifferentlevels as per their socio-economic structure.

**Suggested Continuous Evaluation Method:**

- Seminar on any topic of the above syllabus.
- Test with multiple choice questions/short and long answer questions

Attendance

### Practical (d) Practical based on communication process and Human Development

Programme /Class: Diploma		Year: II	
Course Code: <b>HSC/DSC/UG 011</b>			
Credits:1			
Unit	Topics		
I	Preparation of speech on socially relevant topics, Planning and Conducting small group communication Preparation of folder, booklet		
II	Preparation of radio talk Construction of social message through mobile – text and video		
III	To study recent research articles on adolescents and write a report.  To conduct a survey to assess peer pressure/ impact of media on adolescents.		
IV	To write a narrative account on adolescent years to understand the development of self. To develop different activities to facilitate cognition and creativity in adolescents.		
V	Interviews of adolescent girls and boys to understand their lifestyle, behavior and problems.		
VI	Carry out case studies to know more about the different life stages, school going children, adolescents, young adults.		
	<b>Suggested Readings:</b> <ul style="list-style-type: none"><li>• MonasterG.J.1Adolescent Development Life Taska, Mc Graw Hill(1977)</li><li>• Ambron S.R. Child Development Hoks, Renhart and Winston 1978 (IIIndEdition).</li><li>• Mussen P. H., Conger J.J .KaganJ. and Huston A.C. 1990.Child Development and Personality (VI Edition) Harper and Row Publishers New York.</li><li>• BoeknekG. Human Development Brook and Cole Publishing Company 1980</li><li>• Aadhunik Vikasatmak Manovigyan, Shri Vinod Pustak Mandir Agra Edition3<sup>rd</sup>2015</li></ul> <p>Suggestive digital platfor ms web links- ePG- Pathshala infilibnet, IGNOU, &amp; UPRTOU online study material. <a href="https://bit.ly/3922ZTH">https://bit.ly/3922ZTH</a></p> <p>Swayam Portal,<a href="https://heecontent.upsdc.gov.in/Home.aspx">https://heecontent.upsdc.gov.in/Home.aspx</a></p>		

	<p>Suggested Continuous Evaluation Methods</p> <ul style="list-style-type: none"><li>• Assessment of observation report</li><li>• Preparation of questionnaire</li><li>• Visits records</li></ul> <p>Attendance</p>
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**Food Processing and Storage (DSE)****Cr. Hrs. 4****Course Code- HSC/DSE/UG 12****Course Outcomes:**

Students after successful completion of the course will be able to:

- 1:- Understand the principles behind food preservation technologies such as freezing, drying, canning, and pasteurization.
- 2:- Learn about the factors affecting food spoilage and the methods to prevent it.

**Theory Topics**

Unit 1) Processing and storage of foods in the national perspective and their role in human nutrition. Processing of cereals, millets and legumes by traditional and unconventional methods. Changes in nutritional quality as affected by: pounding, milling. Puffing, flaking, cooking, parboiling. Fermentation, sprouting, malting Processing and packaging of milk products and their effect on nutritional quality

Unit 2) Common methods of preservation for fruits and vegetables and effects on nutritional quality characteristics

Unit 3) Processing of oilseeds for extraction of oils and use of oilseed cakes in human nutrition, limitations and possible improvements.

Unit 4) Different methods of cooking and preservation of meat, fish and poultry. effects on nutritional quality and merits and demerits of various methods

Unit 5) Traditional methods for storage of food grains viz, cereals, millets, legumes and oilseeds, limitations, losses in nutritional quality as influenced by insect and fungal infestation

Current strategies for storage of food grains at national and international level

**Practical**

**Practical on Fermentation, sprouting, malting and puffing of cereals, millets and pulses**  
**Practical based on different methods of domestic food preservation**

**Suggested Readings**

- Frazier WC and Westhoff DC (2014). Food Microbiology, Fifth Edition. TMH Publication, New Delhi.
- Manay NS and Shadaksharaswamy M (2008). Food-Facts and Principles, Third Edition. New Age International (P) Ltd. Publishers, New Delhi.
- Mathur P. (2018). Food Safety and Quality Control. Orient BlackSwan Pvt. Ltd., Hyderabad.
- Potter NN and Hotchkiss H J (1996). Food Science, Fifth Edition. CBS



Publication, New Delhi.

- Suri, S. and Malhotra, A. (2014). Food Science Nutrition and Safety. Delhi: Pearson India Ltd.
- Mohini Sethi, Eram Rao (2011). Food science- Experiments and applications, Second Edition. CBS publishers & Distributors Pvt Ltd.

## HSC /GE/UG 13 EARLY CHILDHOOD CARE AND EDUCATION CREDIT: 04

### I. Course Outcomes:

Students after successful completion of the course will be able to:

1. Understand the meaning and importance of Pre-school/Early childhood education
2. Acquire a critical knowledge about various activities for pre-school children

**Unit I early childhood years:** developmental milestones, development during early childhood: physical, cognitive, social, emotional, moral and language development  
factors influencing physical, cognitive, social, emotional, moral and language development

### Unit II: Historical perspective

Concept of learning: definition, essential features, types and principles of learning  
Learning environment: reinforcement, punishment, motivation and discipline

### Unit III: Learning philosophies

Theories for classroom teaching and its applicability-

Jean Piaget, Erik Erikson, Maria Montessori, Lawrence Kohlberg

Indian: Rabindranath Tagore (1861–1941), Gijubhai Badeka, M.K Gandhi, Tarabai Modak

**Unit IV Family:** types of families and their effect on development of child

Types of parenting and their effect on children

### Unit V: Principles of Early Childhood Education

Objectives; Need and significance; Basic Principles;

The Playway Method; Early Childhood education services in India- Government Sector– ICDS, NIPCCD, NCERT etc; Voluntary Sector–ICCW, Balwadi, MobileCreche's, ECCE centers etc.; Private Sector (Nursery,Pre- Primaryetc)

### Unit VI: Play

Concept of Play; Play and Learning; Role of play in development; Play as a means of understanding children's development; Different types of play among preschool children (unoccupied behaviour, onlooker, solitary independent play, parallel activity, associative play, cooperative or organized, supplementary play)

**Unit V :: Project - Visit a locality and other public spaces to note all the facilities available for children for play, learning and skill building and report writing**

**Preparation of education material for nursery school children**

### References:

- 1.NCERT (1991), A Guide for Nursery School Teachers, NCERT,NewDelhi

- 2.Seth Kanta, Ahuja Kavita (1996), Minimum Specifications for Pre-Schools, NCERT, New Delhi
- 3.Kohn Ruth (2003), The Exploring Child– A Handbook for Pre-Primary Teachers, Orient Longman, Delhi
- 4.Chowdhury D Paul (1995), Child Welfare/Development, Atma Ram & Sons, Delhi
- 5.Certificate Course in Organizing Child Care Services, IGNOU, (Block 1 to 6)
- 6.Grewal JS (1998), Early Childhood Education– Foundations and Practice, Har Prasad Bhargava, Agra

## **FOOD SAFETY, SANITATION AND HYGIENE**

### **(Skill Enhancement Course) (Elective)**

#### **HSC /SEC/UG 14**

<b>Course title &amp; code</b>	<b>credits</b>	<b>lecture</b>	<b>Tutorial</b>	<b>Practical\ practice</b>	<b>Eligibility criteria</b>	<b>Pre-requisite of the course (if any)</b>
HSC /SEC/UG 14- Food safety, sanitation and hygiene	2	1		1	Class XII	NIL

### **Learning objectives**

- To understand food safety principles and its importance in preventing the foodborne illnesses.
- To understand the importance of sanitation in food handling and preparation.
- Implementing personal hygiene standard.

### **Learning Outcomes**

After successful completion of the course, the students will be able to

1. Enumerate the various aspects of food safety and to identify the causes and prevention procedures for food borne illness, intoxication and infection
2. Understand the need for consumer education and discuss occupational safety and health administration requirements.
3. Analyze food handling procedure, describe food storage and refrigeration techniques.
4. Evaluate labelling methods by following the principles of food safety, sanitation and hygiene
5. To create awareness regarding sanitation of dishes, equipment and kitchen.

## II. Theory Syllabus

**Unit – I** Food safety- Definition, Meaning - factors affecting food safety - importance of food safety - Risks and hazards - Food related hazards - microbial consideration in food safety- Food safety and standards bill 2005

**Unit – II** Basic principles of Food hygiene and Sanitation - Personal and environmental Hygiene – Hygiene aspects of Food handlers- Hygiene aspects in preparation and storage of food - dish washing and garbage disposal- Safety of leftover foods Methods of sanitation and hygiene

**Unit – III** Food Adulteration and Adulterants: Meaning, Methods to identify the presence of adulterants-Types of adulteration in various foods-Intentional, incidental and metallic contaminants - Consequences of adulteration

**Unit – IV** Safety in Food processing –Regulatory compliance requirement for establishment of food outlets - Frame work for enabling environment for serving safe and nutritious food at food establishment or outlets. Sterilization and disinfection using heat and chemicals – Solid and liquid waste management and disposal.

**Unit- V** Objectives of developing Food Safety and Standards- Enforcement of structure and procedure - Role of food analyst- good practices- statutory and regulatory requirements - Certification - HACCP, ISO-22000, FSSC-22000

### References:

- 1:- Sunetra Roday, Food Safety and Sanitation, Tata McGraw-Hill Education, 2017
- 2:- Norman G. Marriott and Robert B. Gravani, Principles of Food Sanitation, Springer, 2018
- 3:- Dr. Anju Singh & Dr. Gouri Goyal, Bhojan posan awam swachhta, Sahitya Bhawan Publication, 2022
- 4:- krishna Sinha, Bhojan posan awam swachhta, Rakhi Prakashan, 2021

### B.A. (Home Science) Semester V (DSC)

#### Surface Ornamentations of fabrics (Theory)

Programme/Class: Degree	Year: III
<b>Course Code: HSC/DSC/UG 15</b>	
<b>Credits:3</b>	
<p><b>Course outcome: - 1:-</b>Students will gain a comprehensive understanding of traditional and contemporary techniques for embellishing fabrics, including embroidery, printing, dyeing, and appliqué.</p> <p><b>2:-</b> To provide students with in-depth knowledge of mechanical finishing processes used in textiles and materials, including their purpose, applications, and impact on fabric properties.</p> <p><b>3:-</b> To provide students with a thorough knowledge of the history, cultural significance, and regional diversity of traditional embroidery techniques.</p>	

Unit	Topics
I	<b>Textile Finishes</b> Definition, purpose, type, basic / routine /preparatory finishes, singeing, desizing, scouring, bleaching, stiffening, weighting, mercerization, carbonizing, sanforising
II	<b>Mechanical Finishes</b> Napping, Giggling, sue ding, glazing, raising, immersing, flocking, brushing, shearing, beating, tendering, calendaring, schreiner zing, moaring and embossing
III	<b>Functional Finishes</b> Waterproof and water repellency, shrinkage control, wrinkle resistance, durable press and flame retardant finish, mildew proof, soil resistance, anti-static, anti-piling, wash and wear, flame resistance, flame proof and anti-bacterial finish
IV	<b>Dyeing</b> (a) Classification of dyes- Natural v/s Synthetic, advantages and limitations(b)Theory of Dyeing(c)Properties and use of Dyes-Basic, Acidic, Direct, Azoic, Neutral, Sulphur, Vat, Disperse and Reactive dyes (d)Resist Dying Techniques-Tie-Die, Batik
V	<b>Printing</b> (a)Direct Printing- Block, Screen, Stencil, Roller (b)Transfer Printing (c) Discharge printing, Resist Printing (d)Polychromatic, Inkjet and Digital printing techniques(e)After treatment of dyed and printed goods
VI	<b>Introduction to various components required for hand- embroidery</b> Knowledge of basic hand embroidery, stitches- running, hemming (visible/invisible), back stitch, overcasting, catch stitch, button whole stitch, basting, slip stitch, satin, chain, herringbone, cross, French knot
VII	<b>Traditional Embroideries:</b> Meaning and status of traditional crafts of India, Knowing about the Traditional Embroideries of different states: Zardozi, Kashida of Kashmir, Phulkari of Punjab, Kantha of Bengal, Chikankari of UP, Kasuti of Karnataka, Sindh and Kutch work of Gujarat.
VII	Traditional Textiles: Knowing the Traditional textiles of different states of India(a) Woven fabrics- Baluchars, Brocades, Kashmir carpets, Patola, Ikat, Pochampalli, Chanderi (b) Printed, painted and dyed –Sanganeri, Bhagru, Kalamkari, Madhubani, Bandhani

**Suggested Readings:**

- Marsh JT: Textile Finishes
- Trotman Er: Dyeing and Chemical Technology of Fibers
- Joseph M: Introduction to Textiles
- Corbman P Bernard: Textiles- Fiber to Fabric
- Hollen & Saddler: Introduction to Textile
- J. Hall: The standard Handbook of Textiles, Wood Head Publication, 2004
- J.E. Smith: Textile Processing-Printing, Dyeing, Abhishek Publishing, 2003
- Kate Broughton: Textile Dyeing, Rockport Publishers, 1996
- W.S. Murphy: Textile Finishing, Abhishek Publication, 2000
- Naik.D.Shailaja, Traditional Embroideries of India, New Age International Publishers, 1996
- Naik.D.Shailaja, Jacquie.A. Willson: Surface Designing of Textile Fabrics, New Age International Publishers, 2006
- Bharga, Bela. Vastra Vigyaan, Univ. Book House Pvt. Avam Dhulai Kala, University Book House Pvt Ltd. Jaipur
- Patni, Majnu, Vastra Vigyaan Avam Paridhanka Parichay, Star Publications, Agra. Suggested digital platforms weblinks-

Swayam Portal, <https://heecontent.upsdc.gov.in/Home.aspx>

This course can be opted as an elective by the students of following subjects: Open for all

**Suggested Continuous Evaluation Methods**

- Seminar on any topic of the above syllabus
- Test with multiple choice questions/short and long answer questions.
- Subjective long questions
- Attendance

Course prerequisites: To study this course the student must have had the subject ALL in class/12<sup>th</sup>

### Practical (e) Techniques of Surface Ornamentation of Fabrics

Programme/Class: Degree		Year: III	
Course Code: <b>HSC/DSC/UG 15</b>			
Credits:1			
Unit	Topic		
I	Demonstration of dry cleaning, visit to a commercial dry-cleaning unit/Textile mill.		
II	Identification of labels.		
III	Dying Techniques- Tie- Die, Batik		
IV	Printing Techniques- Block, Screen, Stencil, Roller, Spray		
V	Traditional Embroideries of different states: Zardozi, Kashida of Kashmir, Phulkari of Punjab, Kantha of Bengal, Chikankari of UP, Kasuti of Karnataka, Sindhi and Kutch work of Gujarat		
VI	Preparation of different weaves on Cardboard		

### Community Development and Programme Planning (Theory)

Programme/Class: Degree		Year: III	
Course Code: HSC/DSE/UG 016			
Credits:4			
Unit	Topics		
I	<b>Community Development:</b> Meaning, Definition, Functions, Objectives, Philosophy, Principles of Community Development Programmes in India.		
II	<b>Community Development Organization:</b> Meaning, Types, Principles, Role & Administrative Structure at the National, State, District, Block &Village levels.		
III	<b>Home Science Extension Education in Community Development:</b> Origin, Concept, Need, Importance and Contribution of Home Science Extension Education in National Development.		
IV	<b>Recent Development Programme for Women &amp;Children:</b> Support to training and Employment for women (STEP), Swarn Jayanti Gram Swarozgar Yojna (SGSY), Integrated Child development Services (ICDS) etc.		
V	<b>Support Service of Youth Development:</b> NCC, NSS, Youth Camp, Youth Clubs etc.		
VI	<b>NGO &amp; Other organizations:</b> Contribution towards community services, Types & Role of NGO-WHO, CARE, UNICEF, UNESCO, UNDP/CRY, HELP-AGE INDIA.		
VII	<b>Leadership:</b> Concept, Definitions, Types, Importance, Function and Role of Community leaders, Methods of Identifying and Training of Leaders		
VIII	<b>Programme Planning: Programme planning component cycle and its components-</b> Designing the project-Defining the objectives, Identifying resources, approach, feasibility and Work plan. Implementation, Monitoring and Evaluation		



## Community Development Organizations (GE)

**Cr. Hrs. 4**

**Course Code- HSC/GE/UG 17**

**Unit 1:-** Definition, need, types of community organizations and institutions, Principles and procedures in community organization, Involvement of basic institutions in rural development programmes

**Unit 2:-** Importance of Mahila Mandals, objectives and functions. Importance of youth clubs, organization and functions of youth clubs, Panchayat Raj System in India Government sponsored programmes for family development-IRDP, DWCRA, NREP, RLEGP, TRYSEM etc.

**Unit 3:-** Role of non-governmental and voluntary organizations of family development. Types of co-operatives in the development of weaker sections in the rural areas.

**Unit 4:-** Programme planning - meaning, need and principles Abilities needed by the planners Steps in programme planning, Criteria for good programme planning

**Unit 5:-** Programme implementation, monitoring and evaluation; Identification of local leaders, local bodies, Government Organizations for development of family programme  
Important aspects in programme execution. Identification of local leaders, local bodies, Government Organizations for development of family programme

### **Suggested Readings:**

- 1:- Meera Goyal, samudayik vikas awam karyakram niyojan, SBPD publishing house, 2023
- 2:- D N Srivatava and Vartika Agnihotri, Samudayik vikas awam karyakram niyojan, Sahitya Bhawan, 2023

**B.A. (Home Science) Semester VI**

**Dietetics and Therapeutic Nutrition (Theory) (DSC)**

Programme/Class Degree		Year: III	Semester: VI
<b>Subject: Home Science</b>			
Course Code <b>HSC/DSC/UG/18</b>		Course Title: <b>Dietetics and Therapeutic Nutrition (Theory)</b>	
Course outcomes: 1- Knowledge of principles of diet therapy 2-Develop and understand modification of the normal diet for therapeutic purposes 3- Practical knowledge of dietary management in some common disorders.			
Credits:4			Core Compulsory
Unit	Topics	No. of Lectures	
<b>I</b>	Introduction (a) Definition of Health Dietetics and Therapeutic Nutrition (b) Importance of Diet Therapy (c) Facts about fast foods/Junks foods (d) Objectives of therapeutic Diet (e) Principles of diet therapy		
<b>II</b>	Diet and feeding methods (a) Modification of normal diets for therapeutic purposes (b) (b)Methods of modifications <ul style="list-style-type: none"><li>On the basis of nutrients</li><li>On basis of consistency</li></ul> (c) Different feeding methods <ul style="list-style-type: none"><li>Oral feeding</li><li>Tube feeding</li></ul>		
<b>III</b>	Energy Metabolism (a) The calorific value of food (b) Measurement of energy exchange in the body (c) Factors influencing the Basal Metabolic Rate (d) Factors influencing total energy requirement of body		
<b>IV</b>	Diet during fevers and infections (a) Introduction to fever–Acute Fever, Chronic fever Important changes in nutrition during fever (c) Modification of the diet		
<b>V</b>	Diet during Digestive systems disorders (a)Peptic Ulcers-Causes, symptoms and diet modification (b) Diarrhea and Constipation-Causes, treatment and diet modification		
<b>VI</b>	Weight Management (a)Over weight and Obesity -Introduction to obesity		

	-Causes of Obesity -Diet Modification (b) Underweight -Causes -Treatment -Diet Therapy	
<b>VII</b>	Therapeutic Diets in Cardiac Diseases (a) Atherosclerosis -Introduction -Dietary factors influencing lipid level in blood -Modification of diet and Meal Pattern (b) Hypertension -Causes and symptoms -Diet in Hypertension	

**Suggested Readings:**

- ❖ Sumati R Mudambi-“Fundamentals of food, Nutrition and Diet Therapy”, New Age International Pvt. Ltd, New Delhi, 6<sup>th</sup> Edition (2018).
- ❖ BSrilakshmi-“Dietetics”, New Age International Publishers, New Delhi 2017.
- ❖ Bamji MS, Krishna swamy K and Brahman GNV (Eds) (2009), Text book of Human Nutrition, Edition, Oxford & IBH Publishing Co. Pvt. Ltd New Delhi.
- ❖ Dr.Brinda Singh-Aahar Vigyan evam Poshan, Panchsheel Prakashan, Jaipur, 2015; 13<sup>th</sup> Ed.
- ❖ Dr.Devinasahani, Samanya Evam Upcharatmak Poshan, New Age International Publishers.
- ❖ Dr.Sheel Sharma, “Nutrition and Diet Therapy”, PEEPEE Publishers and Distributors (P) Ltd. Delhi, 2014, 1<sup>st</sup> Ed.
- ❖ Shubhangini A Joshi, “Nutrition and Dietetics”, McGraw Hill Education Private Ltd., New Delhi, 2013.
- ❖ Kumud Khanna-“Textbook of Nutrition and Dietetics”, Elite Publishing House Pvt. Ltd, New Delhi, 7<sup>th</sup> Ed. 2013.
- ❖ MS waminathan-Essentials of food nutrition, Vol III, Applied Aspects, The Bangalore Printing Publishing Co. Ltd, Bangalore, 2<sup>nd</sup> Edition 1985, Reprint 1997.

**Suggested Continuous Evaluation Methods:**

- Test with multiple choice questions/short and long answer questions
- Menu Planning and calculation of nutrient requirement
- Seminar on any above topics

**Suggested equivalent online courses:**

IGNOU and other centrally/state operated Universities/ MOOC platforms such as “SWAYAM” India and abroad.

<http://heecotent.upsdc.gov.in/Home.aspx>

**Further Suggestions:**

- Students can opt. dietitian, nutrition advisor/Nutritionist as a career in private and government sector as well as extend knowledge by joining advance course in same discipline.

Subject: Home Science		
Course Code: HSC/DSC/UG/018	Course Title: <b>Practical (f) Therapeutic Diet Preparation and Nutrient Evaluation</b>	
Courseoutcomes:1-Gain Knowledge of principles of diet therapy 2-Developandunderstandmodificationofthenormaldietfortherapeuticpurposes3- Practicalknowledgeof dietary management in some common disorders.		
Credits:2 1		Core Compulsory
Total No. of lab. Periods-30		
Unit	Topic	No. of lab. Periods
I	Modification of normal diet for therapeutic purposes, preparation and presentation	06
II	Therapeutic Diet preparation and Nutrient Calculation of -Diet in fever -Diet in diarrhea -Diet in Constipation	08
III	TherapeuticDietPreparationandNutrientC alculationofsomecommonDisorders -Diet in Diabetes Mellitus -Diet in Hypertension -Diet in Atherosclerosis	08
IV	Dietary Modification for weight management- Preparation and Nutrient Calculation of diet in- -Over weight & obesity -Underweight	08
<b>Suggested Readings:</b> <ul style="list-style-type: none"><li>❖ SumatiR. Mudambi- “Fundamental of food, Nutrition and Diet Therapy”, New Age. International Pvt. Ltd, New Delhi, 6<sup>th</sup>Edition (2018).</li><li>❖ B.Srilaksmi,“Dietetics”, New Age International Publishers, New Delhi 2017</li><li>❖ Bamji MS, KrishnaswamyK and Brahman GNV (Eds) (2009), Text book of Human Nutrition, 3<sup>rd</sup>edition, Oxford &amp; IBH Publishing Co. Pvt. Ltd. New Delhi.</li><li>❖ Dr.Sheel Sharma, “Nutrition and Diet Therapy” PEEPEE Publishers and Distributers (P) ltd. Delhi, 2014,Ist Ed.</li></ul>		
<b>Suggested Continuous Evaluation Methods:</b> <ul style="list-style-type: none"><li>• Test with multiple choice questions/short and long answer questions</li><li>• Menu planning and calculation of nutrient requirement.</li></ul>		
<b>Suggested equivalent online courses:</b> IGNOU and other central/state operated Universities/MOOC platforms such as“SWAYAM”in India and a broad Svayam Portal.		

### Family Welfare and Community Education (Theory)

Programme/Class: Degree	Year: III	Semester: VI
<b>Subject: Home Science</b>		
Course Code: HSC/DSE/UG 019	Course Title: <b>Family Welfare and Community Education (Theory)</b>	
Credits:4		Core Compulsory
TotalNo.ofPeriods-60		
Unit	Topic	
I	Child and Family Welfare: Children’s rights and National Policy for Children. Demographic profile of child in India. Children with special needs. Deprived Children and abused children, juvenile Delinquency.	
II	Family and child welfare services working at national and international level; C.S.W.B., ICCW ICDS and others, W.H.O. UNICEF, CARE, and ILO.  Rural extension services and community ICDS, DWCRA, IRDP and CHEB	
III	Family relationship, Child Parent relationship, responsibilities of parts relationship of home, school and community.	
IV	The role of teacher and other specialists in parents and community education programmes. Teacher as motivator, community work, guidance of child, youth ethical consideration in dealing with parents and community.	
<b>Suggested Readings:</b> 1. Gangrade,K.D.(1971) Community Organization in India. Popular Prakashan, New Delhi 2. Dahama, O.P. and Bhatnagar,O.P.(1980) Extension and Communication for Development, Oxford and IBH. 3. State of World Children, UNICEF Annual Publication. 4. HansNagpaul.(1980)Culture, Education and Social Welfare. Chand and Company, New Delhi. 5. Chaudhry,D.Paul,(1980).Child Welfare and Development. NIPCCD, NewDelhi.		
<b>Suggested Continuous Evaluation Methods:</b> <ul style="list-style-type: none"><li>• Test with multiple choice questions/short and long answer questions</li><li>• Menu planning and calculation of nutrient requirement.</li></ul>		
<b>Suggested equivalent online courses:</b> IGNOU and other central/state operated Universities/MOOC platforms such as“SWAYAM” in India and abroad Svayam Portal. <a href="http://heecontent.upsdc.gov.in/Home.aspx">http://heecontent.upsdc.gov.in/Home.aspx</a>		

## **Diet and Nutrition Counselling**

### **Generic Elective**

**HSC/GE/UG 20**

#### **I. Learning outcomes**

After successful completion of the course, the students will be able to

1. Define Dietician and recall the qualities, role and responsibilities of a dietician
2. Describes or explains the steps in diet and nutrition counseling
3. Uses the skills in assessment of nutritional status of normal and diseased people
4. Relate practical skills in dietary counseling of various health and disease conditions
5. Develop teaching aids and uses computer applications and smart phones in diet counseling

#### **II. Theory Syllabus**

##### **UNIT-1 Introduction to Dietitian and IDA**

- Dietician – Definition and Educational qualification
- Types of Dietitians – Clinical, academic, research, specific, food service, public/ Community, industrial, consultant, sports, business etc.
- Qualities, Role and responsibilities of Dietician
- IDA – Objectives, membership; Registered Dietician – eligibility for R.D. exam

##### **UNIT-2 Diet Counselling/ Nutrition Care Process (NCP)**

- Diet Counseling/ Nutrition Care Process (NCP) – Definition, importance, purposes and ethical principles
- Steps in Diet counseling Process; Documentation – SOAP
- Counseling Skills for a Dietitian; Tools of Dietitian; Guidelines for effective Counseling

##### **UNIT-3 Counselling Approaches**

- Counselling Approaches – Meaning, Developing a counselling approach
- Different Counselling Approaches – Psychoanalytical, behavioural, humanistic, Patient centered GALIDRAA approaches etc.

##### **UNIT-4 Nutrition Education**

- Nutrition Education – Meaning and importance,
- Teaching Methods and aids used for Nutrition Education in the Community  
Teaching Methods – Lecture, Group discussion, Role Play, Storytelling, Demonstrations, Nutrition Exhibition, Marathon race etc.
- Teaching Aids – Posters, pictures, models, charts, flash cards etc.
- Teaching Materials for patients – Models, pamphlets, leaflets, book

### **UNIT-5 Use of Modern Technology in Diet Counselling**

- Use of Computers in Diet Counselling and Nutrition Education
- Use of Computer Applications and Mobile Applications in Diet Counselling and Nutrition Education; Computer and mobile applications available for Diet Counselling
- Pre requisites for setting up a Diet Counseling Center

### **Project- Visit to a hospital and studying routine hospital diet and report writing**

#### **Preparation of teaching aids in the field of nutrition**

#### **Preparation of case history of a patient and feeding information and report writing**

### **References**

- Srilakshmi, B. “Dietetics”, 8<sup>th</sup> edition, 2018, New Age International Publishes, New Delhi
- IDA, Clinical Dietetics Manual, 2018, 2<sup>nd</sup> edition Elite Publishing House New Delhi
- Corinne H. Robinson, Marilyn R. Lawler, “Normal & Therapeutic Nutrition” 17<sup>th</sup> edition 1986
- Shubangini A Joshi, “Nutrition & Dietetics” 5<sup>th</sup> edition, 2022, McGraw hill Education India Pvt. Ltd.
- Judy Gable “Counselling Skills for Dietitians” 2<sup>nd</sup> edition, 2007, Black Well Publishing Ltd, Oxford, UK.
- “Clinical and Therapeutic Nutrition M.Sc.” published by directorate of Distance Education, Swami Vivekanand Subharti University, Meerut, U.P.
- Linda Snetselaar “Nutrition Counselling Skills for the Nutrition Care Process” 4<sup>th</sup> edition, 2021, Jane and Bartlett Publishers, London

## Semester VII

### HSC/ DSC/PG 101: ADVANCED FABRIC AND CLOTHING CONSTRUCTION CREDIT: 04

#### UNIT I:

Yarn construction– mechanical and chemical spinning; Different stages of yarn construction; Types of yarn– simple, textured and spun; simple– simple, ply, cord; novelty; ply, cable, double and novelty; yarn numbering and yarn twist

Blends–meaning, types, process and reasons for blending, difference between blends and mixed.

#### Unit II:

Weaving technology: Definition, main operations; Characteristics of woven fabrics;

Selvedge–types; Types of weaves.

Loom–Parts of loom; Classification and types of looms; Motions of the loom

Non-woven fabrics–meaning, types, methods and uses (Felting, Bonded and non-woven fabrics etc.)

Knitting technology: Definition, classification, material and equipments; Methods of knitting–Weft knitting and warp knitting; Uses and disadvantages of knitted fabrics

#### Unit III

Equipment used in clothing construction

Sewing machine: Parts and attachments; common defects and remedial measures, care and maintenance

Anthropometric Measurements: Need; taking measurements for different garments; precautions and method; tools and materials.

#### Unit IV

Techniques of clothing construction:

Drafting: Meaning and importance; tools, method and precautions; drafting on paper and cloth;

Pattern making: Meaning and importance; parts of pattern; tools required; symbols used and general rules.

General principles of clothing construction; Steps in clothing construction: Preparation of fabric for clothing construction; preparing layout; marking of cloth; principles of cutting; principles of stitching; finishing

#### Unit V:

Use of construction features in design- seams, darts, tucks, pleats, gathers, placket opening, Shirring. Different types of–necklines, collars, yokes and sleeves.

#### References:

1. Vastra evam Paridhan, Shashi Prabha Jain and Archana Jain, Shiva Prakashan, Indore
2. Parivarik Paridhan Vyavastha, Manju Patni and Sapna Henry, Star Publications
3. Vastra Vigyan ke Mool Sidhanth, G.P. Sherry, Vinod Pustak Mandir
4. Griha Vigyan Vishwa kosh, Rama Sharma and M.K Mishra, Arjun Publishing House



## **HSC/ DSE/PG 102: RESEARCH METHODS AND STATISTICS**

**CREDIT: 04**

**Unit I** Research in Home Science- concept need and approaches, Research approaches-problem oriented and interdisciplinary. Type of research Historical survey, experimental and case study

**Unit II** Definition and identification of research problem selection Hypothesis, basis assumption and limitation of research problems

**Unit II** Sampling: Types of samples and selection of samples, data collection techniques: cross-selection and longitudinal, studies: questionnaire, interview schedule, observation, lab-techniques.

**Unit IV** Editing of statistical data, classification and tabulation, role of statistics in research, elementary statistics: classification, tabulation and frequency distribution of data.

**Unit V** Measures of central tendency- Mean Median and Mode

Measures of dispersion– standard deviation. Probability, normal distribution and use of normal distribution, probability tables, t-test for small sample, use of computer for analysis of data, Report writing.

### **References:**

- 1.Gupta, S.P., Statistical Methods, Sultan Chand and Sons, New Delhi, 1994
- 2.Jain, Gopal Lal, Research Methodology, Methods, Tools and Techniques, Mangal Deep Publications, Jaipur, 1998
- 3.Kothari, C.R.: An Introduction to Operational Research, Vikas Publishing House Pvt. Ltd, NewDelhi,1994
- 4.Wright, Susan E., Social Science Statistics Allyn and Bacon Inc., London,1986
- 5.Wisniekwski, Mik, Quantitative Methods for Decision Makers, McMillan India Ltd., NewDelhi,1986

## **HSC/DSE/PG 103: THEORIES OF HUMAN DEVELOPMENT**

**CREDIT: 04**

### **Unit I:**

Maslow's self-actualization theory  
Freud's psychosexual or psychoanalytic theory  
Erikson's psychosocial theory

### **Unit II:**

Skinner's theory of Operant or instrumental conditioning  
Pavlov's theory of classical conditioning

Thorndike's Trial and Error Learning

**Unit III:**

Kohlberg's six stages of moral reasoning

**Unit IV:**

Piaget's cognitive development theory

**References:**

1. Morgan, Kingetal(1999): "Introduction to Psychology", Tata McGraw-Hill Edition, Delhi, India
2. HurlockE (2000): "Child Development", Tata McGraw-Hill Edition, Delhi, India
3. Bal Vikas evam Bal Manovigyan, Brinda Singh, PanchseelPrakashan, Jaipur

**HSC/DSE/PG/104 ADVANCED FOOD SCIENCE**

**CREDIT: 04**

**Unit-1**

Different food groups and their nutritive values

Cereals: Breakfast cereals– Uncooked and ready to eat products; Cereal-based products– processed, fermented and baked

Pulses and legumes: Composition and processing; Toxic constituents of Pulses and elimination of toxic factors.

Nuts and oilseeds: Use and processing

Fats and oils: Functions of oils and fats in food; Processing of fats

**Unit-2**

Fruits: Composition and nutritive value

Vegetables: Classification, composition, nutritive value and methods of cooking

**Unit-3**

Meat: Composition, cooking of meat; Changes produced during meat cooking; Meat substitutes

Fish: Type, composition and cookery, preservation and processing

Egg: Nutritive value and structure; Storage and processing; Effect of heat on egg protein;

Egg products; Egg cookery; use of egg as a thickening agent and an emulsifying agent.

Milk: Composition and importance; Milk processing; Milk products; Milk substitute.

**Unit-4**

Sugar: Different types of sugars; Indian confectionary

Spices and condiments: Role of major and minor spices and their use; active principles in Some spices, Adulteration of spices.

**References**

1. Amerine MA, Pengborn RM, RoceasierEB(1965). Principles of Sensory Evaluation and Academic Press, NewYork.

2. Srilakshmi, B. Food Science, 4<sup>th</sup> Edition, New Age Publishers, New Delhi.

**PRACTICAL 01- Clothing Construction and Food Preparations**  
(HSE/ DSE/ PG 105) Compulsory

**CREDIT: 04**

**Practical:**

1. Drafting and lifting plan of different weaves on graph paper and glaze paper
2. Visit to a cloth weaving unit and report writing
3. Hand knitting samples/article
4. Construction of darts, pleats, tucks, gathers; basic seams; collars and sleeves.
5. Drafting of adult basic bodice and sleeve block and stitching of blouse and kurta
6. Understanding and handling of sewing machine: various parts; accessories; care, common defects and remedial measures
7. Preparation of research proposal in home Science and its report writing. Important National and International food preparations

**HSC/GE/PG 106 Rural Sociology (Credit 03)**

**UNIT I:** Rural Sociology: Meaning, definition, need to study, scope and importance, difference between rural and urban society.

Structural differentiation, the traditional/modern dichotomy, the rural urban continuum and socio-cultural obstacles or pre-requisites to development

**Unit II** Planned social change

(a) Approaches to rural planning: Improvement and transformation

(b) Indian rural development Programmes- critical analysis of development

(c) Programme, particularly Integrated Rural Development Programme and their consequences

**UNIT III:** Indian Rural social stratification

Castes -Basic notions, regional variations, changes and its role in economy and polity

**UNIT IV:** Indian Rural Institutions

a- Social: Family-Nature, Forms and changes

b- Economic- Objectives and techniques of production: land relations

c- (Ownership, tenancy and labour)

Rural poverty – its manifestations and causes

Physical structure of rural society social organization of rural society

**UNIT V:** Rural leadership – meaning, principles of leadership, types of leaders,

qualities of leader,

selection of rural leaders. Status of women in Rural India, Role of women in Rural and Agricultural Development.

**References: 1 nsllkbZ , vkjHkkjrh; xzkeh.klekt'kkL= , University book house Jaipur**

**2. Doshi S . L. rural sociology, university book house Jaipur**

**3. Ahuja Ram Social Problems in India, University book house Jaipur**

**4. Aggrwal G. K xzkeh.k lekt'kkL= % vkxjk % lkfgR; Hkou**

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**6. çlkj f'k{kk ,o alkeqnkf;d fodkl | ikVuh ,oa Bkdqj] f'kokçdk'ku**

**HSC/VAC/PG107: Dissertation**

**Dissertation on major (4+2) or Dissertation on minor or academic projects /  
entrepreneursh**

## **Semester VIII**

### **HSC/DSC/PG 108: FOOD SAFETY AND PRESERVATION**

**CREDIT: 04.**

#### **Unit1**

Food sanitation and hygiene, Food borne diseases

#### **Unit2**

Food Adulteration and Consumer Protection Fortification of foods with vitamins and minerals Novel and processed supplementary foods Enzymes in food processing

#### **Unit-3**

Evaluation of foods: Visual examination and sensory evaluation (Colour, texture, flavour and taste), Fermented foods, pickles, sauces.

#### **Unit4**

Causes of food spoilage, Food preservation–Principles and methods Preserved and processed products from fruits and vegetables

## **REFERENCES**

- 1:- Sunetra Roday, Food Safety and Sanitation, Tata McGraw-Hill Education, 2017
- 2:- Norman G. Marriott and Robert B. Gravani, Principles of Food Sanitation, Springer, 2018
- 3:- Dr. Anju Singh & Dr. Gouri Goyal, Bhojan posan awam swachhta, Sahitya Bhawan Publication, 2022
- 4:- krishna Sinha, Bhojan posan awam swachhta, Rakhi Prakashan, 2021

### **HSC/DSE/PG 109: LIFE SPAN DEVELOPMENT**

**CREDIT: 04**

#### **Unit I:**

Development during different stages of life cycle.

Prenatal period, conception and pregnancy, stages of prenatal development, factors affecting prenatal development, complications of pregnancy and birth process, Pre-school period- physical growth and motor skills development, language, speech and social development, skill in play, influence of nursery school and home environment on habits and development. Problems of this stage of growth

#### **Unit II:**

Elementary school years- physical growth and health, motor personality, social, emotional, cognitive, language, interests and personality development, effect of peers, school and media, role of parent and teacher, problems of this stage of growth.

#### **Unit III: Adolescence**

Puberty and Adolescence—definition and characteristics

Physical changes during puberty and adolescence

Developmental tasks of adolescence Social and emotional development during adolescence. Factors affecting social

and emotional Development. Role of parents, teachers, peers and society. Problems of adolescence—drop out from education system, juvenile delinquency— causes and prevention, addiction and alcoholism. Problems of adjustment, identity crisis.

#### **Unit IV: Early Adulthood**

Characteristics; Sub-stages; Developmental Tasks Problems: Adjustments, Interests, Vocational, Marital life and adjustments, Divorce, Re- marriage, Unmarried life/singlehood

**Middle age**;- Characteristic; Subdivision; Developmental tasks, problems, some common problems unique to this stage, Physical changes, Health, Changes in interest, Vocational, Changing family pattern.

#### **Unit IV: Old Age**

Characteristics; Subdivisions; Developmental Tasks

Types of Changes during ageing: Physical, Sensory,

Sexual, Health, Changes in motor abilities, Changes

in mental abilities and cognitive capacities, Changes

in interests, Retirement, Loss of spouse; Vocational

and Family life hazards of old age; Consequences of

ageing.

#### **REFERENCES**

- 1.Vikasatmak Manovigyan, Rajendra Prasad Singh, Jitendra Kumar Upadhyay,Rajendra Singh; Motilal Banarsidas, NewDelhi.
- 2.Baal Vikas evam Baal Manovigyan, Vrinda Singh, PanchsheelPrakashan, Jaipur
- 3.Hurlock B Elizabeth (1981), Developmental Psychology– A Life Span Approach, Tata Mc Graw Hill
- 4.Hurlock B Elizabeth (1978), Child Growth and Development, Tata McGraw Hill
- 5.Hurlock B Elizabeth (1997), Child Development, Tata McGraw Hill
- 6.Papalia E Diane & Olds Wendkos Sally (1975), A Child's World—Infancy through Adolescence, McGraw-Hill Book Company
- 7.Berk E Laura (2000), Child Development, Allyn and Bacon

**HSC/DSE/PG 110: ADVANCED HOME MANAGEMENT**

**CREDIT: 04**

**Unit1**

Management in family living, characteristics of management in home, role of home management, misconceptions regarding home management  
 Roles and responsibilities, characteristics and functions of a home manager

**Unit2**

Values–Concept, characteristics, classification and factors influencing values  
 Goals–Concept, types, factors influencing goals  
 Standards–Concept, classification of standards  
 Interrelatedness of values, goals and standards

**Unit3**

Management process: Planning, organizing, leading, controlling and evaluating  
 Decision making: Concept, steps, factors affecting, kind  
 Resources: Meaning and definition, role, characteristics, classification

**Unit4**

Time Management: Tools–peak-loads, work-curves, rest periods and work simplification  
 Energy Management: Classification of efforts used in homemaking, fatigue– types and  
 Causes, Work simplification: Techniques– pathway chart, operation chart, micro-motion film  
 analysis and path process chart

**Unit5**

Money Management: Budgeting– Definition, importance and steps in planning a budget. Account keeping–importance, types of account systems, methods of handling money,  
 family financial records.

**References:**

1. An Introduction to Family Resource Management, Premavathy Seetharaman, Sonia Batra and Preeti Mehra, CBS Publishers and Distributors
2. Economics of the household, B A Drew, Mc Millan company, New York.
3. Consumer Economics, Dr. Richard, Irwin, Illinois (1983)

**HSC/DSE/PG 111: EXTENSION IN HOME SCIENCE****CREDIT: 04**

**Unit1:** Home Science: Concept, objectives, areas and relationship with extension

Extension: concept, goals and history

Origin and need of Home Science Extension Education

**Unit 2** Home science extension worker: Role and Qualities, Extension education methods.

Communication skills: verbal and non-verbal communication. Relationship between, communication, extension and development.

Role of Home science in rural development, Role of women in rural development

**Unit 3** Methods and media of community outreach; Audio Visual aids in Home Science extension education Agencies (national and international) associated with extension education for rural development. Diffusion of innovation and adoption through extension.

**Unit 4** Community development: Understanding communities and their characteristics. Organization, principles, characteristics and functions

Role of home scientists in community development

Welfare program for rural women and children. (DWARKA, ICDS and other social welfare program (TRYSEM, JRY)

#### **References:**

1. Griha Vigyan Prasar Shiksha, Manju Patney and U.S Thakur, Shiva Prakashan Indore
2. Communication for Development in the Third World Theory and Practices (1991). SagePublication, New Delhi.
3. Chaubey BK (1990) A Handbook of Education Extension, Jyoti Publication, Allahabad
4. Singh, R. (1987) Textbook of Extension Sahitya Kala Prakashan, Ludhiana
5. Extension Education in Community (1961) Ministry of Food and Agriculture, Government of India, New Delhi
6. Extension Programme Planning, Oxford and IBH Publishing Company Pvt. Ltd. New Delhi

#### **PRACTICAL 2 (HSE/DSE/PG 112): Practical Aspects of Extension Education**

##### **CREDIT: 04**

1. Preparation of recipes from different Indian states
2. Preparation of low cost high nutritive value recipes
3. Visit and Report Writing to Gram Panchayat.
4. Visit and report Writing to household industry.
5. Visit and report writing on family court / Legal aid centres.
6. Collection of paper cutting / pamphlets related to any specific topic.
7. Plan and prepare slides / C.D. on any concerned topic
8. Preparation and use of slides use and handling of instructional aids
8. Demonstration as an instructional technology-method and result demonstration.
9. Group discussion, lesson planning.



10. Making family budget for different income groups while taking into consideration savings and Taxes

### **HSC/GE/PG 113: Marriage and Family Dynamics**

**Credit: 04**

#### **Unit I**

Marriage – Meaning, marriage as an institution, goals of marriage, selection of life partner, changes in marriage and their causes. Family life cycle.

Readiness of marriage-physiological, social, psychological and others.

Preparation for marriage

Family – Definition, functions, and types (with reference to family life cycle), characteristics of family,

Family structure in India

#### **Unit II**

Patterns of changes in family relationships

#### **Unit III**

Marital adjustment – factors contributing to difficulties in marital adjustment, adjustment to life partners,

sexual adjustment, adjustment to in-laws, adjustment to partner hood.

Contemporary issues in Family life

Break-up of extended family, migration, dual career families, Non-traditional families, influence of extra familiar factors, films, TV, peer groups, neighbourhood and school

Breakup of family: Divorce, separation, desertion, death of partner, single parenthood

#### **Unit IV**

Marriage guidance and counselling – meaning of counselling, factors causing tension in married life, importance of marriage guidance and counselling, areas in marriage requiring guidance.

Legal aspects: laws regarding marriage, adoption, divorce, inheritance

#### **References:**

Manav vikas – Shashi Prabha jain, Shiva Prakashan , Indore

### **HSC/VAC/PG 114: Dissertation**

**Dissertation on major (4+2) or Dissertation on minor or academic projects / entrepreneurship.**

### **Semester IX**

### **HSC/DSC/PG115: COMMUNITY NUTRITION (Compulsory DSE)**

**CREDIT: 04**

**Unit I:**

Prevalence, ethology, biochemical and clinical manifestation and preventive measures for: Protein Calories Malnutrition- Kwashiorkor and Marasmus

**Unit II:**

Prevalence, ethology, biochemical and clinical manifestation and preventive measures for:

Iron deficiency, Iodine deficiency; Fluorine Deficiency and Toxicity

**Unit III:**

Prevalence, ethology, biochemical and clinical manifestation and preventive measures for

Vitamin A deficiency; Beri-Beri, Pellagra; Scurvy; Rickets, Osteomalacia and Osteoporosis

**Unit IV:**

Nutritional assessment and surveillance–Meaning, need, objectives and importance

Anthropometry–Need, importance, types, standards for reference

Biochemical methods–Laboratory and biochemical assessment

Clinical assessment–Need, importance, identifying signs of deficiency diseases

Diet surveys–Need, importance, method

## **HSC/DSE/PG/116: INDIAN EMBROIDERIES, DYEING AND PRINTING TECHNIQUES**

**CREDIT: 04**

**Unit I:**

Dyes–Definition and classification of dyes

Different types of dyes: Natural dyes– Vegetable, animal and mineral; Synthetic dyes–direct, acid, basic, reactive, vat, sulphur, mordant, disperse, pigments. Suitability of various dyes to different fibres.

**Unit II:**

Dyeing methods at different stages of processing– fibre, yarn, piece, union and cross

Colour fastness characteristics– washing, sunlight, crocking and perspiration

Domestic methods of dyeing

**Unit III:**

Printing–Significance, methods–block, stencil, screen, roller, Faults in printing, Advantages

and disadvantages of different printing methods. Preparation of printing paste, use of various ingredients and thickeners. Preparation of cloth for printing. After-treatment of printed goods.

**Unit IV**

Historical background of traditional Indian embroidery

General embroidery techniques; Hand embroidery–

Knowledge of basic hand embroidery stitches

Study of traditional embroideries of India: Texture, design and colour,  
Chikankari of Uttar Pradesh, Kantha of Bengal, Kasuti of Karnataka, Kutch Kathiawar  
of Gujarat, Phulkari of Punjab, Sindhi embroidery

### **Unit V**

Traditional Textiles of India: Texture, design and colour

Woven (in design)–Patola, brocade, chanderi, paithani, pochampalli, ikat, maheshwari

Printed woven fabric– dacca muslin, tassari, kotadris

Printed–Sanganeri, kharhi print of Gujarat

Painted–kalamkari, madhubani

Resist dyed–bandhej of Gujarat and Rajasthan

Khadi: Significance–National and economic; Revolution in Khadi

Handloom: Definition, role in national economy and some chief handloom clothes of India

### **References:**

Vastra Rachna evam Chappai Takneek, Jain and Gupta, Shiva Prakashan, Indore

## **HSC/DSE/PG 117: CHILD WELFARE IN INDIA**

### **CREDIT: 04**

**Unit I:** Child Welfare in India Concept and historical perspective, Need and relevance  
Historical

evolution of Child welfare Rights of children; Protection of Child rights; Convention on  
the rights of the child in the  
Constitution of India

**Unit II:** Profile of child in India Demographic: Total population, Child population, Sex  
ratio, Infant

Mortality Rate (IMR), Literacy, School enrolment rate

**Unit III:** Children at Risk Children in especially difficult circumstances, Children in  
emergency

situation, Disabled child, Destitute child, Street child, Delinquent child, Working child  
Social problems

related to children – female foeticide (pre-birth and preconception elimination), juvenile  
delinquency,

child labour, child abuse and child marriage, discrimination against girl child

**Unit IV:** Policies and Legislations for Child Welfare National Children's Board, The  
National Policy

for the Child, The National Children's Fund, Child Labor Cell Child Labour Act; PC-  
PNDT Act; Child

Marriage Act, The Children's Act, Juvenile Justice Act, Right to Education Act

**Unit V:** Child Welfare agencies and programmes in India International, national and  
local agencies –

governmental and non-governmental (UNICEF, ICCW, Mobile Creches, Bal Bhawan)  
Welfare programs –

ICDS, Mid-day Meal Programme, Universal Immunization Programme, etc

### **References:**

1. Baig, T.A. (1979): Our Children. New Delhi: Ministry of Information and Broadcasting, Govt. of India
2. Chowdhry, D.P. (1980): Child Welfare and Development. Delhi: Atma Ram

### **HSC/DSE/PG 118: HUMAN PHYSIOLOGY**

**CREDIT: 04**

**Unit I** Physiological process, structural and functional basis of human body  
Skeletal system, joints and muscular system

**Unit II** Composition and functions of blood and lymph, heart and course of blood circulation, blood pressure, pulse and heart sounds

**Unit III** Physiology of digestion, digestive enzymes and their function, function of liver, absorption from the intestine

**Unit IV** Respiratory apparatus, mechanism of respiration, respiratory rates, volume and transport of gases, physiology of kidney and skin

**Unit V** The location, secretion and functions of various endocrine glands, male female reproductive organs, pregnancy parturition and, milk secretion

### **REFERENCES**

1. Arhur J. Banders; Human Physiology- The mechanisms of body function, Tata Mc Grawaw-Hill Publishing
2. C. Guyton; Text book of Medical Physiology V<sup>th</sup> edition, W.B. Sanders company- Philadelphia, London.

### **PRACTICAL 3 (HSE/DSE/PG 119): Nutritional Assessment and Surface Ornamentation of fabrics**

**CREDIT: 04**

1. Familiarize students with methods of assessment of nutritional status and conduct single person case study to assess and evaluate nutritional status or carry out a survey using anthropometric measurements.
2. Construction of articles using different types of printing and dyeing techniques
3. Sample preparation of traditional Indian embroideries and machine embroideries Preparation of two articles using different hand embroideries Preparation of two articles using machine embroideries (patch work, applique, braiding, smocking, beading and sequins), Documentation of Indian textile and costumes.

### **HSC/GE/PG 120: Psychological Testing and Measurement (Credits: 03)**

#### **Unit I:**

Introduction to psychological testing: Need, Meaning, objectives, uses and design Difference between testing and measurement Criteria of a good physiological test; reliability, validity and standardization

#### **Unit II:**

Measurement of intelligence and creativity intelligence: Meaning, types of intelligence tests; some standardized intelligence tests

#### **Unit III:**

Measurement of aptitude and attitude aptitude: Meaning, Types of Aptitude test attitude Meaning, attitude scales

#### **Unit IV:**

Assessment of personality Behavioural methods of personality assessment personality inventories projective techniques

#### **References:**

1. Adhunik Manovigyanik Prikshan evam Maapan , Mahesh Bhargava, H. P. Bhargava Book House , Agra
2. Psychological Testing, Urbina Anastasi

### **HSC/VAC/PG 121: Dissertation**

**Dissertation on major (4+2) or Dissertation on minor or academic projects / entrepreneurship.**

## **Semester X**

### **HSC/DSC/PG 122: INTERIOR DECORATION CREDIT: 04**

**Unit I** Factors affecting housing needs and demand in India population, income, occupation, family mobility and technological development. Solving India's housing problems, needs obstacles setting goals, standards, role of central and state Government and local housing agencies, rent control policies housing schemes.

**Units II** Introduction to interior decoration, importance of interior planning and decoration, planning principles for specific areas.

**Unit III** Element and principles of design and their application in interiors, principles of Harmony, proportion, balance and rhythm, application of elements and principles of design in interior planning and decoration.

**UNIT IV** Developing House plans for different income groups

Characteristics of different rooms.

Planning for background areas and their treatment, floors walls ceilings and their structural characteristics, finishes and techniques of preparation and decoration.

**Units IV(a)** kitchen- Definition, need, important arrangement of kitchen work area and types of kitchens.

(b) Building material- Cement, Sand, POP etc

Different types of flooring

False ceiling, wall lining and partition

Paint, vanishes, Distemper.

Concept of air-conditioning

**Units V** Furniture arrangement, types of furniture and selection criteria, window treatment, types of windows and its parts, functional and decorative treatment, Light sources and colour scheme, Developing light plans for different areas, Functional and decorative accessories for interiors.

### **References**

1. Dorothy Stepat- Devan and Others- Introduction to interior Design, N.Y. Macmillan 1980.
2. Mike Lawrence: The Complete interior Decorator U.K. Macdanald, 1986.
3. Faulker and Faulker, inside today's home, N.Y. Holt Rinehart and Winston, 1975

**HSC/DSE/PG123: HUMAN NUTRITION AND DIET THERAPY**

**CREDIT: 04**

**Unit I** Nutrients in foods: their functions, requirements and sources digestion absorption and utilization of nutrients. Effect of low and excess intake of nutrients on human body Energy requirement, BMR, Water, its functions, sources and routes of excretion, recommended dietary allowances

**Unit II** Methods of assessment of nutritional status

**Unit III** BMR, Diet therapy: History of dietetics, effect if illness on food acceptance and utilization, role of dietician, taking patients history, education of patient and dietetic counseling.

**Unit IV** Therapeutic modifications of normal diet, food exchange lists feeding methods, principles of dietetic management of chronically ill patients

**Unit V** Causes, symptoms and principles of diet management of

- Fevers (Long and short duration)
- Peptic ulcer, gastritis
- Jaundice, hepatitis cirrhosis and infantile cirrhosis
- Diarrhea, constipation
- Cardiovascular diseases, hyper lipidemia, hypertension, congestive heart failure
- Nephritis (acute and chronic) renal stone, gout, arthritis
- Diabetes mellitus, obesity and underweight (PCM)
- Diet in surgery, fractures, burns injury, allergy and AID

#### **References:**

1. A Text book of food and nutrition by M. Swami Nathan, Ganesh Publishers, Bo1 I & II.
2. Clinical Dietetics and Nutrition by F.P. Antia, Oxford University Press. New Delhi, London & New York
3. Human Nutrition and Diets by S. Deevidoon, R. Pasamore, J.F. Brock and A.S. Truwell, Churchill and Livingstone.

4. Modern Nutrition in Health & Disease, Yong & ShailsNormel &  
Therapeutic Nutrition by F.T. Proud fit & C.H. Robinson.

### **HSC/DSE/PG 124 CHILDREN WITH SPECIAL NEEDS**

**CREDIT: 04**

#### **Unit I**

Children with special needs: Definition, characteristics, classification according to types of impairment  
Special education for children with special needs

#### **Unit II:**

Mental retardation: definition and levels, causes, identification, educational provisions  
Gifted and creative children: definition, characteristics, special needs, identification and  
Educational provisions

#### **Unit III:**

Visually handicapped children: Classification, identification and educational provisions  
Hearing impaired: Classification, identification, causes and educational provisions

#### **Unit IV:**

Children with orthopaedic impairments: Definition, classification, causes, educational provisions  
And rehabilitation  
Children with behaviour disorders: autism and aggressive behaviour

#### **References:**

1. Bhargava M. (1994)–Introduction to Exceptional Children, Sterling Publishers, New Delhi.
3. Kar Chintamani (1996)– Exceptional Children: Their Psychology and Education, Sterling Publishers, New Delhi.
4. Sahu B.K. (1993)–Education of the Exceptional Children, Kalyani Publishers, New Delhi.
5. Vishisht Avashyakta wale bacchon ki shiksha tatha nirdeshan evam paramarsh, Vinay Rishivar, Agarwal Publications
6. VishishtBalak, Abha Rani Bisht and Swati Saxena, Agarwal Publications
7. Vishesh Avakshyataonwaale Bacche Part I and II, DECE-3, Bacchonke liye sewaye nevam karyakram, IGNOU
8. VishishtBaalak– Shiksha evam Punarwaas, Mahesh Bhargava, H.P. Bhargava BookHouse, Agra

### **HSC/DSE/ PG 125 FASHION: DESIGN AND DEVELOPMENT**

#### **Unit I: Nature and Business of Fashion**

- Fashion terminology
- Importance of Fashion



- Principles of Fashion; Fashion cycle
- **Business of Fashion**
- - Designer's role, Manufacturer's role, Retailer's role

#### **Unit II: Fashion Forecasting**

- Market research
- Forecasting services and resources; Process of Forecasting

#### **Unit III: Product and Line Development**

- Process of Product and Design Development
- Line Development
- Organising the Line

#### **Unit IV: Apparel Categories**

- Fabrics for apparel
- Clothing categories
- Size ranges and price points

#### **References**

Frings, G.S. (1999), Fashion from Concept to Consumer, 6<sup>th</sup> edition, NJ, Prentice Hall.  
 Keiser, S.J., and Garner, M.B., (2008), The Synergy of Apparel Product Development, II Edition, Fairchild Publications, USA.  
 Stone, E., (2008), The Dynamics of Fashion, III Edition, Fairchild Books, China.  
 Kim, E., Fiore, A.M., Kim, H., 2011, Fashion trend analysis and forecasting, published by Berg, 49-51 Bedford

### **PRACTICAL 4 (HSE/DSE/PG 126):- Interior Decoration and Therapeutic Nutrition**

#### **Unit 1**

Assessment of dietary and nutritional status of some families. ; Planning and preparation of diet during normal and diseased conditions

#### **Unit 2**

Drawing house plans with standard specifications

Furniture layout of living room, dining room, kitchen and bedroom.

Interior design of residential spaces based on ergonomics and anthropometric data.

Planning color schemes of different rooms for different activities.

Development of design and construction of curtains, cushions, carpet, table mats.

Flower arrangement; Wall painting, picture frame.

Preparing drawings for different interior spaces.

- a. Arrangement of walls
- b. Arrangement of floors
- c. Ceiling arrangements

#### **Unit 3**

Study of aetiology, characteristics, diagnosis of children with different disabilities and recording information.

Visit of centres and institutions for special children and recording information and observation.

Writing report.

## **HSC/GE/PG 127 Gender in Extension**

### **Credit- 3**

#### **Unit I: Social Construction of Gender**

- Concept of gender, difference between sex and gender
- Cultural construction of gender- socialization and gender roles-historical and contemporary perspectives
- Patriarchy and gender relations, • Changing status of women- influencing factors, role of women's movements.
- Feminism, Feminist theories and gender perspectives • Demographic analysis

#### **Unit II: Gender and Development Perspectives**

- Concept and importance of women's development
- Role and participation of women in development.
- Theoretical frameworks and approaches towards women and development.
- Policies and initiatives for women's development- international and national perspectives.
- Globalization and its impact on Gender and development

#### **Unit III: Gender Issues and Empowerment**

- Problems, vulnerabilities and marginalization of women– lifecycle approach
- Issues and impact of marriage and kinship systems, socio cultural practices, health, education, livelihood, poverty– access and control of resources on women's lives.
- Violence in women's lives- concept, nature, impact
- Women and work- invisibility, opportunities and participation in workforce
- Political participation of women and leadership
- Women's empowerment problems and limitations.
- International and national initiatives in gender sensitization and supporting women empowerment.

#### **Unit IV: Gender and Advocacy**

- Human Rights and women- women's right to development.
- Gender and Law- Laws governing gender empowerment-social, legal and political perspectives. Issues of enforcement of laws and women's protection.
- Women's Development Programmes and policies: National policy for empowerment of women, schemes and programmes.
- Women's empowerment and Media- images and representation of women in different media, women's voice in media, participation in production.

### **RECOMMENDED READINGS**

- Dube, L. (2001) Anthropological Explorations in Gender-Intersecting Fields New Delhi: Sage Publications.

- Goel, A. (2004) Education & Socio-Economic Perspectives of Women Development and Empowerment. New Delhi: Deep & Deep.
- Kishwar, M. (1994) Off the Beaten Track – Rethinking Gender Justice for Indian Women. Mumbai: Oxford University Press.
- Goel, A. (2004) Violence and Protective Measures for Women Development and Empowerment. New Delhi: Deep & Deep.
- Goel, A. (2004) Organisation & Structure of Women Development and Empowerment. New Delhi: Deep & Deep.
- Krishna, S. (Ed) (2003) Livelihood and Gender Equality in Community Resource Management. New Delhi: Sage Publications.
- Powell, G. (1999) Handbook of Gender & Work. London: Sage Publications.

#### **HSC/VAC/PG128: Dissertation**

**Dissertation on major (4+2) or Dissertation on minor or academic projects / entrepreneurship.**