

## UG Program in HOME SCIENCE (BA)

### Program Specific Outcomes (POs)

The program has been framed in such a manner that students receive real feel of quality education by touching all aspects of human lifecycle.

Designed to enhance the capacity of students to understand universal and domain-specific values in Home Science.

Develop the ability to address the complexities and interface among of self, societal and national priorities.

Inculcate both generic and subject-specific skills to succeed in the employment market and standards of life.

Promote research, innovation and design (product) development favoring all the disciplines in Home Science.

This program develops scientific and practical approach among the students which helps in their day today life.

SEMESTER WISE TITLES OF THE PAPERS IN UG HOME SCIENCE					
COURSE	YEAR	COURSE CODE	PAPER TITLE	REMARK	CREDIT
First Year	Semester –I				
		HSC100	Introduction to Community Science		2+0
		HSC101(A130101)	Fundamentals of Nutrition and Human Development		4+0
		HSC102(A130102)	Healthy recipe development and Food Preparation		0+2
	Semester –II				
		HSC103(A130201)	Introduction to Clothing and Textile and Resource Management		4+0
		HSC104(A130202)	Clothing &Textile		0+2
Second Year	Semester –III				
		HSC201(A130301)	Advance Nutrition and Human Development		4+0
		HSC202(A130302)	Human Development		0+2
	Semester – IV				
		HSC203(A130401)	Housing and Extension Education		4+0
	HSC204(A130402)	Resource Planning and Decoration		0+2	
Third Year	Semester –V				
		HSC301(A130501)	Surface Ornamentation of Fabrics		4+0
		HSC302(A130502)	Community Development and Programme Planning		4+0
		HSC303(A130503)	Community Transformation		0+2
	Semester- VI				
		HSC304(A130601)	Dietetics and Therapeutic Nutrition		4+0
		HSC305(A130602)	Research Methodology and Gender Development		4+0
	HSC306(A130603)	Therapeutic Diet Preparation and Nutrient Evaluation		0+2	

**B.A./ B.Sc. I Semester I Home Science  
Introduction to Community Science**

Program/Class: Certificate	Year 1	Semester 1
Subject- Home Science		
CourseCode:HSC100 (A130001)	Course Title: Introduction to Community Science	
<p>Course outcomes:                      The student at the completion of the course will be able to:                      Prepare the students to understand the concept of Home Science                      Students will get familiar with different branches of Home Science                      Acquaint students with knowledge of nutrient rich foods                      Explain the need and importance of studying Home Science                      Identify the biological and environmental factors affecting human development.</p>		
Credits: 2		Core Compulsory / Elective
<b>Units</b>	<b>Topic</b>	
I	Traditional Home Science and its Relevance in current era Contribution made by Indian Home Scientists i.e. M Swaminathan, C V Gopalan, S K Day, Ravindra NathTagore etc.	
II	Basic concepts in food and nutrition Basic terms used in study of food and nutrition Understanding relationship between food, nutrition and health Functions of food-Physiological, psychological and social	
III	Introduction to Resource Management Concept, universality and scope of management Approaches to management Ethics in management Motivation Theory	
IV	Importance of clothing Clothing functions and theories of origin Clothing terminology Individuality and conformity, conspicuous consumption and emulation Selection of clothes for self.	
V	Understanding Human Development Definitions, scope and multidisciplinary nature of Human Development Contexts, stages and domains of development Principles of Growth and Development: Norms and Milestones	
VI	Extension: concept, goals, philosophy and history Principles of extension Relationship between communication and extension - role of extension in development	

**Suggested Readings-**

- Kumar & Hansra, (1997) Extension Education for Human Resource Development. NewDelhi: Concept Publishers
- Khanna K, Gupta S, Seth R, Mahna R, Rekhi T (2004). *The Art and Science of Cooking: A Practical Manual*, Revised Edition. Elite Publishing House Pvt Ltd.
- Raina U, Kashyap S, Narula V, Thomas S, Suvira, Vir S, Chopra S (2010). Basic Food Preparation:A Complete Manual, Fourth Edition. Orient Black Swan Ltd.
- Bamji MS, Krishnaswamy K, Brahmam GNV (2009). Textbook of Human Nutrition, 3rd edition. Oxford and IBH Publishing Co. Pvt. Ltd.
- Marshall S G, Jackson H O, Stanley MS, Kefgen M & Specht T, 2009, Individuality in Clothing & Personal Appearance, 6th Edition, Pearson Education, USA.
- Tate S.L., Edwards M.S., 1982, The Complete Book of Fashion Design, Harper and Row Publications, New York.

**B.A. / B.Sc. I Semester I Home Science Paper 1**

**Fundamentals of Nutrition and Human Development**

Program/Class: Certificate	Year 1	Semester 1
Subject- Home Science		
CourseCode:HSC101(A130101)	Course Title: Fundamentals of Nutrition and Human Development	
<p>Course outcomes:</p> <p>The student at the completion of the course will be able to:</p> <p>Prepare the students to understand physiology based courses</p> <p>Students will get familiar with different methods of cooking</p> <p>Acquaint students with practical knowledge of nutrient rich foods</p> <p>Explain the need and importance of studying human growth and development across life Span.</p> <p>Identify the biological and environmental factors affecting human development.</p> <p>Learn about the characteristics, needs and developmental tasks of infancy &amp; early childhood Years.</p>		
Credits: 4	Core Compulsory / Elective	
Part A		
Units	Topic	

**Department of Home Science DDU Gorakhpur University Gorakhpur**

I	<p>Selection, nutritional contribution and changes during cooking of the following food groups:</p> <p>Cereals Pulses Fruits and vegetables Milk &amp; milk products</p> <p>Eggs Meat, poultry and fish Fats and Oils</p>
II	<p>Cell and Digestive System Respiratory and Cardiovascular system</p>
III	<p>Food and Nutrition Food- Meaning, Classification and function Nutrition- Concept of Nutrition Nutrients-Macro and Micro, sources and deficiency diseases.</p>
IV	<p>Cooking Methods- Methods, Advantages and Disadvantages Preservation of Nutrients while Cooking. Traditional methods of enhancing nutritional value of foods germination, fermentation, food synergy etc.</p>
V	<p>Introduction to Human Development: Concept, Definition and need to study of Human Development Domains, Stages and contexts of development Principles of Growth and Development Determinants of Development- heredity and environment</p> <p>Prenatal Development and Birth Process: Conception, Pregnancy and Childbirth Stages of birth</p>
VI	<p>Prenatal Development and Birth Process: Conception, Pregnancy and Childbirth Stages of birth Types of delivery (natural, c-section, breech, home vs. assisted delivery) Physical appearance and capacities of the new-born Factors affecting Pre-natal development</p>
VII	<p>Infancy: Developmental tasks during Infancy and Preschool Stage. Physical and Motor Development. Social and emotional development Cognitive and language development</p>
VIII	<p>Early Childhood (Pre School) years: Developmental Tasks during Early childhood. Physical and Motor Development Social and emotional development</p>

Cognitive and language development
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**Suggested Readings:**

- Dr. Brinda Singh, Manav Sharir evam Kriya Vigyan Panchsheel Prakashan, Jaipur;2015,15th Ed.
- Chatterjee, C.C , “Human Physiology” Medical Allied Agency ; Vol I , II .
- Text Book of Biology for 10+2 Students (NCERT)
- Sumati R Mudami, “Fundamentals of food Nutrition and Diet Therapy” , New Age International Pvt. Ltd, New Delhi , 6th Ed. (2018)
- Punita Sethi and Poonam Lakda , “Aahar Vigyan, Suraksha evam Poshan” ; Elite Publishing House, New Delhi ;2015
- Dr. Anita Singh, AaharEvamPoshanVigyan, Star Publications, Agra
- Dr.DevinaSahai, AaharVigyan, New Age International Publishers, New Delhi
- Berk, L.E. *Child development* New Delhi: Prentice Hall (2005)(5th ed.).
- Berk L.E. Child Development Allyn and Bacon 1992 (6th) Edition.
- Keenan, T., Evans, S., & Crowley, K. *An introduction to child development*, Sage (2016)
- Hurlock E. Child Development.
- Aadhunik Vikasatmak Manovigyan , Shri Vinod Pustak Mandir Agra Edition 3rd 2015
- Suggestive digital platforms web links-ePG-Pathshala, IGNOU & UPRTOU online study material
- Svayam Portal
- <http://heecontent.upsdc.gov.in/Home.aspx>

**B.A./ B.Sc. I Semester I Home Science Paper 2**

**Healthy recipe development and Food Preparation**

Program/Class: Certificate	Year 1	Semester 1
Subject- Home Science		
CourseCode:HSC102(A130102)	Course Title: Healthy recipe development and Food Preparation	
Course outcomes: Students will get familiar with different methods of cooking Acquaint students with practical knowledge of nutrient rich foods		
Credits: 2		Core Compulsory / Elective
Units	Topic	
I	Basic cooking skills - Weighing of raw materials - Preparing of different food items before cooking	
II	Preparation of various dishes using different methods of	

	cooking - Boiling /steaming - Roasting - Frying – Deep/shallow - Pressure cooking - Hot air cooking/Baking
III	Different styles of cutting fruits and vegetables - Salad Decoration/Dressings
IV	Preparation of nutrient rich dishes - Protein rich dish - Carbohydrate rich dish - Fat rich dish - Vitamins rich dish - Minerals - Fibers

**Suggested Readings:**

- Dr. Brinda Singh, Manav Sharir evam Kriya Vigyan Panchsheel Prakashan, Jaipur;2015,15th Ed.
- Dr.Nitu Singh, PrayogikGrihVigyan, SahityaPrakashan, Agra
- Chatterjee, C.C , “Human Physiology” Medical Allied Agency ; Vol I , II .
- Text Book of Biology for 10+2 Students (NCERT)
- Sumati R Mudami, “Fundamentals of food Nutrition and Diet Therapy” , New AgeInternational Pvt. Ltd, New Delhi , 6th Ed. (2018)
- Punita Sethi and Poonam Lakda , “Aahar Vigyan, Suraksha evam Poshan” ; Elite Publishing House, New Delhi ;2015

**B.A./ B.Sc. I Semester 2 Home Science Paper I**

**Introduction to Clothing & Textiles & Family Resource Management**

Program/Class: Certificate	Year 1	Semester 2
Subject- Home Science		
CourseCode:HSC103(A130201)	Course Title: Introduction to Clothing and Textiles& Family ResourceManagement	
Course outcomes: Learn about scope of textile and clothing Understanding why fabrics are different Learn how fabrics can be manufactured Understand basic clothing concepts and garment making Learn the family resource management as a whole. Understand the Decision making and use of resources throughout the Family life cycle. Gain knowledge about Time, Money & Energy as a Resource. Appreciate Household Equipments for work simplification		
Credits: 4		Core Compulsory / Elective
Part A		
Units	Topic	
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 primary and secondary
II	Knowing Fibers-Manufacture, processing, properties and uses of (a) Cellulosic Fibers-cotton, Linen (b) Protein Fibers-Wool, Silk (c) Synthetic/Manmade fibers-Nylon, Polyester, Acrylic, Rayon.
III	Yarn to Fabrics(a) Definition of Yarn, Manufacture of Yarn and Yarn Properties (b) Different fabric construction techniques (Weaving, Knitting, Felting, Braiding, Non-woven) (c) Weaving of Cloth-Terminologies and Steps in Weaving. (d) Types of weaves-Basic and Decorative
IV	Clothing Construction (a) Tools for Clothing construction (b) Introduction to sewing machines, its parts and maintenance, (c) Importance of Drafting, Draping, Flat pattern techniques - advantages & disadvantages (d) fabric preparatory steps for stitching a garment - preshrinking, straightening, layout, pinning, Marking and cutting.
<b>Part B</b>	
V	Introduction to Home Management: Basic Concepts, Purpose And Obstacles of Management. Process of Management – Planning, Organizing, Controlling and Evaluation. Motivating Factors in Management – Values, Goals and Standards – Definition and Classification.
VI	Resources, Decision making & Family life cycle: Meaning, Characteristics, Types and Factors affecting the use of Resources. Steps and Role of Decision Making in Management. Stages of Family Life Cycle.
VII	Time, Energy and Money Management: Time as a Resource, Steps in making Time Plan, Tools and Aids in Time Management. Energy as a Resource, Work Curve, Fatigue- Types, Causative Factors and Alleviating Techniques. Family income as a Resource, Sources of Income and Expenditure and Saving. Preparation of Family budget in view of family income.
VIII	Work Simplification and Household Equipments: Meaning and Techniques of Work Simplification, Mundell's Classes of Change. Principle, Use and Care of Household Equipments such as Pressure Cooker, Mixer and Grinder, Refrigerator, Washing Machine, Vacuum Cleaner & Solar Cooker

**Suggested Readings:**

- Colbmen P Bernard: Textiles Fiber To Fabric
- Hollen & Saddler: Introduction To Textile
- Joseph M: Introduction To Textiles
- Trotman: Textile Fiber Science
- Cutting Tailoring And Dress Making: National open School, B-31-B Kailash Colony, New Delhi –1100048.
- Khanuja, Reena (2018) Grah Vyavastha avam Grah Sajja. Agrawal Publications, Agra ISBN: 978-93-81124-96-3
- R Bhatia & C Arora (1999), Introduction To Clothing And Textile, Printed by Macho Printery, Raopura, Baroda.
- Complete Guide To Sewing By Reader's Digest: published by The Reader's Digest Association(Canada) Ltd. Montreal-Pleasantville, NY, 2002.
- Deacon R.E. and Firebaugh F.M. (1998) Family Resource Management- Principles and application. N. Delhi.: Roy Houghton Mifflin Company.

- Faulkner, R. & Faulkner, S. (1961) Inside Today's Home. Rev. ed. © Holt, Rinehart & Winston, Inc.
- Gross, I.H. and Crandall, E.H. (1967). Management for Modern Families. N. Delhi: Sterling Publishers Ltd.
- Moorthy G. (Ed.). (1985). Home Management. N. Delhi.: Arya Publishers, Mullick, P. Text book of Home science. Ludhiana.: Kalyani Publishers.
- Nickell, P., and Dorsey, J, M. (2002). *Management in Family Living*. New Delhi:
- CBS Publishers (ISBN13: 9788123908519)
- Patni Manju & Sharma Lalita, Grah Prabandh, Star Publications Agra.
- Varma , Pramila. *Vastra Vigyaan Avam Paridhan*: Madhya Pradesh Hindi Granth Academy, Bhopal.
- Varghese, M. A, Ogale, N. N and Srinivasan, K. (2001). Home Management.
- New Delhi. New Age International (P) Ltd.
- Varghese, M.A. Household Equipment Manual, S.N.D.T Women's University, Mumbai.
- Suggestive digital platforms weblinks-
- Svayam Portal,
- <http://heecontent.upsdc.gov.in/Home.aspx>

**B.A. / B.Sc I Semester 2 Home Science Paper 2**

**Clothing & Textiles**

Program/Class: Certificate	Year 1	Semester 2
Subject- Home Science		
CourseCode:HSC104(A130202)	Course Title: Clothing and Textiles	
Course outcomes: Ability to identify fibers and fabrics Understanding why fabrics are different Learning basic Sewing skills Learn how garments are stitched		
Credits: 2		Core Compulsory / Elective
<b>Units</b>	<b>Topic</b>	
I	Identify fibers and fabrics (a) Fibre identification tests- Visual, burning and microscopic- natural and synthetic, pure and blended fibres. (b) Weaves identification and understanding their usage	
II	Learning to stitch (a) Knowing how to stitch-an idea of straight-line stitching, stitching on curves and at corners (b) Basic Stitching-Temporary Stitching, Permanent and decorative stitching	
III	Basic sewing (a) Seams-Plain seams and its finishing, run & fell seam, French seam (b) Attaching different Fasteners (c) Disposal of fullness-darts, gathers, tucks and pleats (d)	

	Neckline Finishing-Facing & Binding
IV	Preparing Frock (a)Drafting, cutting and stitching of Childs' basic block and sleeve block. (b)adaptation to "Gathered frock" with Peter Pan collar and puff sleeves

**Suggested Readings:**

- Cutting Tailoring and Dress Making: National open School, B-31-B Kailash Colony, New Delhi – 1100048.
- R Bhatia & C Arora (1999), Introduction to Clothing and Textile, Printed by MachoPrintery, Raopura, Baroda.
- Complete Guide to Sewing by Reader's Digest: published by The Reader's Digest Association (Canada) Ltd. Montreal-Pleasantville, NY, 2002.
- Helen J Armstrong, Pattern Making for Fashion Design, Prentice Hall
- Gerry Cooklin, Introduction to Clothing Manufacture, Blackwell Science, UK, 1991
- Metric Pattern cutting & Grading by Winfred Aldrich.
- Khanuja, Reena. Vastra Vigyaan ke Sidhant, Agrawal Publication, Agra.
- Suggestive digital platforms weblinks-
- Svayam Portal,
- <http://heecontent.upsdc.gov.in/Home.aspx>

**B.A./ B.Sc. 2 Semester 3 Home Science Paper 1  
Advance Nutrition and Human Development**

Program/Class: Diploma	Year 2	Semester 3
Subject- Home Science		
CourseCode:HSC201(A130301)	Course Title: Advance Nutrition and Human Development	
<p>Course outcomes: The student at the completion of the course will be able to:</p> <p><input type="checkbox"/> Create an awareness about importance of healthy meal at various stages of life Cycle.</p> <p><input type="checkbox"/> Inculcate healthy eating practices among students</p> <p><input type="checkbox"/> Develop skill of meal planning for different physiological groups</p> <p><input type="checkbox"/> Explain the Physical &amp; Psychological changes during middle childhood, Adolescent and adulthood stage.</p> <p><input type="checkbox"/> Identify the biological and environmental factors affecting personality.</p> <p><input type="checkbox"/> Learn about the characteristics, needs and developmental tasks of Middle Childhood years, Adolescent &amp; Adulthood stage</p>		
Credits: 4	Core Compulsory / Elective	
Part A		
Units	Topic	
I	Meal Planning- Definition , importance , factors affecting meal planning , Balanced Diet , RDA	
II	Nutrition During Infancy and Childhood- Nutrition Requirement, RDA and Diet Plan	
III	Nutrition During Adolescence, Adulthood and Old Age. Nutrition Requirement, RDA and Diet Plan	
IV	Nutrition During special condition pregnancy and lactation	

	Nutrition Requirement, RDA and Diet Plan
	Part B
V	<p>Middle Childhood Years</p> <p>Developmental tasks and characteristics of middle childhood period</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Physical and motor development</li> <li><input type="checkbox"/> Social &amp; emotional development</li> <li><input type="checkbox"/> Cognitive development</li> <li><input type="checkbox"/> Language development</li> </ul>
VI	<p>Puberty and Adolescence</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Development tasks and characteristics</li> <li><input type="checkbox"/> Significant Physical physiological and hormonal changes in Puberty.</li> <li><input type="checkbox"/> Self and Identity, Factors influencing Identity &amp; Personality Development.</li> <li><input type="checkbox"/> Family and peer relationship</li> </ul> <p>Problems – Drug and Alcohol abuse, STD, HIV/AIDS, Teenage Pregnancy.</p>
VII	<p>Cognitive, Language and Moral Development during Adolescence:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Perspective on cognitive development, development of intelligence and Creativity</li> <li><input type="checkbox"/> Adolescent language</li> <li><input type="checkbox"/> Adolescent Morality</li> </ul>
VIII	<p>Introduction to adulthood:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Concept, transition from adolescence to adulthood</li> <li><input type="checkbox"/> Developmental tasks of Adulthood</li> <li><input type="checkbox"/> Physical and physiological changes from young adulthood to late adulthood</li> </ul> <p>Responsibilities and adjustments-educational, occupational, marital and parenthood</p>

**Suggested Readings:**

- Sheel Sharma , “Nutrition and Diet Therapy, Peepee Publishers , New Delhi ; 2014
- Ankita Gupta “ Text book of Nutrition” Medico Refresher Publisher, Agra, 2018
- Subhangini A Joshi; Nutrition and Dietetics, Mc Graw Hill Education, Private Ltd.
- Kumud Khanna, “Text book of Nutrition and Dietetics”, Elite Publishing House Pvt. Ltd, New Delhi, 2013, 7th Ed.
- Swaminathan M, " Essentials of Food and Nutrition Vol I and II
- Monaster G.J. 1 Adolescent Development Life Tasks. Mc.Graw Hill (1977).
- Ambron S.R. Child Development Holt, Rinehart and Winston 1978 (IInd Edition).
- 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.
- Boeknek G. Human Development Brook and Cole Publishing Company 1980.
- Aadhunik Vikasatmak Manovigyan , Shri Vinod Pustak Mandir Agra Edition 3rd 2015
- Harpalani. Aahar Vigyaan avam Upcharatmak Poshan, Star Publications ,Agra.
- Suggestive digital platforms web links- IGNOU & UPRTOU online study material

- Svayam Portal,
- <http://heecontent.upsdc.gov.in/Home.aspx>

**B.A. / B.Sc. 2 Semester 3 Home Science Paper 2**

**Human Development**

Program/Class: Diploma	Year 2	Semester 3
Subject- Home Science		
CourseCode:HSC202(A130302)	Course Title: Human Development	
Course outcomes: <input type="checkbox"/> Learn to cope up with adolescent and adulthood problems. <input type="checkbox"/> Understand and handle development related issues more efficiently. <input type="checkbox"/> Able to know human behavior. <input type="checkbox"/> Understand individual differences		
Credits: 2		Core Compulsory / Elective
Units	Topic	
I	Preparation of an album on developmental milestones of children. Prepare child literature. Visit to Child Care Centers/ anganwadi	
II	Study of physical, social, emotional, cognitive, language development (any two). Observations of child rearing practices in families from different social classes	
III	Interviews of adolescent girls and boys to understand their life style, behavior and problems	
IV	Carry out case studies to know more about the different life stages, e.g., school going children, adolescents, Young adults. (any two)	

**Suggested Readings:**

- Monaster G.J. 1 Adolescent Development Life Tasks. Mc.Graw Hill (1977).. Ambron S.R. Child Development Holt, Rinehart and Winston 1978 (IInd Edition).
- 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.
- Boeknek G. Human Development Brook and Cole Publishing Company 1980.
- Aadhunik Vikasatmak Manovigyan , Shri Vinod Pustak Mandir Agra Edition 3rd 2015
- Suggestive digital platforms web links- ePG- Pathshala, inflibnet,IGNOU & UPRTOU
- online study material.
- Svayam Portal,
- <http://heecontent.upsdc.gov.in/Home.aspx>

**B.A. / B.Sc 2 Semester 4 Home Science Paper 1  
Housing & Extension Education**

Program/Class: Diploma	Year 2	Semester 4
Subject- Home Science		
CourseCode:HSC203(A130401)	Course Title: Housing & Extension Education	
<p>Course outcomes:</p> <p>Grasp knowledge of Housing need &amp; selection of site in real life situations.</p> <p>Comprehending Housing plans for residential purpose.</p> <p>Appreciate principles of design and the contributing factors to refine personal Aesthetic senses.</p> <p>Learn the widening concepts of Extension Education.</p> <p>Develop understanding for Effective teaching and learning.</p> <p>Comprehend the various effective communication methods.</p> <p>Gain skills to use technologically advanced Audio-visual aids.</p>		
Credits: 4		Core Compulsory / Elective
<b>Part A</b>		
<b>Units</b>	<b>Topic</b>	
I	Housing: Needs of a House, Difference between House & Home, way to acquire house (Own & rented). Factors influencing selection and purchase of house and site for house Building.	
II	House Planning: Principles of house planning, Planning Different residential spaces in a house. Planning house for Different income groups.	
III	Interior Designing: Introduction to Interior designing. Importance of good taste. Objective of Interior decoration. Elements of design – Line, Shape, Texture, Color, Pattern, Light & Space. Principle of design- Proportion, Balance, Rhythm, Emphasis, Harmony	
IV	Home Decors: Furniture, Furnishings (Curtain, Draperies, Floor coverings, Wall celing, Lighting, Accessories (Wall painting, Mirrors, wall art, Sculpture & Antiques, Flower arrangements) etc.	
V	Extension Education: Meaning, Concepts, Objectives, Scope, Principles, Philosophy of Extension Education. Early Extension Efforts in India. Formal & Non-formal Education.	
VI	Extension Teaching & Learning: Role and Qualities of an Extension worker. Steps in Extension Teaching Process, Criteria for Effective Teaching & Learning.	
VII	Communication & Extension Teaching Methods: Definition, Importance, Characteristics, Elements, Models & Challenges in	

	communications. Relationship between Communication, Extension & Development. Extension Teaching Methods- Classification, Factors guiding the Selection & use of Extension teaching methods.
VIII	Audio- visual Aids: Definition, Importance, Classification, Selection, Preparation & Effective use of Audio-visual Aids.

**Suggested Readings:**

- Khanuja, Reena (2018) Grah Vyavastha avam Grah Sajja. Agrawal Publications, Agra ISBN: 978-93-81124-96-3
- Patni Manju & Sharma Lalita, Grah Prabandh, Star Publications Agra.
- Cherunilam, F., & Hedggade, O. D. (1987). *Housing in India*. Bombay: Himalaya Publishing House.
- Craig, H.T. and Rush, O.D. (1966). *Homes with Character*. Heath, 1966.
- Faulkner, R. & Faulkner, S. (1961) *Inside Today's Home*. Rev. ed. © Holt, Rinehart & Winston, Inc.
- Goldstein. H & Goldstein V. (1954). *Art in 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). *Flower Arranging: Step-by-step Instructions for Everyday Designs*. Florist Review
- Aggarwal, R. (2008). "Communication- today and tomorrow", New Delhi.: Sublime Company
- Dubey V.K, Srivastava Archana, Agrawal Garima, Grah Vigyan Prasar Avam Sampreshan. Star Publications Agra.
- Harpalni B.D. Patni. Manju, ( Prasar Shiksha Avam Sanchar) Star Publications, Agra. ISBN 978-93-81246
- Shaw Geeta Pushp, Shaw Jois Sheela, Prasar Shiksha , Vinod Pustak Mandir Agra. ISBN 81-7457-104-3
- Dahama, O.P., & Bhatnagar, O.P. [1998]. "Education and Communication for Development". New Delhi. - Oxford and IBH Publishing Co. Pvt. Ltd.
- Jaipal Singh." Prasar Shiksha avam Gramin Vikas" SR Scientific Publications, Agra
- Reddy, A. [1987]. "Extension Education". Bapatha, Andhra Pradesh, India.: Sreelekshmi Press.
- Supe A.N. (1983). *An introduction to Extension Education*. Delhi: Oxford IBH Publishing
- 2. Suggestive digital platforms
- weblinks <http://>
- [heecontent.upsdc.gov.in/Home.aspx](http://heecontent.upsdc.gov.in/Home.aspx)

**B.A. /B.Sc 2 Semester 4 Home Science Paper 2**

### Resource Planning & Decoration

Program/Class: Diploma	Year 2	Semester 4
Subject- Home Science		
CourseCode:HSC204(A130402)	Course Title: Resource Planning & Decoration	
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>• Incorporate appropriate work simplification in using household Equipments.</li> <li>• Develop understanding for house planning &amp; decoration.</li> </ul>		
Credits: 2	Core Compulsory / Elective	
Units	Topic	
I	Preparation of time plans for self and family. Drafting family budget for different income groups.	
II	Market Survey of Household Equipments- (Pressure cooker, Toaster, Gas Stove, Mixer & Grinder, Refrigerator, Washing machine, Microwave, Solar cooker)	
III	Draw House Plans Standard Specifications & Furniture Layout.	
IV	Preparation of Color wheels & Color schemes. Flower Arrangement & Floor Decoration (Rangoli)- Application of Design principles and Elements of Art , Innovation of new styles.	

### Suggested Readings:

- Alexander. N.J., (1972). Designing Interior Environment. New York: Harcourt Brace,
- Bhargava, B. (2005). Family Resource Management and Interior Decoration, Jaipur:Apple Printer and V. R. Printers.
- Faulkner, R., and Faulkner, S. (1975). Inside Today's Home, New York: Rinehart.
- Gandotra, V., and Jaiswal, N. (2008). Management of Work in Home, New Delhi: Dominant Publishers and Distributors. (ISBN No. 81-7888-526-3)
- Harmon. S., and Kennon, K. (2018). The Codes Guidebook for Interiors (5thEd.). NewYork: Wiley (ISBN: 978-1-119-34319-6)
- Johanovich Inc. Ball, V. K. (1982). Art of Interior Design. New York: John Wiley & Sons.
- Leach, S. D. (1978). Techniques of Interior Design Rendering and Presentation (1stEd.). Architectural record Books (ISBN-13: 978-0070368057)
- Mohanty, A.B. (1985). Guide to House Buildings. New Delhi: Inter India Publications
- Patni Manju & Sharma Lalita, Grah Prabandh, Star PublicationsAgra.
- Suggestive digital platforms weblinks-
- [bit.ly/3fJfghi](https://bit.ly/3fJfghi)
- <https://bit.ly/39mTwGQ>
- <https://bit.ly/2JoXB2e>

- <https://bit.ly/3ljkrWf>.
- Svayam Portal,
- <http://heecontent.upsdc.gov.in/Home.aspx>

**B.A. / B.Sc 3 Semester 5 Home Science Paper 1**

**Surface Ornamentation of fabrics**

Program/Class: Graduation	Year 3	Semester 5
Subject- Home Science		
CourseCode:HSC301(A130501)	Course Title: Surface Ornamentation of fabrics	
Course outcomes:		
<ul style="list-style-type: none"> <li>• Knowing why fabrics look differently</li> <li>• Identify the different techniques of fabric from surface</li> <li>• Learn about finishes done on fabrics</li> <li>• Knowing about dyeing fabrics</li> <li>• Learn how printing on fabrics is carried</li> <li>• Knowing the traditional embroideries of India</li> <li>• Identifying traditional textiles of different states</li> <li>• Knowing the importance of appropriate laundry method</li> </ul>		
Credits: 4		Core Compulsory / Elective
Units	Topic	
I	Techniques of Creating variety on fabrics (a) weaving(b) finishing of fabrics(c) dyeing of fabrics(d) printing fabrics(a) embroidery and other decoration methods	
II	Finishes (a) Classification of fabric finishes (b) Study of purpose and process of finishes (i) General Purpose finishes-Bleaching, Mercerization, Calandring, Sanforization, Tentering, Singeing, Scouring (ii) Functional Finishes	
III	Dyeing (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, Natural, Sulphur, Vat, Disperse and Reactive dyes (d) Resist Dying Techniques- Tie & Die, Batik.	
IV	Printing (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	
V	Traditional Embroideries: Meaning and status of traditional crafts in India, Knowing about the Traditional Embroideries of different states -Zardozi, Kashida of Kashmir, Phulkari of Punjab, Kantha of Bengal, Chikankari, Kasuti, of UP, Sindh and Kutch work of Gujarat.	
VI	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.	

VII	Water(a) Water and its uses in textile industry , properties, (b)types of water used for processing (c) Hardness and removal of Hardness of water.
VIII	Laundry and dry cleaning of fabrics and garments (a) Methods of Laundry and Dry cleaning (b) Dry cleaning process (c) Reagents of Laundry-Blues, Bleaches, Optical Brighteners, Stiffening agents (d) Types of soaps and detergents (e) Cleaning action of soaps and detergents.

**Suggested Readings:**

- Marsh JT: Textile Finishes
- Trotman Er: Dyeing And Chemical Technology Of Fibres
- Joseph M: Introduction To Textiles
- Corbman P Bernard: Textiles- Fibre To Fabric
- Hollen & Saddler: Introduction To Textile
- J. Hall: The Standard Hand Book 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. Shailiaja:Traditional Embroideries Of India, New Age International Publishers, 1996
- Naik.D. Shailiaja, Jacquie.A.Willson: Surface Designing Of Textile Fabrics, New AgeInternational Publishers,2006
- Bhargav, Bela. Vastra Vigyaan, Univ. Book House Pvt. Avam Dhulai Kala,University Book HousePvt Ltd. Jaipur
- Patni .Manju, Vastra Vigyaan Avam Paridhan ka Parichay ,Star Publications, Agra.
- Suggestive digital platforms weblinks-
- Swayam Portal,
- <http://heecontent.upsdc.gov.in/Home.aspx>

**B.A./ B.Sc 3 Semester 5 Home Science Paper 2  
Community Development & Programme Planning**

Program/Class: Graduation	Year 3	Semester 5
Subject- Home Science		
CourseCode:HSC302(A130502)	Course Title: Community Development & Programme Planning	
Course outcomes: <input type="checkbox"/> Understand the Community Development dynamics & organizing system for Development. <input type="checkbox"/> Create awareness about the various development programs. <input type="checkbox"/> Identify the leadership pattern in the community. <input type="checkbox"/> Impart skills to implement monitor & evaluate program.		
Credits: 4	Core Compulsory / Elective	
Units	Topic	

**Department of Home Science DDU Gorakhpur University Gorakhpur**

I	Community Development: Meaning, Definition, Functions, Objectives, Philosophy, Principles of Community Development Programme in India.
II	Community Development Organization: Meaning, Types, Principles, Role & Administrative Structure at the National, State, District, Block & Village levels.
III	Home Science Extension Education in Community Development: Origin, Concept, Need, Importance and Contribution of Home Science Extension Education in National Development.
IV	Recent Development Programme for Women & Children: Support to Training & Employment for women (STEP), Swarn jayanti Gram Swarajgar Yogna (SGSY), Integrated Child Development Services (ICDS) etc.
V	Support Service of Youth Development: NCC, NSS, Youth Camp Youth Clubs etc.
VI	NGO & Others: Contribution towards community services, Types & Role of NGO - WHO, CARE, UNICEF, UNESCO, UNDP, CRY, HELP-AGE INDIA.
VII	Leadership: Concept, Definitions, Types, Importance, Function and Role of Community leaders. Methods of Identifying and Training of leaders.
VIII	Programme Planning: Programme planning component cycle and its components- (i) Designing the project – Defining the objectives, Identifying resources, approach, feasibility and Work plan. (ii) Implementation. (iii) Monitoring and Evaluation

**Suggested Readings:**

- Clark John. (1991). Voluntary Organizations: Their Contribution to Development. London: Earth Scan
- Dahama, O.P., & Bhatnagar, O.P. "Extension & Rural Welfare". New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.
- Ghosh Bhola Nath, (1996), "Rural Leadership & Development" Mohit Publications, New Delhi.
- Julie Fisher. (2003). Governments, NGO's and the Political Development of the Third World. Jaipur: Rawat Publications
- Mohsionnadeem, (1985), "Rural Development through Government Program" Mittal Publications New Delhi.
- Manju Patni & Harpalini, (2018) Prasar Shiksha avam sanchar, Star Publications, Agra.
- Reddy, A [1987]. "Extension Education". Bapatha, Andhra Pradesh, India.: Sreelekshmi Press.
- Ravi Shankar Kumar Singh. (2003). Role of NGO's in Developing Countries (Potentials, Constraints and Policies). New Delhi: Deep & Deep Publications (P) Ltd

- Suggestive digital platforms weblinks
- <https://bit.ly/313Ayaj>
- <https://bit.ly/35RnyAi>
- <https://www.un.org/en/universal-declaration-human-rights/>
- <https://www.un.org/womenwatch/daw/cedaw/text/econvention.htm>
- <https://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>
- <https://www.undp.org/content/undp/en/home/sustainable-development-goals.html>
- <https://bit.ly/39ROD8X>
- <https://www.unicef.org/>
- <https://www.who.int/about>  <https://www.careindia.org/>

**B.A./ B.Sc. 3 Semester 5 Home Science Paper 3  
Community Transformation**

Program/Class: Graduation	Year 3	Semester 5
Subject- Home Science		
CourseCode:HSC303(A130503)	Course Title: Community Transformation	
Course outcomes: <input type="checkbox"/> Address & resolve women & family related issues. <input type="checkbox"/> Make use of Audio-visual aids in planning & conducting group communication <input type="checkbox"/> Understand the role of Government bodies in development of the community. <input type="checkbox"/> Organizing people for their own development.		
Credits: 2	Core Compulsory / Elective	
Units	Topic	
I	Identify the target group & their relevant issues i.e.help nutrition, Education, Women's & Family issues followed by preparing a report.	
II	Observe & Critical analysis nearby community of women & children related welfare program followed by the preparation of report.	
III	Prepare & learn the use of Audio-visual Aids.	
IV	Identify to create an awareness on the existing Contemporary issues. Develop a script in the Folk drama (Nukkad Natak) format to perform in the target group.	

**Suggested Readings:**

- Mondal Sagar, Misra OP (2018) "Fundamentals of Extension education & Rural Development", Kalyani Publications, New Delhi.
- Mortiss PD (1988) Agricultural Extension- Practical Manual" Department of Primary Industries, Queens Land Government.
- Pradhan.K. Varaprasad.C (2018) Glimpses of Practical in Extension Education, NewIndia Publishing Agency. New Delhi
- Jaipal Singh." Prasar Shiksha avam Gramin Vikas" SR Scientific Publications, Agra
- Suggestive digital platforms weblinks <https://bit.ly/3922ZTH>
- Svayam Portal,

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

**B.A. / B.Sc 3 Semester 6 Home Science Paper 1  
Dietetics and Therapeutic Nutrition**

Program/Class: Graduation	Year 3	Semester 6
Subject- Home Science		
CourseCode:HSC304(A130601)	Course Title: Dietetics and Therapeutic Nutrition	
Course outcomes: Gain knowledge of principles of diet therapy Develop and understand modification of the normal diet for therapeutic purposes Practical knowledge of dietary management in some common disorders		
Credits: 4	Core Compulsory / Elective	
Units	Topic	
I	Introduction a) Definition of Health Dietetics and Therapeutic Nutrition b) Importance of Diet Therapy c) Facts about fast foods/Junk foods d) Objectives of therapeutic Diet e) Principles of diet therapy	
II	Diet and feeding methods a) Modification of normal diets for therapeutic purposes b) Methods of modification <input type="checkbox"/> On the basis of nutrients <input type="checkbox"/> On basis of consistency c) Different feeding methods <input type="checkbox"/> Oral feeding <input type="checkbox"/> Tube feeding	
III	Energy Metabolism a) The calorific value of food b) Measurement of energy exchange in the body <input type="checkbox"/> Direct calorimeter <input type="checkbox"/> Indirect calorimeter c) Factors influencing the Basal Metabolic Rate d) Factors influencing the total energy requirement	
IV	Diet during fevers and infections a) Introduction to fever –Acute fever –Chronic fever b) Important changes in nutrition during fever c) Modification of the diet	
V	Diet during Digestive system disorders a) Peptic ulcers–Causes, symptoms and diet modification b) Diarrhea and Constipation –Causes, treatment and diet modification	
VI	Weight Management	

	<p>a) Overweight and Obesity –Introduction to Obesity –Causes of Obesity –Diet Modification</p> <p>b) Underweight –Causes –Treatment –Diet Therapy</p>
VII	<p>Therapeutic Diets in Cardiac Diseases</p> <p>a) Atherosclerosis –Introduction –Dietary factors influencing lipid level in blood –Modification of diet and Meal Pattern</p> <p>b) Hypertension –Causes and symptoms –Diet in Hypertension</p>
VIII	<p>Endocrinal Disorders</p> <p>a) Introduction to endocrinology</p> <p>b) Various endocrine glands and their functions : Thyroid, Adrenal and Pancreas</p> <p>c) Diabetes Mellitus–occurrence types, symptoms,metabolic changes, dietary modification and educatingthe patient.</p>

**Suggested Readings:**

- Sumati R Mudambi – “Fundamentals of food, Nutrition and Diet Therapy”, New AgeInternational Pvt. Ltd, New Delhi, 6th Edition (2018).
- B Srilakshmi- “Dietetics” , New Age International Publishers, New Delhi 2017
- Bamji MS, Krishnaswamy K and Brahmam GNV(Eds) (2009), Text book of HumanNutrition, 3rd Edition , Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
- Dr. Brinda Singh- Aahar Vigyan evam Poshan, , Panchsheel Prakashan, Jaipur, 2015;13th Ed.
- Dr.DevinaSahai, SamanyaEvamUpcharatmakPoshan, New Age International Publishers.
- Dr. Sheel Sharma, “Nutrition and Diet Therapy” PEEPEE Publishers and Distributers(P) Ltd. Delhi, 2014, 1st Ed.
- Shubhangini A Joshi, – “Nutrition and Dietetics”, Mc Graw Hill Education Private Ltd., New Delhi, 2013
- Kumud khanna– “Text book of Nutrition and Dietetics” , Elite Publishing House Pvt.Ltd, New Delhi, 7th Ed. 2013
- M Swaminathan – Essentials of food and Nutrition , Vol II, Applied Aspects, The Bangalore Printing and Publishing Co. Ltd, Bangalore, 2nd Edition 1985, Reprint 1997.

**B.A. / B.Sc 3 Semester 6 Home Science Paper 2  
Research Methodology and Gender Development**

Program/Class: Graduation	Year 3	Semester 6
Subject- Home Science		
CourseCode:HSC305(A130602)	Course Title: Research Methodology and Gender Development	

Course outcomes: The student at the completion of the course will be able to: Explain the concept and use of Research. Develop a research proposal. Learn about the data, sample and report writing. Conduct survey. To develop insight into the General issues of women. To understand strategies for empowerment of women.	
Credits: 4	Core Compulsory / Elective
Part A	
Units	Topic
I	Social Research: Concept, Scope, Steps of research
II	Sampling Concept, Techniques, Principles and Limitations of Sampling.
III	Data Collection: Sources of Data Collection: Primary & Secondary Tools of Data collection: Interview schedule, Observation, Questionnaire, Methods of data collection
IV	Report Writing Summary, Conclusion and Recommendations, Writing references, Writing process of research report: Formal Style of writing, Preface, Chapterization, Headings, Tables and Figures, Appendices, Bibliography and Acknowledgement
Part B	
V	Women in Development: Capacity Building for women- Education, Decision Making abilities, Opportunities, Awareness & Information on social and legal issues.
VI	Women's Organizations & Collective Strength: Women's action groups and women's participation in development Initiative.
VII	Employment Trends of women: Need for self-employment, Opportunities & challenges in an organized and un-organized sector.
VIII	Entrepreneurship Development to empower women: Motivation, Development of women entrepreneurs in India, Schemes available to encourage women entrepreneurship. (a) Bhartiya Mahila Bank Business Loan (b) Annapurna Scheme. (c) Stree Shakti Package (d) Mudra yojana scheme for CC women. (e) Mahila udyam nidhi scheme.

**Suggested Readings:**

- C. R. Kothari: Research Methodology- Method and Techniques
- R. Kumar: Research Methodology: A step by Step Guide for Beginners
- M. H. Gopal: Introduction to Research Methodology for Social Sciences
- Good, Carter, Scales and Douglas: Methods of Research
- Bhasin, Kamla (2000). Understanding Gender. New Delhi. Kaali for Women.
- Devi, Uma (1994). Women Work, Development and Ecology. New Delhi, Har-Anand Publications.

- Krishna, Sumi (2007). Women's Livelihood Rights: Recasting Citizenship for Development, New Delhi, Sage Publications.
- Sohoni, K Neerj, (1994), Status of Girls in Development Strategies, New Delhi, Har-Anand Publications.
- Gundry Lisa K. & Kickul Jill R., 2007, Entrepreneurship Strategy: Changing Patterns in New Venture Creation, Growth, and Reinvention, SAGE Publications, Inc.
- Taneja & Gupta, 2001, Entrepreneur Development- New Venture Creation, Galgotia Publishing Company
- Patni, Manju. Anusandhan Vigyaan, Star Publications, Agra.
- Sudha, G.S. Vyavsayik Prabandh ke Siddhant avam Udyamita, RBD Publications.
- Gupta, U.C. Udyamita Vikas, Kailash Pustak Sadan, Bhopal
- Suggestive digital platforms web links- e-PG Pathshala – Inflibnet

**B.A. / B.Sc 3 Semester 6 Home Science Paper 3  
Therapeutic Diet Preparation and Nutrient Evaluation**

Program/Class: Graduation		Year 3	Semester 6
Subject- Home Science			
Course Code: HSC306(A130603)		Course Title: Therapeutic Diet Preparation and Nutrient Evaluation	
Course outcomes: 1- Gain 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: 2		Core Compulsory / Elective	
Units	Topic		
I	Modification of normal diet for therapeutic purposes preparation and presentation		
II	Therapeutic Diet Preparation and Nutrient Calculation of - Diet in fever - Diet in diarrhea - Diet in Constipation		
III	Therapeutic Diet Preparation and Nutrient Calculation of some Common Disorders - Diet in diabetes Mellitus - Diet in Hypertension - Diet in Atherosclerosis		
IV	Dietary Modification for weight management – Preparation and Nutrient Calculation of diet in- - Overweight & obesity - Underweight		

**Suggested Readings:**

- Sumati R Mudambi – “Fundamentals of food, Nutrition and Diet Therapy”, New Age International Pvt. Ltd, New Delhi, 6th Edition (2018).
- B Srilakshmi- “Dietetics”, New Age International Publishers, New Delhi 2017

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- Bamji MS, Krishnaswamy K and Brahmam GNV(Eds) (2009), Text book of Human Nutrition, 3rd Edition , Oxford & IBH Publishing Co. Pvt. Ltd. New Delhi
- Dr. Brinda Singh- Aahar Vigyan evam Poshan, , Panchsheel Prakashan, Jaipur, 2015;13th Ed.
- Dr. Sheel Sharma, “Nutrition and Diet Therapy” PEEPEE Publishers and Distributers(P) Ltd. Delhi, 2014, Ist Ed.
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