# **MAHARAJA SUHEL DEV STATE** UNIVERSITY **AZAMGARH**



**Syllabus of M.A. [Home Science]** I Semester - Ist to IVth 1

Dean, Faculty of At

**Based on National Education Policy-2020** 

**Effective from 2022-23** 

Approved By: Board of studies - Home Science Submitted by-

Pooja Pallavi

Convener

Home Science

29/08/2022

## Semester Wise Titles of The Papers in PG (Home Science)

Year	Semester	Course Code	Paper Title	Credits
M.A. I	I	A130701T	Food Science	4
		A130702T	Extension and Communication in	4
			community development	
		A130703T	Life span development	5
		A130704T	Research methodology	5
		A130705P	Practical	2
		A130706R	Major Research Project	4
		1 D	(Individual/Progressive)	
	II	A130801T	Fabric construction and care	4
		A130802T	Early child care and education	4
		*Opt	ional Courses	
		A130803T	Theory of management	5
		A130804T	Advance nutrition science	5
		A130805T	Statistics and computer application	5
		A130806T	Adolescence and youth	5
	*Stu	dents will be sele	ect any two courses from the optional cour	ses.
		A130807P	Practical	2
		A130808R	Major Research Project	4
			(Individual/Progressive)	
M.A. II	III	A130901T	Clinical and therapeutic nutrition	4
		A130902T	Children with special needs	4
		*Opti	ional Courses	
		A130903T	Entrepreneurship management	5
		A130904T	Textile testing and quality control	5
		A130905T	Management of energy and household equipments	5
		A130906T	Food Processing and technology	5
	*Str	idents will be se	lect any two courses from the optional cou	rses

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	A130907P	Practical	2
	A130908R	Major research project/Dissertation (Individual/Progressive)	4
IV	*Opt	tional Courses	
	A131001T	Gender in extension and development	4
	A131002T	Family guidance and counseling	4
	A131003T	Food quality analysis	4
	A131004T	Media and extension	4
	A131005T	Community health management	4
	A131006T	Consumer economics	4
	*Students will courses.	l be select any four courses from the option	nal
	A131007P	Practical	4
	A131008R	Major research project/Dissertation (Individual/Progressive)	4

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## M.A. I Semester I Home Science Paper I

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130701T
Nature of course	Theory (Compulsory)
Course/Paper Title	Food Science
Semester	I
Credit assigned	4
Maximum marks	25+75

#### Course objectives:

- Provide an understanding of composition of various food stuff.
- Unable students to use the theoretical knowledge in various applications and food preparations.

#### Course outcomes:

- Students will get familiar with constituents of food.
- Acquaint students with changes occurring in various food stuffs as a result of processing and cooking.

#### Total No. of lectures - 60

Unit	Topic	No.of lectures
I	Introduction to Food Science: Constituents of foods- general, physical and chemical properties, colloidal system, gels, emulsions.  Enzymes: Importance of enzymes and their application in food industry.	10
II	Cereals and cereal products: Cereal grains- structure and composition, cereal products, wheat starch and gluten formation, properties of Amylase and Amylopectin.  Fats and oils: Types, sources, composition of fat; Functional	15
	properties and uses in cookery.	

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Ш	Pulses and Legumes: Composition and functional properties of pulses, toxic constituents.  Vegetables and fruits: Composition, pigments and flavour constituents, changes occurs during cooking.	15
IV	Milk and milk products: Composition, physical & chemical properties; Effect of heat, acid and salts.  Dairy products – butter, cheese, yogurt, cultured milk etc.	10
v	Meat and poultry: Muscles composition, characteristics, post mortem changes.  Egg and fish: structure, composition, changes during storage, uses in cookery.	10

#### Suggested readings:

- N. Shakuntala Manay, Food: Facts and Principles, New Age International Pvt. Ltd. Publication, New Delhi.
- Dr. Anita Singh, Ahar Evam Poshan Vigyan, Star Publication, Agra
- Punita Sethi and Poonam Lakda, Ahar Vigyan, Suraksha Evam Poshan, Elite publishing House, New Delhi, 2015
- Dr. Devina Sahai, Aahar Vigyan, New Age International publishers, New Delhi.
- Ankita Gupta," Text Book Of Nutrition." Medico Refresher Publisher, Agra, 2018.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

Swayam Portal;

http://heecontent.upsdc.gov.in/Home.aspx https://en.m.wikipedia.org/wiki/food science

## M.A. I Semester I Home Science Paper II

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130702T
Nature of course	Theory (Compulsory)
Course/Paper Title	Extension and Communication in Community Development
Semester	I
Credit assigned	4
Maximum marks	25+75

#### Course objectives:

- To understand the process of communication in development work.
- Develop understanding for effective extension teaching and learning.
- Comprehend the various effective communication methods.

- Acquaint students write effective extension teaching methods.
- Students will aware about community development programme
- Enhance skills to use advance technology in extension programme.

Unit	Topic	No.of lectures
I	Community: Definition, concept & characteristics, social groups and organizations; Community leadership, role of leadership in community development.	10
П	<b>Extension</b> : Meaning, changing concept of extension, objective, principles, functions, component of extension, extension system in India.	15
Ш	Extension teaching: Methods and process, steps in extension teaching method, Teaching aids, cone of learning.	15



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IV	Communication: Definition role & significance of communication, elements and classification of communication, communication models.	10
v	Community development programs: Meaning, principles, aims of community development, method of community development; C.D.P.	10

#### Suggested readings:

- Dahama, O.P. & Bhatnagar, O.P., "Education and communication for development,"
   New Delhi oxford and IBG publishing Co. Pvt. Ltd.
- Supe, A.N., An introduction to extension Education. Delhi; oxford IBH publishing.
- Reddy, A., "Extension education", Bapatha, Andhra Pradesh, India; Sreelakshmi press.
- Jaipal Singh., "Prasar Shiksha Avam Gramin Vikas" S.R scientific publication, Agra.
- Agrawal, R., "Communication- Today and Tomorrow", New Delhi; Sublime Company.
- Harpalani B.D., "Prasar Shiksha Avam Sanchar", Star Publications, Agra.
- Shaw, Geeta Pushp, Shaw Jois sheela, "Prasar Shiksha", Vinod Pustak Mandir Agra.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

Swayam Portal;

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## M.A. I Semester I Home Science Paper III

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130703T
Nature of course	Theory (Compulsory)
Course/Paper Title	Life Span Development
Semester	I
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To become acquainted with development stage from birth to old age.
- To develop awareness of important aspect of development during the whole life span.
- To understand the issues faced and adjustment required at each stage across the life span.

#### Course outcomes:

- Student will know about various development stage.
- Student will aware about aspect of development during whole life span.
- Acquaint students with principles and factors influencing human development in different stages.

Unit	Topic	No. of lectures
I	Human development: Definition, principles of growth and development.  Prenatal development & birth process: Stages of prenatal development, factors affecting prenatal period, delivery and birth process.	20
II	Infancy: Physical & motor development, cognitive development, emotional development early language development.	10
Ш	Early and late childhood: Physical and motor development, cognitive development, social and emotional development.	15
IV	Adolescence: Physiological changes, social and emotional development; Identity formations; Problems of adolescence-drugs, alcohol delinquency etc.	15

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**Adulthood**: Young adulthood (18-35 years)- Significance of the period, responsibilities & adjustment.

Middle adulthood (35-50 years)- Physical changes and changing roles in the family.

Late adulthood (50- 60 years)- Changes in personality, occupational changes, health issues.

15

Course pre-requisites: To study this course a student must had the subject Home Science in UG class.

#### Suggested Readings:

- F.P. Rice, Human Development, A life span approach, N.J. Prentice Hall- 1965.
- Berk, L.E., Child Development, Allyn and Bacon (1992) (6<sup>th</sup>) edition.
- Hurlock, E., Child Development.
- Berk, L.E., Child Development, New Delhi, Prentice Hall.
- Newman., & Newman. (2003). Development through life, A psycho social approach (pp. 252-284). United States of America: Wards worth.
- Pikunas, J. (1976). Human Development, An emergent Science, United States of America: Mc. Graw Hill, Inc.
- Owens, K. (2003), Child and Adolescent Development, An integrated Approach (pp 413-454). Wards worth: United States.
- Fabes R., & Martin. C.L. (2003), Discovering Child Development, United States of America: Pearson Education Inc.
- Fabes, R., & Martin. C.L. (2003), Discovering Child Development, United States of America: Pearson Education Inc.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;
    Swayam Portal;

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## M.A. I Semester I Home Science Paper IV

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130704T
Nature of course	Theory (Compulsory)
Course/Paper Title	Research Methodology
Semester	I
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To understand the significance of statistics and research methodology in Home Science research.
- To understand the types, tools and methods of research.
- To develop the ability to construct data gathering instruments.
- To understand the appropriate statistical technique for the measurement scale and design

- Students will be able to explain the concept and use of research.
- Students will be able to conduct survey.
- Students will be able to develop a research proposal.

Total	Total No. of lectures - 75		
Unit	Topic	No.of lectures	
I	Research: Concept, Scope, types of research recent trends in research in Home Science.	15	
П	Research problem: Definition & importance and source of research problem, Selection of research problem.  Hypothesis: Concept, types of significance.	15	
Ш	Research design: Purposes of research design: fundamental, applied and action, exploratory and descriptive, experimental, survey and case study, ex-post facto.  Sampling: Definition, concept significance and types of sampling.	20	
IV	Source of data collection: Primary and secondary data, methods and tools of data collection.	10	



#### Suggested readings:

- Bhatnagar, G.L: Research methods and measurements in behavioral and social sciences Agri Cole Publishing Academy, New Delhi.
- C.R. Kothari: Research methodology- method and techniques .
- M.H. Gopal: Introduction to research methodology for social Sciences.
- Mukherjee, R: The quality of life: valuation in social research, saga publications, New Delhi.
- Kerlinger: Foundation of educational research.
- James Harold Fox, Criteria of Good Research, Phi Delta Kappan, Vol. 39 (March, 1958)
- Danny N. Bellenger and Barnett, A. Greenberg, "Marketing Research—A Management Information Approach".
- Robert M.W. Travers, An Introduction to Educational Research.
  - Suggestive digital platforms web links-Swayam Portal;

http://heecontent.upsdc.gov.in/Home.aspx https://www.scribbr.com

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## M.A. I Semester I Home Science Paper V

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130705P
Course/Paper Title	Practical (Compulsory)
Semester	I
Credit assigned	2
Maximum marks	25+75

#### Course objectives:

- To aware students to used practical knowledge in various applications and food preparations.
- To gain knowledge about changes in food during cooking and processing.
- To know importance of extension and communication in development.
- To comprehend the various effective teaching materials in communication process.

- Students will familiarize with effect of cooking and processing on food stuffs.
- Acquaint students with the different stages of sugar cookery.
- Skills for making and using of extension teaching aids in students will be developed.

Total	Total No. of lectures - 30		
Unit	Topic	No.of lectures	
I	Sugar cookery: Stages of sugar cookery	4	
	•		
П	Fruits & vegetables: Effects of cooking metal ions and PH on pigment.	5	
ш	Pulses: Effects of cooking & processing method.	4	
IV	Fats & oils: Melting point, smoking point.	3	
v	Preparation of extension teaching materials: Chart, poster, flash, cards and literature.	6	



#### Suggested readings:

- N. Shakuntala Manay, Food: Facts and Principles, New Age International Pvt. Ltd. Publication, New Delhi.
- Punita Sethi and Poonam Lakda, Ahar Vigyan, Suraksha Evam Poshan, Elite publishing House, New Delhi, 2015
- Dr. Devina Sahai, Aahar Vigyan, New Age International publishers, New Delhi.
- Dahama , O.P. & Bhatnagar, O.P., "Education and communication for development," New Delhi – oxford and IBG publishing Co. Pvt. Ltd.
- Supe, A.N., An introduction to extension Education. Delhi; oxford IBH publishing.
- Reddy, A., "Extension education", Bapatha, Andhra Pradesh, India; Sreelakshmi press.
- Jaipal Singh., "Prasar Shiksha Avam Gramin Vikas" S.R scientific publication, Agra.
- Agrawal, R., "Communication- Today and Tomorrow", New Delhi; Sublime Company.
- Harpalani B.D., "Prasar Shiksha Avam Sanchar", Star Publications, Agra.
- Shaw, Geeta Pushp, Shaw Jois sheela, "Prasar Shiksha", Vinod Pustak Mandir Agra.
- http://epgp.inflibnet.ac.in

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# M.A. I Semester I Home Science Paper VI Programme/Class M.A. Home Science

Course Paper Title Major Research Project (Compulsory)

Semester I

Credit assigned 4

A130706R

Total No. of lectures - 60

Course Paper code

**Note:-** The topic for the major research project will be opted by the students with consent of his/her research supervisor.

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## M.A. I Semester II Home Science Paper I

Programme/Class	M.A.
Subject	Home Science
Course Paper code	A130801T
Nature of course	Theory (Compulsory)
Course/Paper Title	Fabric Construction and Care
Semester	II
Credit assigned	4
Maximum marks	25+75

#### Course objectives:

- To get knowledge about different fabric manufacture process.
- To gain knowledge and understanding of fundamentals of weaving process.
- To understand the theory of dyeing in relation to various classes of dyes.

- Students will able to analize different weave patterns.
- Students will familiar with finishes done on fabrics.
- Students will acquaint with different kinds of eaves.
- Students will able to know the importance of laundry method.

	No. of lectures - 60	
Unit	Topic	
I	<b>Principles of fabric manufacture:</b> Characteristics and significance of different Fabric manufacture process- Woven, knitted, laces, braids.	10
П	Wearing: Parts and functions of loom, types of weaves – Basic and decorative.  Knitting: Types of knitting, properties; Felting & non woven: felting process. Lace making.	15
Ш	<b>Fabric finishing:</b> Classification of finishes- Physical calendaring, tentering, weighing, beatling, singeing, napping, chemical-bleaching, mercerizing; Special purpose finishes – flame retardant, water proofing & water repellent, wrinkle resistant antistatic, stain and soil release finish.	13
IV	<b>Dyeing:</b> Theory of dyeing, Types of dyes, Dyeing method; Types of Dyeing – stock dyeing, yarn dyeing, piece dying, solvent dyeing, foam dyeing.	10



Laundry Science: Stains – classification, methods of removing stains; Methods of laundry, soap & detergent, whitening agent: Types & functions, dry cleaning agents.

10

Course pre-requisites: To study this course a student must had the subject Home Science in UG class.

#### Suggested readings:

- Marsh J.T.: Textile Finishes.
- Trotman Er: Dyeing and Chemical Technology of Fibres.
- Joseph M; Introduction to Textiles.
- Corbman P. Bernard: Textiles- Fibre to fabric.
- Hollen and Saddler: Introduction to Textiles.
- 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. Shailiaja, Jacqui A. Willson: Surface Designing Of Textiles Fabrics, New Age International Publisher, 2006
- Bhargav, Bela. Vastra Vigyan, Univ. Book House Pvt. Avam Dhulai kala, University book House Pvt. Ltd. Jaipur.
- Patni, Manju, Vastra Vigyan Avam Paridhan ka Parichay, Star Publication, Agra.
  - Suggestive digital platforms web links-Swayam Portal;

http://heecontent.upsdc.gov.in/Home.aspx http://www.britannica.com/topic/textile/production-of-fabric

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## M.A. I Semester II Home Science Paper II

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130802T
Nature of course	Theory (Compulsory)
Course/Paper Title	Early Child Care and Education
Semester	II
Credit assigned	4
Maximum marks	25+75

#### Course objectives:

- To gain knowledge and insight regarding principles of early childhood care and education.
- To make them aware of basic setup & a requirements of a preschool.
- To develop the skills and techniques to plan activities in ECCE centers.

#### Course outcomes:

- Students can conduct activities effectively for preschool children.
- Students will able to start own preschool centre.

Total	No. of lectures - 60	
Unit	Topic	No.of lectures
I	<b>ECCE</b> : Importance, need and scope of ECCE, objective of ECCE; Types of preschool: play centers, day care, Montessori, Kindergarten, Balwadi, Anganwadi.	15
II	Contribution of thinkers in ECCE: Rousseou Frobel, Maria Montessori. M.K. Gandhi, Rabindranath Tagour.	10
III	<b>ECCE in India</b> : Pre independence period, post Independence-Kothari commission, contribution of the five year plans to ECCE, Yashpal committee.	10
IV	Contribution of different agencies: ICCW, IAPE, NCERT, ICDS, UNICEF, NCTE.  Organization of preschool centers: Concept, administrative set	10
	up, function Building & equipment staff, record and report.	

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	Activities of ECCE: Activities & related material for –  - Language development	
V	<ul> <li>Mathematical concept</li> <li>Art &amp; motor creative abilities</li> <li>Science concepts</li> <li>Physical &amp; motor activities</li> </ul>	15
Cou	rse pre-requisites: To study this course a student must had the subject	Home Science
	in UG class.	
Sugg	<ul> <li>Grewal , J. S. (1984), Early childhood Education, Agra, National corporation pub.</li> </ul>	

Bhatia & Bhatia (1995), Theory and Principles of Education, Doaba house, Delhi.

• Kaul, V. (1997), Early Childhood Education Programme, New Delhi, NCERT.

• Kulkarni, S. (1988), Parent Education, Perspectives and Approaches, Jaipur, ravat publications.

 Mohanthy, J., & Mohanthy, B. (2000). Early Childhood Care and Education (pp.1-10) New Delhi: Deep and Deep Publications PVT limited.

• Eliason, C., & Jenkins, L. (1990). A practical guide to early child curriculum, 4th edition, (pp.3-10). London: Merril Publishing Company.

Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

Swayam Portal;

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

https://en.unesco.org/themes/earrly-childhood-care-and-education

https://wcd.nic.in

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## M.A. I Semester II Home Science Paper III

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130803T
Nature of course	Theory (Optional)
Course/Paper Title	Theory of Management
Semester	II
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To understand the significance of management in the organizations.
- To know the conceptual, human and scientific aspects of management functions.
- To develop the ability to evaluate the management efficiency and effectiveness in the organizations.

- Students will familiar with management process.
- Students will able to explain the concept of decision-making.
- Students will able to analyze human behaviour in organization.

Unit	Topic	No.of lectures
I	Management: Definition, concept, elements, Objective, principles.  Decision making: Concept, types of decision, tools & techniques for decision making, cost- benefit analysis.	20
П	Management functions and process: Planning-concept objectives, principles.  Organizing: Concept, principle.  Staffing: Concept, principle, purpose, recruitment.	20
Ш	Directing: Concept, types, significance. Controlling: Concept, objectives. Monitoring & Evaluation: Concept, types, tools & techniques.	15
IV	Human behavior in organizations: Personality: Concept of personality development and determinants. Attitude: Concept, difference between beliefs and values; Stress and conflict management.	20



#### Suggested readings:

- Kapur, S.K. (1996): Professional Management, S.K. Publishers, New Delhi.
- Deacon, R.E. and Fire Baugh, F.M. (1975): Home Management Context and Concept Houghton Miffen, Boston.
- Deacon, R.E. and Fire Baugh, F.M.(1981): Resources Management Principles and Applications, Allyn and Bacon & Bacon, Boston.
- Sherman, A.W. et.al (1988): Managing Human Resources, South-Western Publication Co., Cincinnati.
- Ivancevich, J.M. et.al (1980): Managing For Performance Business Publications, INC, Texas.
- Dwivedi, R.S. (1981): Dynamics of Human Behaviour of Work, Oxford and 9BH, New Delhi.
- Saiyadain, M.S. (1980): Human Resource Management, Tata Mc Graw Hill, New Delhi.
- Dayal, R. (1996): Dynamics of Human Resource Development, Mittal Publication, New Delhi.
  - Suggestive digital platforms web links-Swayam Portal; <a href="http://heecontent.upsdc.gov.in/Home.aspx">http://heecontent.upsdc.gov.in/Home.aspx</a>

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## M.A. I Semester II Home Science Paper IV

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130804T
Nature of course	Theory (Optional)
Course/Paper Title	Advance Nutrition Science
Semester	II
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To aware students with the recent advances in nutrition.
- To provide knowledge of the physiological and metabolic role of various nutrients and their interactions in human nutrition.
- To understand the basis of human nutritional requirement and recommendations through life cycle.

- Students will familiarize with the recent advances in nutrition.
- Inculcate healthy eating practices among students.
- Students will aware about importance of healthy meal at various stages of life cycle.

Unit	Topic	No.of lectures
I	RDA: RDA & dietary guidelines, Nutritional requirement-reference man, reference woman, body composition.  Energy: Energy balance, estimation of energy requirements, deficiency and access.	20
П	Carbohydrates: Classification, digestion, absorption, metabolism, glycemic index of food, dietary fiber.	10
Ш	Protein: Types, digestion, absorption, metabolism assessment of protein quality, factors affecting bioavailability.  Lipid: Digestion, absorption, metabolism, cholesterol, saturated and unsaturated fatty acids.	20
IV	Vitamins and minerals: Sources, Bioavailability, functions, requirement, deficiency and toxicity.	10



		15
V	Nutrition through life span: Meal planning, factors affecting meal planning, meal planning during infancy, preschool, school age, adolescence, adulthood, old age and special condition (pregnancy & lactation).	

#### Suggested readings:

- Indian Council of Medical Research, Recommended Dietary intakes for Indians, Latest Recommendations.
- World Reviews of Nutrition and Dietetics.
- N.Shakunthala, Manay, Food: Facts and Principles, New Age International Publication, New Delhi
- Ankita Gupta, "Text Book of Nutrition", Medico Refresher Publisher, Agra, (2018).
- Shubhangini A. Joshi, Nutrition and Dietetics, Mc Graw Hill Education Private Limited.
- Swaminathan M., "Essentials of Food and Nutrition," volume- I and II.
- Kumud Khanna, "Textbook of Nutrition and Dietetics." Elite Publishing House Private Limited, New Delhi 2013, 7<sup>th</sup> Ed.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials; Swayam Portal;

http://heecontent.upsdc.gov.in/Home.aspx https://kosmospublishers.com/advances-in-nutrition-and-food-science

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## M.A. I Semester II Home Science Paper V

Programme/Class	M.A.
Subject	Home Science
Course Paper code	A130805T
Nature of course	Theory (Optional)
Course/Paper Title	Statistics and Computer Application
Semester	II
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To understand the role of statistics and computer applications in research.
- To apply statistical techniques to research data for analyzing and interpreting data meaningfully.

- Students will be able to apply statistical techniques in research.
- Students will be know importance of computer applications in research.
- Students will be able to analyzing and interpreting data in research.

Total	Total No. of lectures - 75		
Unit	Topic	No.of lectures	
I	<b>Statistics:</b> Meaning, tabulation of data, uses of diagrammatic representation of data; Measures of central tendency, measures of dispersion.	20	
П	Correlation: coefficient of correlation, Rank correlation; Frequency distribution; Probability; Chi square; 't' test.	15	
Ш	Fundamental of computer: History, Generation of computer, language, Components application of computers, Operating system and internet.	20	
IV	Experimental designs: Completely randomized design, Randomized block design, Latin square design, Factorial design; Trend Analysis.	20	



#### Suggested readings:

- Garrett, Henry E (1971). Statistics in Psychology and Education. David Heley and Co.
- Mukherjee, R.(1989): The Quality of life: Valuation in Social Research, Sage publications, New Delhi.
- Edwards. Experimental design as Psychological Research.
- Kerlinger: Foundation of Education Research.
- SPSS/PC for the IBM PC/XT, SPSS Inc.
- Suggestive digital platforms web links-Swayam Portal;

http://heecontent.upsdc.gov.in/Home.aspx https://ecourseonline.iasri.res.in/course/view.php

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## M.A. I Semester II Home Science Paper VI

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130806T
Nature of course	Theory (Optional)
Course/Paper Title	Adolescence and Youth
Semester	II
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To understand the stages of adolescence and youth in human development.
- To study the major developmental characteristics of these stages.
- To study the issues of identity, developmental tasks and problems associated with these stages.

- Students will be able to explain the concept of adolescence.
- Students will aware to physical and emotional changes during adolescence.
- Students will be identify problems and challenges related to adolescence and youth.

Unit	Topic	No.of lectures
I	The adolescent stage:  - Its link with middle childhood and youth.  -The concept of adolescence in India.  -Developmental tasks of adolescence	20
	Theoretical perspectives:  G. Stanley Hall, Anna Freud, Erik Erikson, James Marcia, Kagan and Margaret Mead, Indian perspectives.	
П	Physical and sexual development:  - Puberty, development of primary and secondary sex characteristics.  - Psychological response to puberty.  - Gender differences; Sexuality, Sexual needs and sex education.  Cognitive development:  - Formal operations – Piaget's theory, Intellectual development at Adolescence and youth.  - The information – Processing view.  - Reasoning, thinking critically, reflective judgment, moral reasoning and judgment.	20



Ш	Identity formation:  - Different perspectives; construct of self and development of self – concept Daniel Offer.  - Indian views on adolescent's identity.  Social and emotional development:  - Family, peers and friendships, interpersonal relations; Emotional competence.  - Conflict with authority.	10
IV	School, college, work and career:  - Adolescence and youth in the context of differential opportunities for education and formal training.  - Importance of academic achievement and failure, related issues.  - Training for career and work.  Important agents of influence:  - Family, community and culture  - Electronic media.	15
v	Marriage:  - Legal age and its relationship to development. Marriage as a family/individual issue.  - Marriage choices and significance of marriage in human development.  Delinquency and disturbance:  - juvenile delinquency: causes and prevention.  - Psychological disturbances: depression, suicide, substance abuse.	10

#### Suggested readings:

- Balk, E.E. (1995), Adolescent Development. New York: Brooks/Cole.
- Erikson, E.H. (1968), Identity: Youth and crisis, London: Faber & Faber.
- Kroger, J. (1996), Identity in Adolescence, London: Routledge.
- Kakar, S. (1992), Identity and Adulthood, Delhi: Oxford University Press.
- Sharma, N. (1996), Identity of the Adolescent Girl, New Delhi; Discovery Publishing House.
- Saraswathi, T.S. & Dutta, R. (1988), Invisible Boundaries: Grooming For Adult Roles, New Delhi, Northern Book Cenre.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

Swayam Portal;

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

https://www.britannica.com/science/adolescence



## M.A. I Semester II Home Science Paper VII

Programme/Class	M.A.
Subject	Home Science
Course Paper code	A130807P
Course/Paper Title	Practical (Compulsory)
Semester	II
Credit assigned	2
Maximum marks	25+75

#### Course objectives:

- To get knowledge about weaving process.
- To familiar with different kind of weaves.
- To study the methods of removing stains from fabrics.
- To provide knowledge about planning ECCE programme.
- To develop skills to conduct activities in early childhood care and education and to work effectively with the parents.

- Students will able to identify the different weaves.
- Acquaint students with methods of removing stains on different types of fabric.
- Students will understand individual differences.
- Students will be able to developing literature for child and parents.

Unit	Topic	No.of lectures
I	Identification of weaves by sample collection.	8
П	Removal of stains on cellulosic, silk and synthetic fabrics.	7
Ш	Planning ECCE programme including infrastructural facilities.	5
IV	Conducting interaction programmes with teachers and parents.	4



To study this course a student must had the subject Home Science in UG class.

#### Suggested readings:

- Marsh J.T.: Textile Finishes.
- Joseph M; Introduction to Textiles.
- Corbman P. Bernard: Textiles- Fibre to fabric.
- Hollen and Saddler: Introduction to Textiles.
- J. Hall: The Standard Handbook of Textiles, Wood Head Publication, 2004.
- W.S. Murphy: Textile Finishing, Abhishek Publication, 2000.
- Naik D. Shailiaja, Jacqui A. Willson: Surface Designing Of Textiles Fabrics, New Age International Publisher, 2006
- Bhargav, Bela. Vastra Vigyan, Univ. Book House Pvt. Avam Dhulai kala, University book House Pvt. Ltd. Jaipur.
- Patni, Manju, Vastra Vigyan Avam Paridhan ka Parichay, Star Publication, Agra.
- Grewal , J. S. (1984), Early childhood Education, Agra, National psychological corporation pub.
- Bhatia & Bhatia (1995), Theory and Principles of Education, Doaba house, Delhi.
- Kaul, V. (1997), Early Childhood Education Programme, New Delhi, NCERT.
- Kulkarni, S. (1988), Parent Education, Perspectives and Approaches, Jaipur, ravat publications.
- Mohanthy, J., & Mohanthy, B. (2000). Early Childhood Care and Education (pp.1-10) New Delhi: Deep and Deep Publications PVT limited.
- Eliason, C., & Jenkins, L. (1990). A practical guide to early child curriculum, 4th edition, (pp.3-10). London: Merril Publishing Company.
- http://www.britannica.com/topic/textile/production-of-fabric

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# M.A. I Semester II Home Science Paper VIII

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130808R
Course/Paper Title	Major Research Project (Compulsory)
Semester	II
Credit assigned	4
Maximum marks	100
Total No. of lectures – 60	

**Note:-** The topic for the major research project will be opted by the students with consent of his/her research supervisor.

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## M.A. II Semester III Home Science Paper I

M.A.
Home Science
A130901T
Theory (Compulsory)
Clinical and Therapeutic Nutrition
III
4
25+75

#### Course objectives:

- To develop intellectual and practical skills of the students in the field of clinical and therapeutic nutrition.
- To identify patients at risk for major nutrition related health problems.
- To identify the principles and explain the objectives of diet therapy.
- To identify most common therapeutic diets used in clinical care.

#### Course Outcomes:

The students at the completion of the course will be able to:

- Describe the methods used to adapt a normal diet to treat a specific clinical nutritional disorder.
- Apply recent various methods and techniques in the field of therapeutic nutrition.
- Lists methods for preparation of normal food to adjust various pathological conditions.
- Recommend dietary adjustments leading to better health outcomes and improved quality of life.

Unit	Topic	No.of lectures
I	Basic concept of diet therapy: New trends in delivery of nutritional care and dietary counseling.  Weight management: Identifying the overweight and obese, factors contributing to obesity. Low energy diet and behavioral modification; Underweight Etiology and assessment; High energy diets for weight gain; Nervosa and Bulimia.	20



п	Diets for febrile infections and surgical conditions: Etiological factors, symptoms, diagnostic fest's dietary management. Stomach disease, gastric and duodenal ulcers, Diarrhea and constipation.	10
Ш	Nutritional management of the Liver diseases: viral hepatitis, Cirrhosis of liver; Diseases of the Gall Bladder.  Diabetes mellitus: Types, symptoms, metabolic changes and management.  Disease of Cardiovascular system: Atherosclerosis Hyperlipidemia, Hypertension.	15
IV	Dietary management of the Kidney diseases: Glomerulonephritis, Nephrotic syndrome and Renal failure.  Diseases of muscular skeletal system: Rheumatic arthritis, Osteoarthritis, osteoporosis, gout.	15

#### Suggested readings:

- B. Srilakshmi- Dietetics, 8th ed.
- Gopalan, C. et. al: Nutritive value of Indian Foods, Indian Council of Medical Research.
- Clinical Nutrition & Dietetics- F. P. Antia and Philip Abraham, Oxford University Press.
- Anderson, L., Dibble, M.V., Tukki, P.R., Mitchall, H.S., and Rynbergin H.J.: Nutrition in Health and Disease, 17th edition, J. B. Lipincott & Co. Philadelphia.
- Robinson. C.H. Lawler, M.R. Chenoweth, W. L., and Garwick, A. E. (1986): Normal and Therapeutic Nutrition. 17th edition, MacMilian Publishing Co.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

Swayam Portal:

http://heecontent.upsdc.gov.in/Home.aspx http://egyankosh.ac.in

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## M.A. II Semester III Home Science Paper II

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A130902T
Nature of course	Theory (Compulsory)
Course/Paper Title	Children with Special Needs
Semester	III
Credit assigned	4
Maximum marks	25+75

#### Course objectives:

- To develop awareness of the critical development that occurs prenatal through early childhood.
- To gain knowledge of the major theories of human growth and development and interrelatedness of developmental domains in relation to children with disabilities.
- To acquire knowledge about change in the prevailing and emerging Indian society in view of recent trends in education and national development.
- To identify the special needs of children and develop confidence in them to realize
  their potentials and abilities to meet the national development with self respect,
  dignity and freedom.

#### Course Outcomes:

The students at the completion of the course will be able to:

- Discuss prenatal, perinatal, and postnatal risk factors and the resulting effects on child development, prenatal through early childhood.
- Apply major theoretical concepts to expectations for child development and implications for developing educational programs for young children with disabilities.
- Utilize a bio-ecological perspective in understanding the context, complexity, etiology, and outcome in relation to specific disorders and disabilities.

Unit	Topic	No.of lectures
I	<b>Special children:</b> Definition, types of special children, children at risk- poverty and gender issues, genetic and environmental factors in disability, effect of disability on the child, early detection, screening, identification, need for intervention, education, rehabilitation, role of family and child care worker; Policies and legislation for disabled.	20

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п	Child with mental retardation: Definition and classification causes of mental retardation, identification, managing children with mental retardation at home; Special educational measures; Gifted children: Characteristics of gifted children, identification; Special educational measures; Role of parents.	15
Ш	Visually impaired children: Definition, blind and partially sighted children, Identification, causes, effect of usual impairment on child's development; Special education and training.  Hearing impaired children: Classification, causes of impairment, identification, education of hearing impaired children, role of family in detection and child's language development.	15
IV	Children with cerebral palsy and Orthopedic disability: Definition, classification, causes, identification and integrated education; Rehabilitation of children with physical disability; Role of family in care and early training; Children with behavioral disorders.	10
Cours	se pre-requisites: To study this course a student must had the subject in UG class.	Home Science
Sugge	sted readings :	
	Batshaw, M. L., Roizen, N. J., & Lotrecchiano, G. R. L. (2013). Disabilities (7th Edition). Baltimore, Maryland: Paul Brook Publishing Best, S. J., Heller, K. W., & Bigge, J. L. (2009). Teaching individual or multiple disabilities. Pearson/Merrill Prentice Hall.  Narayan, J. Educating Children with Learning Problems in Re Secunderabad, NIMH.  Subba Rao, T.A. (1992). Manual on Developing Communication Ski	g. s with physic gular Schoo

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- Taylor, R.L. (1993). Assessment of Exceptional Students Educational and Psychological Procedures. Boston: Allyn & Bacon.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

Swayam Portal;

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

https://wecapable.com/cwsm-categories-of-children-with-special-needs

## M.A. II Semester III Home Science Paper III

Programme/Class	M.A.	
Subject	Home Science	
Course/Paper code	A130903T	
Nature of course	Theory (Optional)	
Course/Paper Title	Entrepreneurship Management	
Semester	III	
Credit assigned	5	
Maximum marks	25+75	

#### Course objectives:

- Provide conceptual inputs regarding Entrepreneurship management.
- To develop and strengthen the quality of entrepreneurship
- To sensitize and motivate the students towards Entrepreneurship management.
- To orient and import knowledge towards identifying and implementing Entrepreneurship opportunities.
- To understand the process and procedure involved in setting up small units.

#### Course outcomes:

The students will be able to-

- Identify essential qualities of entrepreneurship
- Assess entrepreneurial opportunities in rural context
- Discuss procedures of setting up enterprises
- Develop awareness about enterprise management in terms of initiation, operation, finance and marketing.

Total No. of lectures - 75		
Unit	Topic	No.of lectures
I	Entrepreneurship management: Concept, need, process of Entrepreneurship development, types of enterprise; Government policies and schemes for enterprise development.	20
П	The entrepreneur: Entrepreneurial motivation and competency; Important features of entrepreneurial personality.	15
Ш	Launching an enterprise: Environmental scanning, enterprise selection, market assessment.	15

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IV	Resource mobilization: Costing and evaluation, performance appraisal & assessment, profitability & control measures.	10
V	Market economy: Definition, types of market, marketing steps: product development, promotion & distribution.	15

#### Suggested readings:

- Meredith, G.G. et at (1982): Practice of Entrepreneurship, ILO Geneva.
- Kanitkar, A. (1995), Grassroots Entrepreneurship, Entrepreneurship and micro-Enterprises in rural India, New age International, New Delhi
- S.K.G. Sundaram: Entrepreneurship: A Handbook For Beginners, S.N.D.T, Women's University, Mumbai.
- G.R. Jain and Debmuni Gupta, New Initiatives in Entrepreneurship Education and Training, Ed.
- Abhauri, M.M.P. (1990), Entrepreneurship for Women in India, NIESUD, New Delhi.
  - Suggestive digital platforms web links-Swayam Portal;

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

https://www.indeed.com/career-advice/career-development/entrepreneur-management

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## M.A. II Semester III Home Science Paper IV

Programme/Class	M.A.	
Subject	Home Science	
Course/Paper code	A130904T	
Nature of course	Theory (Optional)	
Course/Paper Title	Textile Testing and Quality Control	
Semester	III	
Credit assigned	5	
Maximum marks	25+75	

#### Course objectives:

- To develop an understanding of methods and techniques used to analyze textile fibre, yarns and fabrics for end-use performance.
- To acquire knowledge and understanding of various structural properties of textiles and relate to end use fabric performance and product.
- To be able to analyze and interpret the results and predict textile testing.

#### Course outcomes:

#### The students will be able to-

- Familiarise with various quality parameters of fabrics for various end uses.
- Acquaint with testing methods involved in testing of textiles.
- Integrate knowledge, skills, and practices required for careers in textiles and apparel.
- Pursue careers in the field of textiles / apparel.

Unit	Topic	No.of lectures
I	Introduction to textile testing: Concept, scope, need and importance of textile testing.	15
П	Standardization and quality control of textile products - Fiber properties: length fineness, maturity strength: definition, importance.  Methods of determination of above properties: Hand stapling method, fibrigraph, gravimetric, micronaire (for fineness), direct and indirect, single fiber strength and bundle strength.	20

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ш	Study of yarn properties: Yarn count, direct indirect and universal system of yarn numbering; Measuring yarn count.  Yarn twist: Types and amount of twist, effect of twist, determination of twist.  Evenness of yarn: Type of variations, measuring evenness, yarn strength.	20
IV	Study of fabric properties: Testing of fabric length, width and thickness, fabric strengthmeasuring tensile strength, tearing strength, bursting strengthFabric abrasion testing, pilling testing, stiffness testing, fabric colour fastness testing, colour fastness to sunlight, washing and crocking.	20
Cour	se pre-requisites: To study this course a student must had the subject in UG class.	Home Sci
Sugge	ested readings:  Booth, J.E., Principles of Textile Testing, Newness Butter Worth, Lon John, H. Skinkle., Textile Testing, Brooklyn, New York.  Billie, J. Collier and Helen, H. Epps., Textile Testing and Analys Hall, New Jersey.  Grover and Hamby., Hand Book of Textile Testing and Quality Control Handbook of Textile Testing and Quality Control Hamby.  Suggestive digital platforms web links-	is, Prenti

http://heecontent.upsdc.gov.in/Home.aspx https://textilevaluechain.in/in-depth-analysis/articles/textile-stesting-and-qualitycontrol

# M.A. II Semester III Home Science Paper V

Home Science
A130905T
Theory (Optional)
Management of Energy and Household Equipments
III
5
25+75

#### Course objectives:

- To understand sources of energy classification and consumption pattern.
- To understand about the conservation of energy.
- To understand about basic household equipment's and testing of product quality.
- To understand the potential and limitations of different energy sources and the environmental impacts of their use.
- To understand the recent development in household equipment design and technology.

#### Course outcomes:

- Students will able to explain the need and ways of energy management.
- Students will able to recognize the importance of standards and its benefits.
- Students will attain knowledge about sources of energy, consumption pattern and principles.
- Students will familiarize about basics of household equipment.
- Students will familiar with safety against household appliances.

Unit	Topic	No.of lectures
I	Sources of energy and their classifications: Non-renewable vs. renewable sources, alternative sources, conventional vs. non-conventional sources, commercial vs. non- commercial sources.  Energy consumption pattern-national statistics.	20

П	<b>Energy conservation:</b> Principles of improving the efficiencies of Combustion, Heat exchange and Energy conservation; proper use and maintenance of domestic heating, cooking, lighting and other appliances; Energy conservation in the transport sector.	15
Ш	Basics of house hold equipments: About electricity- Power source, voltage, resistance, current, series/parallel circuits, AC/DC sources; Electrical materials- Conductors, semiconductors, insulators; Important parts in an appliance- Main Cord, switches, plugs and sockets, controls such as thermostats, light bulbs, heating elements, Motors, Fans & Blowers, Bearings and Bushings, Electronic control systems, Batteries etc.	20
IV	Product testing for quality: Need, types of testing, equipments required for testing.  Safety against household appliances: Definition and classification of safety; Electric shock and its prevention; Quality control- Provisions and norms.	20

#### Suggested readings:

- Raj, G.D.(1996) Non Conventional Energy, Khanna Publishers, New York.
- Chatterjee Manas(1981): Energy and Environment in Developing Countries, John Wiley, Chichester.
- Parich, J. K. (1980): Energy, System and Development, OUP, New Delhi.
- Reddy, B. S. (1986): Urban Energy Systems, concept publishing Co. New Delhi.
- Allison, A.(1966): Running your Home and Equipment: Design for Living, Series No. 6, Mills and Boon Ltd. London.
- Van Zante H. (1970): Household Equipment Principles, Prentice Hall, New York.
- Adam's, J. T. (1981): How to Buy and Maintain Home Systems and Appliances, Arco Publishers Inc., New York.
- Varghese, M. A. Et. Al(1985): Household Equipment Manual, S.N.D.T. Women 's University, Mumbai.
- Barney L. Capehart, Wayne C. Turner, William J. Kennedy. Guide to energy management-7th ed
- Wayne, C. Turner: Energy Management Hand Book, 4th ed.
  - Suggestive digital platforms web links-Swayam Portal;

in UG class.

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

https://www.cdc.gov/nceh/publications/books/housing/housing ref manual 2012.pdf

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# M.A. II Semester III Home Science Paper VI

Programme/Class	M.A.	
Subject	Home Science	
Course/Paper code	A130906T	
Nature of course	Theory (Optional)	
Course/Paper Title	Food Processing and Technology	
Semester	III	
Credit assigned	5	
Maximum marks	25+75	

#### Course objectives:

- To enable student to acquire Knowledge of food preservation techniques in daily life.
- To prepare the product of food material by using natural preservative.
- To introduce the students to the fundamentals of food science and technology,
- To emphasize on the importance of food safety, food quality, food laws and regulations, plant sanitation, packaging, marketing and cost control in food industry.

#### Course outcomes:

- Students will able to apply knowledge of food science or food processing technology to the society.
- Students will learn about processing of raw material to edible food products by using technical knowledge.
- Students will learn about different methods of preservation and their principles.
- Students will learn about novel methods of food preservation and also difference between earlier methods and novel methods of preservations.

Unit	Topic	No.of lectures
Ι	Introduction: Brief review of main food crops grown in the country – their nutritional importance.  Food and its preservation (Home and Community Level including commercial operations): Cause of food spoilage; Needs and benefits of Food Processing and Technology for Food Preservation.  Fresh food storage: Principles; Plant product storage; Animal product storage.  Physical principles in food processing operations: Thermal processing (Use of heat); Types of heat treatments; Heat resistance of micro-organisms.	20



П	Refrigeration (Use of low temperature): Refrigeration and freezing – method, principles and applications; Freezing and its effects of food components and structure; Shelf life of frozen foods.	15
	<b>Drying and dehydration:</b> Types of foods – traditional and new <b>food products</b> ; principles and applications; Home, community and commercial methods of dehydration; Effect on food quality.	
	Food Irradiation: Technology and application.	
	Pasteurization: Methods and applications.	
Ш	Chemical Principles of Food Processing: Preservation/ processing by sugar, salt, curing, smoke, acids and chemicals; Principles and methods used for various products such as pickles, chutney, ketchup. Sauces, fruit juices, squashes, fruit syrups and cordials.	10
IV	Traditional methods of processing Cereals and pulses: Products such as par-boiled rice, rice flakes, puffed rice, chana etc; Wheat processing- variety of baked products, baking process- basic concepts; Pulse processing methods- removal of toxic factors, fermentation and germination.	15
	Milk Processing: Classification, standardization, homogenization and packaging.  Meat, fish and egg processing: Methods and products; Ageing;	
V	tenderizing; curing; smoking; Freezing.  Food additives: Classification and products  Nutritional Implications of Food Processing: Causes for loss of vitamins and minerals; Enrichment, restoration and fortification.  Ecology and Environment: Cause, effects and prevention of global	15
	warming; Concept of natural and man-made disasters.	

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#### Suggested readings:

- N.P. Norman and H.H. Joseph, 'Food Science', CBS Publishers & Distributors Pvt. Ltd., New Delhi, India.
- W.C. Frazier and D.C. Westhoff, 'Food Microbiology', Tata McGraw Hill Publishing Company Ltd., New Delhi, India.
- M. Kalia and S. Sangita, 'Food Preservation and Processing', Kalyani Publishers, New Delhi, India.
- B. Sivasankar, 'Food Processing and Preservation', Prentice Hall of India Pvt. Ltd., New Delhi, India.
- J.N. Desrosier and N.W. Desrosier, 'Technology of Food Preservation', CBS Publishers & Distributors Pvt. Ltd., New Delhi, India.
- P. Fellows, 'Food Process Technology: Principles and Technology', CRC Press, Cambridge, England.
- N. Khetarpaul, 'Food Processing and Preservation', Daya Publishing House, New Delhi, India
- Shubhangini Joshi, Textbook of food and nutrition, Tata Macgrohill Publishing Co., New Delhi.
- B. Shrilakshmi, Food Science, New Age International Publishers
- Muddambi S.R. and Rajgopal M. V., Fundamentals of Food and Nutrition, Wiley Eastern Ltd., New Delhi.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

Swayam Portal;

http://heecontent.upsdc.gov.in/Home.aspx https://ncert.nic.in/textbook/pdf/lehe105.pdf

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# M.A. II Semester III Home Science Paper VII

Programme/Class	M.A.	
Subject	Home Science	
Course/Paper code	A130907P	
Course/Paper Title	Practical (Compulsory)	
Semester	III	
Credit assigned	2	
Maximum marks	25+75	

#### Course objectives:

- To understand importance of therapeutic nutrition.
- To develop intellectual and practical skills of the students in the field of clinical and therapeutic nutrition.
- To identify the most common therapeutic diets used in clinical care.

#### Course outcomes:

- Students will able to battery management in various disorders students will be able to prepare different kind of diets.
- Students will know how to record information about special children.
- Students will understand individual differences.

Unit	Topic	No.of lectures
Ι	Planning and preparation of therapeutic diets for patients of different disorders:  - Diabetes mellitus - Hypertension - Atherosclerosis - Renal diseases	10
П	Preparation of the following diets: - Soft and low fibre diet - Low calorie diet - High calorie diet - High protein diet - Sodium restricted diet	8



Ш	Study etiology, characteristics; Diagnosis of children with different disabilities and recording information.	6
IV	Visit of centers or institutions for special children and recording information and writing a report.	6

#### Suggested readings:

- B. Srilakshmi- Dietetics, 8th ed.
- Gopalan, C. et. al: Nutritive value of Indian Foods, Indian Council of Medical Research.
- Clinical Nutrition & Dietetics- F. P. Antia and Philip Abraham, Oxford University Press.
- Anderson, L., Dibble, M.V., Tukki, P.R., Mitchall, H.S., and Rynbergin H.J.: Nutrition in Health and Disease, 17th edition, J. B. Lipincott & Co. Philadelphia.
- Robinson. C.H. Lawler, M.R. Chenoweth, W. L., and Garwick, A. E. (1986): Normal and Therapeutic Nutrition. 17th edition, MacMilian Publishing Co.
- Batshaw, M. L., Roizen, N. J., & Lotrecchiano, G. R. L. (2013). Children with Disabilities (7th Edition). Baltimore, Maryland: Paul Brook Publishing.
- Best, S. J., Heller, K. W., & Bigge, J. L. (2009). Teaching individuals with physical or multiple disabilities. Pearson/Merrill Prentice Hall.
- Narayan, J. Educating Children with Learning Problems in Regular Schools, Secunderabad, NIMH.
- Subba Rao, T.A. (1992). Manual on Developing Communication Skills in Mentally Retarded Persons, NIMH, Secunderabad
- Taylor, R.L. (1993). Assessment of Exceptional Students Educational and Psychological Procedures. Boston: Allyn & Bacon.
- <a href="https://www.doc.wa.gov/information/policies/files">https://www.doc.wa.gov/information/policies/files</a>

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# M.A. II Semester III Home Science Paper VIII

Programme/Class	M.A.
Subject	Home Science
Course Paper code	A130908R
Course/Paper Title	Major Research Project/Dissertation (Compulsory)
Semester	III
Credit assigned	4
Total No. of lectures – 60	

**Note:-** The topic for the major research project will be opted by the students with consent of his/her research supervisor.

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### M.A. II Semester IV Home Science Paper I

M.A.
Home Science
A131001T
Theory (Compulsory)
Gender in Extension and Development
IV
5
25+75

#### Course objectives:

- To learn about concept of gender and role of gender.
- To enhance the capability in students for identifying and analysing gender issues in agriculture and allied sectors.

#### Course outcomes:

- Students will learn about an overview of the concept of gender and gender balance on development and develop skills of identifying gender roles, rights, responsibilities and relationships on development.
- Students will learn the attitudinal change to internalize gender equity concerns as fundamental human rights.
- Students will learn about status of women policies for women development and women's support system.

Unit	Topic	No.of lectures
Ι	Gender and Development: Concept of gender, gender roles, changing trends, gender analysis matrix; Shift from welfare to development and empowerment, gender in development, gender and development; National and international efforts for gender empowerment.	20

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П	Status of Women: Status- meaning, status of women —a situational analysis, demographic, education, employment, political and health (general, occupational and reproductive); Changing scenario.  Violence Against Women: Dowry, divorce, female foeticide and infanticide, domestic violence, sexual harassment and exploitation, portrayal of women in mass media; Efforts for elimination of all forms of discrimination.	20
Ш	Policies and Programmes for Women's Development: National policy for Empowerment of women, policy perspectives, mainstreaming, a gender perspective in the development process; Economic empowerment: poverty eradication, micro-credit, self-help groups, women and agriculture, women and industry and support services; Social empowerment: education, health, nutrition, drinking water and sanitation, housing and shelter, environment; Legal empowerment: legal literacy on personal and family laws, role of family curt and legal aid centers; Political empowerment: role of panchayatiraj in the political empowerment of women.	20
IV	Support System: Role and functions of the Department of Women and Child Development, Central Social Welfare Board, State Social Welfare Board, National Commission for Women, Women's development Corporation.	15

#### Suggested readings:

- National Perspective Plan for Women (1998): New Delhi, Department of Women and Child Development, Govt. of India.
- Rehman, M.M. and Biswal, K.K.(1993). Education, Work and Women: Common Wealth Publishers.
- Country Report.(1995)Department of women and Child Development. Govt. of India.
- Sharma, O.C. (1994). Crime Against Women: New Delhi : Sterling Publishers Pvt. Limited.
- Subbamma, M. (1985). Women, Tradition, Culture, New Delhi: Ashish publishing House.
- H.S.Rout and P.K.Panda "Gender & Development in India" New Century Publications.
- A. Mathu "Gender and Development" The Indian Scenario, Kalpaz Publications.
  - G. Pachouri "Gender, School and Society" R.Lall Educational Publishers. Suggestive digital platforms web links-Swayam Portal;

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# M.A. II Semester IV Home Science Paper II

Programme/Class	M.A.	
Subject	Home Science	
Course/Paper code	A131002T	
Nature of course	Theory (Compulsory)	
Course/Paper Title	Family Guidance and Counselling	
Semester	IV	
Credit assigned	5	
Maximum marks 25+75		

#### Course objectives:

- To develop an understanding of the concepts of Family guidance and counselling
- To comprehend about different areas of counselling.
- To find ways to cope with the increasing pressures and demands of life from the theories of philosophy, psychology and sociology.

#### Course outcomes:

- Students will able to explain the concept of Guidance and Counselling and its principles.
- Students will able to explore the philosophical and sociological values in counselling.
- Students will able to analyze about the different Counselling therapy.

Unit	No. of lectures - 75  Topic	No.of lectures
I	Basic differences in guidance, advice, counselling and therapy; Basic concept, meaning, definition, nature, scope of family guidance and counslling; Guidance and counselling- need of individual, families and systems.	20
П	Principles and objectives of family guidance and counseling, types of counselling; Approaches of guidance and counselling.	15
Ш	The Indian approach- Meditation and yoga exercises; Qualities and skills of a counselor, the process of counselling: First contact, assessment, intervention, closure, follow – up.	15

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IV	Nature of psychological disorders and different stages that requires counselling: Childhood, adolescence and youth, adulthood, old age.	15
v	Principles of counselling and therapy: Approach to counselling and different developmental stages; Family therapy approach.	10

#### Suggested readings:

- Kinra, Asha K. (2012). Guidance and Counselling, Pearson Publication.
- Sidhu S H (2013). Guidance and Counselling, Twenty First Century Publication
- Susant Misra(2015). Essential of Guidance and Counselling, Lakshi Publishers.
- Jan Sutton and William Stewart (2017). Learning To Counsel, Publisher: Little, Brown Book Group.
  - Andrew Reeves (2018). An Introduction to Counselling and Psychotherapy, SAGE Publications Ltd.
  - Suggestive digital platforms web links-Swayam Portal;

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## M.A. II Semester IV Home Science Paper III

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A131003T
Nature of course	Theory (Optional)
Course/Paper Title	Food Quality Analysis
Semester	IV
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To impart knowledge of food analysis and quality assurance.
- To enable the students to understand food composition and its chemical, microbiological and sensory aspects.
- To familiarize the students about the food analysis
- To emphasize the importance of food safety, food quality, food laws and regulations
- To develop skills required in various industries, food analytical labs and in the field of food

#### Course outcomes:

- Students will able to understand food composition and its chemical, microbiological and sensory aspects.
- Student will get familiarized about the food analysis
- Students will able to understand the importance of food safety, food quality, food laws and regulations
- Students will able to develop skills required in various industries, food analytical labs and in the field of food.

Unit	Topic	No.of lectures
I	Importance of food standard: Quality control and assurance.  Food standard, laws and regulations to ensure safety of food: Prevention of Food Adulteration Act, 1954; Essential Commodities Act, 1955; Fruit Product Order, 1946; Directorate of Grading, Marketing and Inspection of Agricultural Products; Bureau of Indian standards, 1952; Standards Weights & Measures Act 1976.	20

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п	Product Evaluation: Sampling for product evaluation; Sample preparation.  Tests for specific raw food ingredients: Proximate Principles; Nutrient Analysis.	20
Ш	Hazards to Food Products: Micro-biological, environmental, natural. Toxicant. Pesticide residues and food additives. Food Adulteration: Common Adulterants; Methods and Tests for detecting adulterants.	15
IV	Sensory Analysis: Definition; Use in Product Evaluation.  Types of Test: Discrimination/Difference test-Paired test, Triangle test and duo-trio test; Tests for multiple samples, difference from control/reference.  Quantitative Difference Tests: Ranking; Numerical Scoring Test; Magnitude Estimation.  Descriptive Tests: Threshold Tests Acceptance; Tests Determining consumer acceptability using sensory evaluation.	20

### Suggested readings:

- Hand book of analysis and quality control for fruit and vegetable products, S. Ranganna, IIEd., Tata McGraw Hill Publishing Co. New Delhi.
- The Food Chemistry Laboratory: A Manual for Experimental Foods Dietetics, and Food Scientists, Second Edition-Connie M. Weaver, James R.Daniel
- Food Chemistry: A Laboratory Manual -Dennis D.Miller

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- The chemical analysis of foods and food products, Morris B. Jacobs IIIrd Edition, CBS Publishers and distributors New Delhi.
- Food Chemistry, Fennema, Owen R, 3rd Ed., Marcell Dekker, New York, 1996
- B. Shrilakshmi, Food Science, New Age International Publishers.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials; Swayam Portal;

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# M.A. II Semester IV Home Science Paper IV

Programme/Class	M.A.	
Subject	Home Science	
Course/Paper code	A131004T	
Nature of course	Theory (Optional)	
Course/Paper Title	Media and Extension	
Semester	IV	
Credit assigned	5	
Maximum marks	25+75	

#### Course objectives:

- To learn about the concept, meaning and process of communication and various methods and modern media of communication.
- To learn the information management and journalistic writing of various information materials and also study their readability.
- To exposes the students to various Digitized video material in multimedia and also enable to design visuals for print, TV and knowhow about scanning of visuals.

#### Course outcomes:

- Student will familiarize the students with the working of print, electronic, New Media & Traditional folk media.
- Student will be working skills needed for Print, Radio and T.V. Journalism to reach community.
- An understanding between the students will be developed regarding Mass Communication Process and Media Management its impact on the society.
- To develop writing skills for different media.

Total	No. of lectures - 75	- Westpark
Unit	Topic	No.of lectures
I	<b>Theories, types and roles of Media:</b> Theories and models of mass communication; Role of media in communication process; Various types of media for communication; Various constraints in the use of media; Criteria in selection and use of various media.	20
п	Media planning for social advertising: Social advertising and commercial advertising- definitions, need and scope; Social advertising- programme designing. Selection of media, impact assessment of each mass media for different campaign types for different target groups, economic, technical and social considerations in social advertising.	15

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Ш	<b>Development Journalism:</b> Growth, nature, scope and significance; Need for development journalism; Issues and problems for media professionals.	15	
IV	<b>Print Media:</b> Trends in print media; Role of press as mass media; Press Laws in India- History and present scenario; News –its meaning, concept, news agencies, writing of news.	10	
v	Electronic Media: Trends in Radio, Television and Cyber Media; Impact and policies; Future challenges and scope of electronic media.  Media Research: Need rationale, scope and approaches.	15	

#### Suggested readings:

- Dahama O.P. & Bhatnagar O.P. 2005. Education and Communication for Development. Oxford & IBH.
- Grover I., Kaushik S., Yadav L. & Varma S.K. 2002. Communication and Instructional Technology. Agrotech Publ. Academy.
- Jana, B.L. & Mitra K.P. 2005. Farm Journalism. Agrotech Publ. Academy.
- Ray, G.L. 2006. Extension Communication and Management. Kalyani Publ. Rayudu Post Graduate Syllabus, Department of Agril. Extension, UBKV.
- C.S. 2002. Communication, Himalaya Publ. House.
- Reddy, A.A. 1987. Extension Education. Sree Lakshmi Press, Bapatla.
- Sandhu A.S. 2004. Textbook on Agricultural Communication Process and Methods. Oxford & IBH.
  - Suggestive digital platforms web links- ePG-Pathshala, IGNOU & UPRTOU online study materials;

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# M.A. II Semester IV Home Science Paper V

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A131005T
Nature of course	Theory (Optional)
Course/Paper Title	Community Health Management
Semester	IV
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To realize the problems of the community.
- Be familiar with various approaches to nutrition and health interventions, programmes and policies.
- To familiarize about health care services managing information system in health sector.
- To understand effect of environment on health.

#### Course outcomes:

- Students will be able to understand the concept of health care, community needs and problems.
- Students will be familiarize about health care services managing information system in health sector and effect of environment on health.

Unit	No. of lectures - 75  Topic	No.of lectures
I	Concept of Health and Health Care: Concepts of health and positive health, definitions of health; Health – factors affecting health, health as a human right; Concept of community health, health for all; Primary health care-definitions, Principles, components, comprehensive health care, levels of prevention, concept of reproductive health.	15
II	<b>Health and Development Indices:</b> Health indices and related indices in community health, fertility indicators, demographic indicators- sex ratio, social and mental health indicators; Human Development Index; Reproductive Health Index.	15

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Ш	Community Health needs and Problems: Health needs and problems related to sanitation and environment, protected water, personal hygiene and pollution control; Health needs of special groups-women, infants, children; Major health problems in India; Communicable and non-communicable diseases; Population problem and its impact; Problems of malnutrition; Reproductive health problems.	15
IV	Health Care Service: Health administrative set up-state, national, urban, rural, private; Role of NGOs in health services; Importance of National Health Programmes; Child survival and safe motherhood; Importance of Child Health and related programmes; Health in relation to community development; Important National	20
	and International Health Agencies; Health Information, education, communication.	
V	Management of Information System in Health Sector: health surveys; Monitoring health; Health regulations and acts, health legislation; Census; Evaluation of health services.	10
Cour	se pre-requisites: To study this course a student must had the subject in UG class.	Home Science
Sugge	ested readings :	
•	James F. Mc Kenzie, Robert R. Pinger, Jerome E. Kotecki (2005) An Community Health-5th ed	Introduction 1
•	An introduction to community health / James F. McKenzie, Rol Jerome E. Kotecki.—5th ed. p.; cm. Includes bibliographical referen	
	ISBN 0-7637-2953-1 Gastrell, P. & Edwards, J., ED. Community health nursing: framework	rks for practic
	London, Balliere Tindall, 1996.	1 1:00 14 1:

- Stevens, A. & Raftery, J. Health care needs assessment. Oxford, Radcliffe Medical Press, 1994.
- Twinn, S. Et. al. Community health care nursing: principles for practice. Oxford, Butterworth Heinemann, 1996.
- G.L. Ray, "Extension Communication and Management".
- R.C. Gupta, "Management Information System", CDS Publishers, New Delhi.
- National Nutrition Policy (1993): Dept. of WCD, Govt. of India.
  - Suggestive digital platforms web links-Swayam Portal;

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# M.A. II Semester IV Home Science Paper VI

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A131006T
Nature of course	Theory (Optional)
Course/Paper Title	Consumer Economics
Semester	IV
Credit assigned	5
Maximum marks	25+75

#### Course objectives:

- To helps the students learn skills in buying and consuming goods and services.
- To offers the information on banking, investing and saving.
- The student is may learn skillful budgeting strategies, the economics of buying and selling homes, and appropriate and adequate insurance options offered in our global economy.
- To Understanding Economic Principles and consumer rights.
- To understand the fundamentals of demand theory.

#### Course outcomes:

- Students will co-relate consumer economics to basic economic decisions.
- Students will identify the role of the consumer in the economy.
- Students will Use sources of information that will be beneficial throughout life.
- Students will identify the problems in family financial management within different income groups, social groups, and at various stages in the financial life cycle.

Unit	Topic	No.of lectures
I	Concept of consumer economies- consumption, field of consumer economics:  Consumer and his wants; Origin of human wants; Characteristics of wants; Classification of wants; Demand: Determinants, elasticity.	15
П	The theory of consumer behavior: The central problem of choice; The utility solution; Diminishing marginal utility and low of equimarginal utility; Factors affecting choice are decision making.  Economy system: Purpose; Type economic system; Indian economy- characteristics.	15

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Ш	Market and marketing: Concept, classification-function, types-wholesale, retail etc.; Marketing environment, Marketing theories-models Marketing strategies-concept, types based on product, seller, demand, media mix, price promotion and policy.  Market and Market prices: Definition and types of Market Prices; Pricing under perfect and imperfect competition and monopoly.	20
IV	Consumer credit: Definition; types of credits; Factors affecting consumer credit decisions; Sources of consumer credit.	10
v	Consumer protection: Government protection; Public protection; Standardization of consumer goods and testing methods.	15

#### Suggested readings:

- Del Hawkins, Roger J. Best, Kenneth A. Cony and Anith Mukergy Consumer Behaviour Building Marketing Strategy Tata Mc Grew-Hill Publishing Company Ltd New Delhi.
- Seetharamn.Premavathy and Sethi, Mohini (2002) Consumerism; Strategies and Tactics.
- Rajlakshmi Rao (2008), Consumer is King-Know your rights and remedies, Universal Law Publishing Company, New Delhi.
- Varghese, M. A., Ogale N. N. and Srinivasan K. 1985, Home Management, New Age International (P) Limited, Publishers New Delhi.
- D.R. Sachdeva and Vidya Bhushan, An Introduction to Sociology, Hissar. Kitab mahal, Allahabad Delhi.
- M. Y. Khan and P. K. Jain, Financial Management-Text, problems and cases (2007)
   Fiffth edition Tata McGraw-Hill Publishing company Limited.
  - Suggestive digital platforms web links-Swayam Portal;

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

https://en.n.wikipedia.org/wiki/consumer economics

https://www.britannica.com/topic/consumer-economics

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### M.A. II Semester IV Home Science Paper VII

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A131007P
Course/Paper Title	Practical (Compulsory)
Semester	IV
Credit assigned	4
Maximum marks	25+75

#### Course objectives:

- To study the status of women's in the community.
- To comprehend about different areas of counselling.
- To familiarize the students about the food analysis.
- To develop writing skills for different media.
- To realize about the health problems of the community.
- To understand about various types of markets.

#### Course outcomes: Students will be able to-

- Identify problems of women's in the community.
- Analyze about the different Counselling therapy.
- Acquaint with common food adulterants.
- Develop writing skills for different media.
- Identify the health needs of special group and conduct health related survey.
- Understand the working process of consumer forum.

Total 1	No. of lectures - 60	
Unit	Topic	No.of lectures
I	<ul> <li>Study of women's status in a community.</li> <li>Identification of Women's Problems in a community.</li> <li>Visit a woman welfare organisation.</li> </ul>	15
П	<ul> <li>Identify Families with problems</li> <li>learn about the counselling process- role play and mock sessions.</li> </ul>	15

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III	<ul> <li>Sensory evaluation of food products.</li> <li>Testing of common adulterants in different foods.</li> </ul>	15
IV	<ul> <li>Preparation of Non projected materials- Pamphlets, leaflets, folders etc.</li> <li>Operations of various audio visual aids- Overhead projector, Slide projectors, LCD projector, tape recorders, computer etc.</li> </ul>	15
V	<ul> <li>Identification of health needs of special groups, infants, young children and adolescents, women.</li> <li>Preparation of health survey schedules for different groups.</li> </ul>	15
VI	<ul> <li>Survey the consumer forum for learning the working of forum.</li> <li>Visit to different types of markets- organized, inorganized, local &amp; weekly etc.</li> </ul>	15

Note:- Students will select any four practical units according to opted four optional courses.

Course pre-requisites: To study this course a student must had the subject Home Science in UG class.

#### Suggested readings:

- National Perspective Plan for Women (1998): New Delhi, Department of Women and Child Development, Govt. of India.
- Rehman, M.M. and Biswal, K.K.(1993). Education, Work and Women: Common Wealth Publishers.
- Sharma, O.C. (1994). Crime Against Women: New Delhi : Sterling Publishers Pvt. Limited.
- A. Mathu "Gender and Development" The Indian Scenario, Kalpaz Publications.
- Kinra, Asha K. (2012). Guidance and Counselling, Pearson Publication.
- Susant Misra(2015). Essential of Guidance and Counselling, Lakshi Publishers.
- Andrew Reeves (2018). An Introduction to Counselling and Psychotherapy, SAGE Publications Ltd.
- Hand book of analysis and quality control for fruit and vegetable products, S. Ranganna, IIEd., Tata McGraw Hill Publishing Co. New Delhi.
- The Food Chemistry Laboratory: A Manual for Experimental Foods Dietetics, and Food Scientists, Second Edition-Connie M. Weaver, James R.Daniel
- B. Shrilakshmi, Food Science, New Age International Publishers.
- Reddy, A.A. 1987. Extension Education. Sree Lakshmi Press, Bapatla.

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Dahama , O.P. & Bhatnagar, O.P., "Education and communication for development," New Delhi – oxford and IBG publishing Co. Pvt. Ltd.
Gastrell, P. & Edwards, J., ED. Community health nursing: frameworks for practice. London, Balliere Tindall, 1996.
Stevens, A. & Raftery, J. Health care needs assessment. Oxford, Radcliffe Medical

Press, 1994.
Twinn, S. Et. al. Community health care nursing: principles for practice. Oxford, Butterworth Heinemann, 1996.

 Del Hawkins, Roger J. Best, Kenneth A. Cony and Anith Mukergy Consumer Behaviour Building Marketing Strategy Tata Mc Graw- Hill Publishing Company Ltd New Delhi.

 Seetharamn.Premavathy and Sethi, Mohini (2002) Consumerism; Strategies and Tactics.

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# M.A. II Semester IV Home Science Paper VIII

Programme/Class	M.A.
Subject	Home Science
Course/Paper code	A131008R
Course/Paper Title	Major Research Project/Dissertation (Compulsory)
Semester	IV
Credit assigned	4
Maximum marks	100

**Note:-** The topic for the major research project will be opted by the students with consent of his/her research supervisor.

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