



## 1. COURSE STRUCTURE

The Course Structure of the Master of Arts/Master of Science in Home Science Programme shall be as under:

Year	Sem	Subject	Course Code	Paper Title	Theory	Practical	Total Credits
1	I	Core Compulsory 26	A130701T	Advance Human Development	4	1	5
		Core Compulsory 27	A130702T	Human Development-Theories and Current Trends	4	1	5
		Core Compulsory 28	A130703T	Research Methodology	4	1	5
		Core Compulsory 29	A130704T	Infant Stimulation Programmes	4	1	5
		GE 3/Minor Elective	A130705T	Food Science and Processing Techniques(VII/VIII Semester)	4		4
		Research Project/Industrial Training	A130706I/SR	Industrial Training/ Survey/ Research Project	4		4
1	II	Core Compulsory 30	A130801T	Guidance and Counselling	4	1	5
		Core Compulsory 31	A130802T	Statistics and Computer Applications/	4	1	5
		Core Compulsory 32	A130803T	Methods and techniques of assessment in human development	4	1	5
		Core Compulsory 33	A130804T	Women Studies	4	1	5
		GE 3/Minor Elective	A130805T	Food Science and Processing Techniques(VII or VIII Semester)	4		4
		Research Project/Industrial Training	A130806I/SR	Industrial Training/ Survey/ Research Project	4		4



<b>Distribution of Marks</b>	<ul style="list-style-type: none"><li>• There theory papers will be each of 100 marks (70 marks for Written Examination + 30marks for Internal Assessment) for each theory paper.</li><li>• Practical paper including Viva-Voce will be of 100 marks including 30 marks for Internal Assessment.</li><li>• Theory paper including practical shall be 30 marks for internal assessment+50 Marks for External Assessment +20 marks for practical</li><li>• Research Project/ Survey/Industrial Training will be of 100 marks. (70 marks for External Assessment + 30marks for Internal Assessment)</li></ul>
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## 2. Course Outlines

**M.A./M.Sc. I Year (Semester I) Home Science**  
**Paper 1 Advance Human Development MHS CC 101**

Programme/Class: M.A./M.Sc.	Year: 1	Semester: 1
<b>Subject-Home Science</b>		
Course Code: MHS CC 101	Course Title: <b>Advance Human Development</b>	
Course outcomes: <ul style="list-style-type: none"><li>• To undertake an advanced study of the stages in human development with special focus on stages from prenatal development to adulthood.</li><li>• To understand the need for theory of Human Development.</li><li>• To develop practical knowledge among students regarding different developments of different stages</li></ul>		
Credits: 4	Course Type-Core Course	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Human Development:</b> <ul style="list-style-type: none"><li>• Concepts,</li><li>• Principles,</li><li>• Growth and Development.</li></ul> <b>Pre-natal period and Birth:</b> <ul style="list-style-type: none"><li>• Development, genetic and environmental factors affecting prenatal Development,</li><li>• Delivery and birth.</li></ul>	8
II	<b>Infancy:</b> <ul style="list-style-type: none"><li>• Physical and perceptual development;</li><li>• Cognitive, social and emotional development.</li><li>• language development</li></ul>	8
III	<b>Early and Middle Childhood:</b> <ul style="list-style-type: none"><li>• Physical and motor development;</li><li>• Cognitive development;</li><li>• Social and Emotional development,</li><li>• language development</li></ul>	9



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<b>IV</b>	<b>Adolescence :</b> <ul style="list-style-type: none"><li>• Physical development;</li><li>• Cognitive development;</li><li>• Social and Emotional development,</li><li>• problems during adolescent</li></ul>	10
<b>V</b>	<b>Adulthood :</b> <ul style="list-style-type: none"><li>• Physical, sensory and cognitive changes during adulthood,</li><li>• Social and emotional development</li><li>• Adjustment problems during adulthood</li></ul>	10
<b>Practical</b>	<ul style="list-style-type: none"><li>• Study of physical, motor, social, emotional, language, intellectual and moral development at different ages and writing interpretative report.</li><li>• Prepare Resource File.</li><li>• Seminar/Presentation on any topic related to Human Development.</li></ul>	15
<b>Suggested Readings:</b> <ol style="list-style-type: none"><li>1. Berk L.E., Child Development, Allyn and Bacon, USA, 2000.</li><li>2. Devadas R.P.C. &amp; Jaya N.A.- Textbook on Child Development, McMillan India Ltd. Delhi, 1996.</li><li>3. Stuart Clark- Life Span Development.</li><li>4. Papalia D.E., Human Development, Tata McGraw Hills Publishing Company 1997.</li><li>5. Turner Jeffery.S. &amp; Life Span Development. Harcourt Helms. Donald B.</li><li>6. Dehart G.B. &amp; Sroufe. L Alan. Child Development- its Nature and Course.</li><li>7. Santrok John W.- Child Development, McGraw Hill.</li></ol> Hughes, Noppe & Nopp (1996). Child Development, Prentice Hall, New Jersey, New Delhi ;2015		
<b>Suggested Continuous Evaluation Methods:</b> <ul style="list-style-type: none"><li>• Test with multiple choice questions/short and long answer questions</li><li>• Developmental assessment</li><li>• Seminar/Presentation</li></ul>		



M.A./M.Sc. I Year (Semester I) Home Science  
Paper 2 Human Development: Theories and Current Trends MHS CC 102

Programme/Class: M.A./M.Sc.	Year: 1	Semester: 1
<b>Subject-Home Science</b>		
Course Code: <b>MHS CC 102</b>	Course Title: <b>Human Development: Theories and Current Trends</b>	
Course outcomes: <ul style="list-style-type: none"><li>To understand and demonstrate the basics of knowledge relating to human development</li><li>To provide an understanding of various theories of human development.</li><li>To familiarize the students with changes occurring during life span.</li></ul>		
Credits: 4	Course Type-Core Course	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Early Theories</b> <ul style="list-style-type: none"><li>Historical foundation, philosophies of the enlightenment.</li><li>Scientific Beginnings, Normative period.</li></ul>	9
II	<b>Psychoanalytical perspectives.</b> <ul style="list-style-type: none"><li>Freud's Theory , Three parts of personality, Psychosocial Theory- Erik Erikson</li><li>Contribution and limitations of the psycho analytical perspective.</li></ul>	9
III	<b>Behaviorism and social learning theory</b> <ul style="list-style-type: none"><li>Social Learning Theory- Albert Bandura</li><li>Learning Theories- Pavlov and Skinner</li><li>Contribution and limitations of behaviorism and social learning theories</li></ul>	9
IV	<b>Cognitive Development Theory- Jean Piaget</b> <ul style="list-style-type: none"><li>Piaget's stages</li><li>Contribution and limitations of piagets theory</li><li>Socio-Cultural Theory of Cognitive Development- Vygotsky</li></ul>	9
V	<ul style="list-style-type: none"><li>Kohlberg's Moral Judgement Theory</li><li>Ecological Theory- Vrie Bronfenbrenner</li><li>Recent Theoretical Perspectives of Human Development.</li></ul>	9



<b>Practical</b>	<ul style="list-style-type: none"><li>• Group Discussions: Various Theories of Human Development and Crises Management</li><li>• Resource file-Collection of element articles, picture, tests about theories theorists, philosopher, thinkers, psychologist, educationists (related to Human Development).</li></ul>	<b>15</b>
<b>Suggested Readings:</b> <ul style="list-style-type: none"><li>❖ Child Development- L.E.Berk Basten-Allyn &amp; Bacon, London.</li><li>❖ Child Development- E.B. Hurlock.</li><li>❖ Developmental Psychology- E.B.Harlock.</li><li>❖ Child Development &amp; personality- P.H.Mussen, J.J. Conger &amp; J.Kagan, A.C.Huston-Harper &amp; Row Publications, New York.</li><li>❖ Human Development- F.P.Rice-Perntice Hall, New Jersey.</li><li>❖ The Development of Children- M.Cole &amp; S.Cole-Scientific American Books- Freeman &amp; Co,</li><li>❖ Child Development- An Introduction – J.W. Santrock &amp; S.K.Yussen Iowa WMC. Brown Publishers.</li><li>❖ Child Development: Infancy through Adolescence-A.Clarke Stewart &amp; S.Friedman, Johnwiley, New York.</li></ul>		



M.A./M.Sc.I Year (Semester I) Home Science

Paper 3 Research Methodology A130703T

Programme/Class: M.A./M.Sc	Year: I	Semester: I
Subject-Home Science		
Course Code:	Course Title: RESEARCH METHODOLOGY	
Course outcomes: <ul style="list-style-type: none"><li>• Understanding the nature of problem to be studied and identifying related area of knowledge.</li><li>• Understanding meaning and concept of social science research and specifically areas of research in Home Science.</li><li>• Understanding various steps of research (data collection, data analysis, interpretation and report writing)</li></ul>		
Credits: 4+1=5	Course Type-Core Course	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Social Research:</b> <ul style="list-style-type: none"><li>• Concept, Nature, Scope, Types of Researches in Home Science.</li><li>• Formulation and Selection of the Research Problems</li></ul> Participatory Research	7
II	<b>Hypothesis:</b> <ul style="list-style-type: none"><li>• Concept, Types &amp; Significance</li></ul> <b>Research Design:</b> <ul style="list-style-type: none"><li>• Concept, Types and significance.</li></ul> <b>Sampling:</b> <ul style="list-style-type: none"><li>• Concept, Types and Significance</li></ul>	8
III	<b>Sources of Data Collection:</b> <ul style="list-style-type: none"><li>• Primary and Secondary, Field and Documentary.</li></ul> <b>Tools of Data Collection:</b> <ul style="list-style-type: none"><li>• Interview guide, Interview schedule, observation and questionnaire.</li></ul> <b>Methods of data Collection:</b> <ul style="list-style-type: none"><li>• Interview, Questionnaire, Observation, Case Study and Projective techniques.</li></ul>	12
IV	<ul style="list-style-type: none"><li>• <b>Measurement</b> and Scaling</li><li>• <b>Processing</b> of Data</li></ul>	8
V	<ul style="list-style-type: none"><li>• <b>Analysis</b> and Interpretation of Data</li></ul> <b>Report Writing</b>	8
Practical	<b>Exercises with students to explore process of research</b> <ol style="list-style-type: none"><li>1. Selection of a research problem</li><li>2. Review of Literature</li><li>3. Developing Hypotheses and Objectives</li><li>4. Constructing measurement tools</li><li>5. Selection of sample</li></ol>	15



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	<ol style="list-style-type: none"><li>6. Data collection</li><li>7. Analysis of data</li><li>8. Report writing</li><li>9. Class presentation</li></ol>	
<p><b>Suggested Readings:</b></p> <ul style="list-style-type: none"><li>• Gupta, S.P., Statistical Methods, Sultan Chand and Sons, New Delhi, 1994</li><li>• Jain, Gopal Lal, Research Methodology, Methods, Tools and Techniques, Mangal Deep Publications, Jaipur, 1998</li><li>• Kothari, C.R.: An Introduction to Operational Research, Vikas Publishing House Pvt. Ltd, New Delhi, 1994</li><li>• Wright, Susan E., Social Science Stastics Allyn and Bacon Inc., London, 1986</li><li>• Wisniekwski, Mik, Quantitative Methods for Descision Makers, Mcmillan India Ltd., New Delhi, 1986.</li><li>• Kerlinger F. 1973. Foundations of Behavioural Research. Rinehart Winston.</li><li>• Gay LR. Educational Research Competencies for Analysis and Application</li><li>• Bajpai SR. 1966. Methods of social Survey and Research. Kitab Ghar.</li><li>• Best W. 1983. Research in Education. 4th Ed. Prentice Hall of India.</li><li>• Carter Good V. 1966. Essential of Education Research. Appleton Century</li><li>• Profits, Educational Division, Meredith Corp.</li><li>• Kaul Lokesh 1984. Methodology of Education Research. Vikas Publ.</li></ul>		
<p><b>Suggested Continuous Evaluation Methods:</b></p> <ul style="list-style-type: none"><li>• Test with multiple choice questions/short and long answer questions</li><li>• Theoretical classes followed with practical exercises on same content for assessing understanding and applied learning of students.</li></ul>		



M.A./M.Sc.I Year (Semester I) Home Science  
Paper 4: Infant Stimulation Programmes A130704T

Programme/Class: M.A./M.Sc.	Year: I	Semester: I
Subject-Home Science		
Course Code: A130704T	Course Title: Infant Stimulation Programmes	
Course outcomes: <ul style="list-style-type: none"><li>To understand and demonstrate the basics of knowledge relating to infant stimulation programme.</li><li>To provide an understanding of basic concept, characteristics of infant.</li><li>To familiarize the students with changes occurring during .infancy</li></ul>		
Credits: 4+1=5	Course Type-Core Course	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Infancy</b> <ul style="list-style-type: none"><li>Concept, characteristics, developmental task.</li><li>Physical, social, emotional, cognitive and language development during infancy.</li><li>Attachment theory</li></ul>	9
II	<b>Stimulation:</b> <ul style="list-style-type: none"><li>Definition, Importance, early experiences and developmental consequences,</li><li>Family and environmental stimulation</li></ul>	9
III	<b>Child rearing practices:</b> <ul style="list-style-type: none"><li>Importance of child rearing practices</li><li>Role of environment in child rearing</li></ul>	9
IV	<b>Infant stimulation concept:</b> <ul style="list-style-type: none"><li>Infant stimulation (visual, auditory, tactile, vestibular, olfactory, gustatory)</li><li>Infant stimulation programmes</li></ul>	9
V	<b>Infant stimulation programmes.</b> <ul style="list-style-type: none"><li>Review of currently running infant stimulation programmes</li></ul>	9





<b>Practical</b>	<ul style="list-style-type: none"><li>• Visit to different day care, infant and toddler centers.</li><li>• Observation and recording of development and behavior in different ecological settings.</li><li>• Study of existing stimulation practices and materials in home and institutional settings (infant, toddler centers, day care centres).</li><li>• Preparation of stimulation material for physical, motor, cognitive, language, behavior, social and emotional domains.</li><li>• Development of stimulation kit from indigenous low cost materials and evaluation. Implementation of prepared programme in different ecological settings. Modification on the basis of evaluation</li></ul>	<b>15</b>
<b>Suggested Readings:</b> <ul style="list-style-type: none"><li>❖ Swaminathan (1998). The first five years: A critical perspective on yearly childhood care and education in India.</li><li>❖ Child development, VII Edition Robert S. Feldman Pearson.</li><li>❖ Developmental Psychology: A life Span Approach Vth edition, Elizabeth B. Hurlock, Tata Mc. Graw- Hill Publishing Company Ltd. New Delhi.</li><li>❖ How to have a smarter Baby: The Infant Stimulation Program for enhancing your baby's natural developmental mass market paper back- May 1, 1987.</li></ul>		



M.A./M.Sc.I Year (Semester I) Home Science  
Paper 5: Food Science and Processing Techniques A130705T

Programme/Class: M.A./M.Sc.	Year: 1	Semester: I
Subject-Home Science		
Course Code: A130705T	Course Title: Food Science and Processing Techniques	
Course outcomes: <ul style="list-style-type: none"><li>• Enabling students to various methods for evaluating variety of foods.</li><li>• To understand and use various methods of preservation of food</li><li>• To provide an understanding of food processing technology</li><li>• To understand and demonstrate the basics of knowledge relating to nutrients loss during food processing.</li></ul>		
Credits: 4	Course Type-Value Added Course(Credited)	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Introduction:</b> <ul style="list-style-type: none"><li>• Brief review of main food crops grown in the country – their nutritional importance.</li><li>• <b>Food and its preservation (Home and Community Level including commercial operations):</b> Cause of food spoilage; Needs and benefits of Food Processing and Technology for Food Preservation.</li><li>• <b>Physical principles in food processing operations:</b> Thermal processing (Use of heat); Types of heat treatments; Heat resistance of micro-organism</li></ul>	9
II	<ul style="list-style-type: none"><li>• <b>Refrigeration (Use of low temperature):</b> Refrigeration and freezing – methods, principles and applications; Freezing and its effects of food components and structure; Shelf life of frozen foods.</li><li>• <b>Drying and dehydration:</b> Types of foods – traditional and new food products; Principles and applications; Home, community and commercial methods of dehydration; Effect on food quality.</li></ul>	9
III	<ul style="list-style-type: none"><li>• <b>Chemical Principles of Food Processing:</b> Preservation/ processing by sugar, salt, curing, smoke, acids and chemicals.</li><li>• <b>Principles</b> and methods used for various products such as pickles, chutney, ketchup, sauces, fruit juices, squashes, fruit syrups and cordials.</li></ul>	9



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<b>IV</b>	<ul style="list-style-type: none"><li>• <b>Fruit</b> and vegetable processing methods and products</li><li>• <b>Milk Processing:</b> Classification, standardization, homogenization and packaging.</li><li>• <b>Meat, fish and egg processing:</b> Methods and products; Ageing ; tenderizing; curing; smoking; freezing.</li><li>• <b>Food additives:</b> Classification and products</li></ul>	<b>9</b>
<b>V</b>	<ul style="list-style-type: none"><li>• <b>Nutritional Implications of Food Processing:</b> Causes for loss of vitamins and minerals; Enrichment, restoration and fortification</li><li>• <b>Sensory Analysis:</b> Definition, types of test, use in product evaluation</li></ul>	<b>9</b>
<b>Practical</b>	<ul style="list-style-type: none"><li>• Advance Diploma Courses may be arranged for the students for Food Preservation and Bakery and Confectionery.</li><li>• Visits to food processing units such as Dairy, Cold Storage Plant and Preservation Centres.</li><li>• Prepare resource file</li></ul>	<b>15</b>

**Suggested Readings:**

1. Cherley H (1982). Food Science (2nd edition), John Wiley & Sons, New York
2. Gopalan C. (eds.) (1993) Recent Trends in Nutrition, Oxford University Press
3. International Child Health: A Digest of Current Information
4. Jallinek G (1985). Sensory Evaluation of Food Theory and Practice, Ellis Harwood Chicester  
Jelliffe DE and Jelliffe EFP (1989). Community Nutritional Assessment, Oxford University Press



M.A./M.Sc.I Year (Semester II) HomeScience  
Paper 6 : Research Project / Industrial Training A130806R/I

Programme/Class: M.A./M.Sc.	Year: 1	Semester: I
Subject-Home Science		
Course Code: A130806R/I	Course Title: Research Project / Industrial Training	
Topic will be Decided		

M.A./M.Sc.I Year (Semester II) Home Science  
Paper 7: Guidance and Counselling A130801T

Programme/Class: M.A./M.Sc.	Year: 1	Semester: II
Subject-Home Science		
Course Code: A130801T	Course Title: Guidance and Counselling	
<b>Course outcomes:</b> <ul style="list-style-type: none"><li>To understand meaning and concept of counselling and guidance.</li><li>To understand various approaches of counselling.</li><li>To understand the scope and importance of counselling in present scenario.</li></ul>		
Credits: 4+1=5	Course Type- Elective	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Introduction to guidance and counseling,</b> <ul style="list-style-type: none"><li>concept, aims</li><li>Needs and Scope of guidance and counseling</li><li>Basic principles of guidance and counseling.</li></ul>	7
II	<b>Types of guidance :</b> <ul style="list-style-type: none"><li>Educational, vocational and personal, marriage and family, leisure time</li><li>Areas of guidance and counseling and Counseling techniques</li></ul> <b>Types of counseling-</b> <ul style="list-style-type: none"><li>Specialized counseling, crises counseling, facilitative counseling and preventive counseling.</li></ul>	8
III	<b>Competencies and role of a guidance and counseling professionals.</b> <ul style="list-style-type: none"><li>Limitations of a counselor, Modes and methods of Counseling</li><li>Essentials for conducting guidance and counseling; understanding the process of guidance and counseling, Guidelines for setting up Child Guidance and Counseling unit.</li></ul>	12
IV	<ul style="list-style-type: none"><li>Psycho therapies, Cognitive therapy, Affective therapy, Behavior therapy, Rational Emotive therapy, Transactional analysis, Gestalt therapy.</li></ul>	8
V	<ul style="list-style-type: none"><li>Knowledge and skills to handle assessment tools, Knowledge and skills – continued. Effective communication and documentation</li></ul>	8



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	skills, networking with allied professionals and institutions. <ul style="list-style-type: none"><li>• Status of guidance services in education at state and center level and ethical Issues in counseling</li></ul>	
Practical	<ul style="list-style-type: none"><li>• Administration of any five psychological tests/ scales available in department laboratory and understanding its use in counseling.</li></ul>	<b>15</b>
<b>Suggested readings:</b> <ul style="list-style-type: none"><li>• Counseling and Guidance, S.Narayan Rao tata McGraw Hill Publishing Company Limited,</li><li>• Counseling skills Training- P.Burnard, Viva Books, New Delhi.</li><li>• Counseling: the Skills of finding solutions to Problems, R.Manthei, Routledge, London.</li><li>• Individual Counseling: Therapy &amp; practice, D.Nicolson &amp; H.Ayers, David Fulton, London.</li><li>• Encyclopedia of Guidance &amp; counseling- Mittal Publications, New Delhi.</li><li>• Educational &amp; Vocational Guidance- R.Singh, Common Wealth Publishers, New Delhi.</li><li>• Guidance &amp; Counseling- I. Madhukar, Authe press Global Network..</li><li>• Principles of Guidance &amp; Counseling- M.Asche Sarup &amp; sons, New Delhi.</li><li>• Guidance &amp; Educational Counseling- S.K.Chibber- Common Wealth Publishers.</li><li>• Sharma.R.N &amp; Sharma.R., 2004, "<i>Guidance and Counselling in India</i>", Atlantic Publishers and distributors, New Delhi.</li></ul>		
<b>Suggested Continuous Evaluation Methods:</b> <ul style="list-style-type: none"><li>• Test with multiple choice questions/short and long answer questions</li><li>• Theoretical classes followed with practical exercises on same content for assessing understanding and applied learning of students.</li><li>• Departmental discussions and seminars.</li></ul>		



M.A./M.Sc.I Year (Semester II) Home Science  
Paper 8: Statistics and Computer Application A130802T

Programme/Class: M.A./M.Sc.	Year: 1	Semester: II
Subject-Home Science		
Course Code: A130802T	Course Title: Statistics and Computer Application	
Course outcomes: <ul style="list-style-type: none"><li>To understand the basics of statistics with relation of material and techniques</li><li>Enable students to understand the basic needs of computer application</li><li>To understand the various methods and techniques use in statistics</li><li>To understand the significance of statistics and computer application in Home Science</li></ul>		
Credits: 4+1=5	Course Type-Core Course	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Classification &amp; tabulation of Data:</b> <ul style="list-style-type: none"><li>Meaning, objective and types of classification,</li><li>Formation of discrete and continuous frequency distribution, tabulation of data, parts of a table, General Rule of tabulation,</li><li>Types of tables,</li><li>Diagrammatical and graphical presentation of data: significance, types and limitation of different types of diagrams and graphs used for presentation of data.</li></ul>	9
II	<b>Measure of Central tendency:</b> <ul style="list-style-type: none"><li>Mean, Median, Mode and their uses with examples and their advantages and disadvantages,</li></ul>	9
III	<b>Measure of Dispersion:</b> <ul style="list-style-type: none"><li>Significance and methods used in studying dispersion (range, quartile deviation, mean deviation and standard deviations) with their uses, advantages and disadvantages.</li></ul>	9
IV	<b>Test of Relationship;</b> <ul style="list-style-type: none"><li>Meaning, types and methods used to study correlation (simple Co-efficient of correlation, rank correlation, co-efficient of concurrent deviation and other methods) regression along with their uses, advantages &amp; disadvantages. Testing of Hypothesis; Meaning, basic concept concerning testing of hypothesis, procedure for testing hypothesis, Errors in testing hypothesis.</li></ul>	9



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<b>V</b>	<b>Parametric and Non-parametric tests:</b> <ul style="list-style-type: none"><li>• uses of chi square test, student 't' test, and 'z' test in testing hypothesis. Interpretation &amp; Report writing; meaning, technique of interpretation, significance, steps followed, layout of report writing.</li><li>• Types of report and techniques of writing a report, The computer system, important characteristics and application in Research.</li></ul>	<b>9</b>
<b>Practical</b>	<ul style="list-style-type: none"><li>• Prepare resource file</li><li>• Classification and tabulation of data</li><li>• Measures of central tendency</li><li>• Measure of Dispersion</li></ul>	<b>15</b>

**Suggested Readings:**

1. Statistical Methods – S.P.Gupta, Sultan Chand & Sons Publisher- New Delhi
2. Research Methodology, Methods and Techniques – C.R. Kothari Wiley Eastern Limited – New Delhi
3. An Introduction to Statistical Methods – C.B.Gupta & V.Gupta- Vikas Publishing House PVT Ltd.
4. Methodology and Techniques of Social Research – P.L.Bandarkar & T.S.Wilkinson –Himalaya Publishing House- Mumbai.
5. Research Methods & Measurements in Behavioural & Social Sciences – G.L.Bhatnagar – Agri. Cole. Publishing Academy, New Delhi.
6. Statistics in Psychology & Education – Henry, E. Garrett, David Heley and Co.
7. Experimental Design in Psychological Research – Edwards
8. The Quality of Life: Valuation in social Research – R. Mukherjee – Sage publications, New Delhi.





M.A./M.Sc.I Year (Semester II) Home Science  
Paper 9: Methods and Techniques of assessment in human development A130803T

Programme/Class: M.A./M.Sc.	Year: 1	Semester: II
Subject- Home Science		
Course Code:	Course Title: Methods and Techniques of assessment in human development	
Course outcomes: <ul style="list-style-type: none"><li>To understand various techniques for studying Human Development.\</li><li>To make the students aware about scientific method of analyzing Human Development.</li></ul>		
Credits: 4+1=5	Course Type-Core Course	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Assessment-</b> <ul style="list-style-type: none"><li>Definition and function of assessment,</li><li>Assessment techniques, Approaches to assessment,</li><li>concept of measurement,</li><li>Techniques of measurement,</li><li>Relative efficacy of assessment tools and measuring different aspect of development.</li></ul>	9
II	<b>Assessment scales-</b> <ul style="list-style-type: none"><li>Neonatal scales, infant and toddler assessment scales,</li><li>Infant- toddler scales,</li><li>Early childhood assessment _ types,</li><li>Administration of cognitive test for children.</li></ul>	9
III	<b>Administration of personality test for children-</b> <ul style="list-style-type: none"><li>New trends in assessment of human behavior,</li><li>Current challenges in assessment of human behavior,</li><li>Ethical issue in the assessment of human development</li></ul>	9
IV	<b>Scientific method-</b> <ul style="list-style-type: none"><li>Importance, Criteria- reliability, validity, control, Types and test for reliability and validity,</li><li>Item analysis- Importance and types, Item analysis procedures.</li></ul>	9
V	<b>Principles of developing a test / scale.</b> Standardization procedures. <ul style="list-style-type: none"><li>Types of scales – nominal scales – construction rules, Ordinal scales – construction rules, Interval scales, Ration scales – construction rules.</li></ul>	9
<b>Practical</b>	<ul style="list-style-type: none"><li>Development of test/ scales for assessment.</li></ul>	<b>15</b>





**Suggested Readings:**

1. Robert M. Kaplan, Dennis P. Saccuzzo, 2005, "Psychological Testing", Principles, Applications and issues, Wodsworth, U.S.A.
2. Pestonjee D.M. 2003., "Third hand book of psychological and social instruments". Vol.1, Concept Publishing Company, New Delhi.
3. James Goodwin, 2002 "Research in Psychology". Methods and design, 3<sup>rd</sup> edition, John Wiley & Sons, Inc. U.S.A.
4. L.R. Gay. Geoffrey, E. Mills and Peter Airasian, 2000, "Educational research", Competencies for Analysis and applications, 8<sup>th</sup> edition, Pearson, Merrill Prentice Hall, New Jersey..



M.A./M.Sc.I Year (Semester II) Home Science  
Paper 10: Women Studies A130804T

Programme/Class: M.A./M.Sc.	Year: 1	Semester: II
Subject-Home Science		
Course Code: A130804T	Course Title: Women Studies	
Course outcomes: <ul style="list-style-type: none"><li>To be familiar with the common problems faces by women.</li><li>To get exposure of the schemes to combat nutritional problems.</li><li>To be aware of the health hazards related to food and water</li><li>To know about women welfare programmes in india.</li></ul>		
Credits: 4+1=5	Course Type-Core Course	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Women's Studies:</b> <ul style="list-style-type: none"><li>Meaning, significance and growth of women's studies in India,</li><li>Women's role &amp; status in the society, the changing position of Indian women,</li><li>The women's movement in India, feminist theories,</li><li>Women empowerment.</li></ul>	9
II	<b>Women's situational&amp; development:</b> <ul style="list-style-type: none"><li>Women &amp; education,</li><li>Women &amp; employment,</li><li>Women &amp; health,</li><li>Women in agriculture,</li><li>Women in Industry,</li><li>Women in Politics,</li><li>Women's personal laws.</li></ul>	9
III	<b>Life Cycle Approach to Women's Health –</b> <ul style="list-style-type: none"><li>Health status of women in India,</li><li>Factors influencing health and Nutritional status.</li><li>Maternal and Child Health (MCH) to Reproductive and Child health approaches.</li><li>Issues of declining Child Sex Ratio, Widowhood and old age.</li></ul>	9



<b>IV</b>	<b>Women welfare Programmes:</b> <ul style="list-style-type: none"><li>• Women welfare programme in urban &amp; rural areas,</li><li>• Policies &amp; programmes of social welfare floated at the center &amp; state level, for the advancement of the Condition of women in India.</li></ul>	<b>9</b>
<b>V</b>	<b>Women welfare organizations,</b> <ul style="list-style-type: none"><li>• Co-ordination of agencies of women welfare programmes.</li><li>• Women empowerment.</li><li>• Development of women entrepreneurships.</li></ul>	<b>9</b>
<b>Practical</b>	<ul style="list-style-type: none"><li>• Study of women's status in a community</li><li>• Identification of women's problems in a community</li><li>• Preparation of an album on women's issues.</li><li>• Visit to Women Welfare Organizations.</li></ul>	<b>15</b>

**Suggested Readings:**

- ❖ Desai N & Krishna M. 1988. Women and Society in India. Ajanta publ.
- ❖ Krishnaraj M. (Ed). 1986. Women studies in India. Popular Prakshan.
- ❖ Patil AK. 1995. Women and Development. Ashish Publ.
- ❖ Poonacha V. 1999. Understanding women studies. SNTD Women's University. Mumbai.
- ❖ AbouZahr, C., and E. Royston 1991. Maternal Mortality: A Global Factbook. Geneva, Switzerland: World Health Organization.
- ❖ Ainsworth, M., and I. Semali 1998. The impact of adult deaths on the nutritional status of children. Ch. 9 in Coping with AIDS: The Economic Impact of Adult Mortality on the African Household. Washington, D.C.: World Bank.
- ❖ Arrowsmith, S., E.C. Hamlin, and L.L. Wall 1996. Obstructed labor injury complex: Obstetric fistula formation and the multifaceted morbidity of maternal birth trauma in the developing world. Obstetric and Gynecological Survey 51(9):568-574. [PubMed]



M.A./M.Sc.I Year (Semester II) Home Science  
Paper 11 : Food Science and Processing Techniques

Programme/Class: M.A./M.Sc.	Year: 1	Semester: II
Subject-Home Science		
Course Code: A130805T	Course Title: Food Science and Processing Techniques	
Course outcomes: <ul style="list-style-type: none"><li>• Enabling students to various methods for evaluating variety of foods.</li><li>• To understand and use various methods of preservation of food</li><li>• To provide an understanding of food processing technology</li><li>• To understand and demonstrate the basics of knowledge relating to nutrients loss during food processing.</li></ul>		
Credits: 4	Course Type-Value Added Course(Credited)	
Max. Marks: 100(30+70)		
Total No. of Lectures-60		
Unit	Topics	No. of Lectures Total=60
I	<b>Introduction:</b> <ul style="list-style-type: none"><li>• Brief review of main food crops grown in the country – their nutritional importance.</li><li>• <b>Food and its preservation (Home and Community Level including commercial operations):</b> Cause of food spoilage; Needs and benefits of Food Processing and Technology for Food Preservation.</li><li>• <b>Physical principles in food processing operations:</b> Thermal processing (Use of heat); Types of heat treatments; Heat resistance of micro-organism</li></ul>	9
II	<ul style="list-style-type: none"><li>• <b>Refrigeration (Use of low temperature):</b> Refrigeration and freezing – methods, principles and applications; Freezing and its effects of food components and structure; Shelf life of frozen foods.</li><li>• <b>Drying and dehydration:</b> Types of foods – traditional and new food products; Principles and applications; Home, community and commercial methods of dehydration; Effect on food quality.</li></ul>	9
III	<ul style="list-style-type: none"><li>• <b>Chemical Principles of Food Processing:</b> Preservation/ processing by sugar, salt, curing, smoke, acids and chemicals.</li><li>• <b>Principles</b> and methods used for various products such as pickles, chutney, ketchup, sauces, fruit juices, squashes, fruit syrups and cordials.</li></ul>	9



**ख्वाजा मुईनुद्दीन चिश्ती भाषा विश्वविद्यालय, लखनऊ, उत्तर प्रदेश (भारत)**  
**Khwaja Moinuddin Chishti Language University, Lucknow, U.P. (India)**

U.P. STATE GOVERNMENT UNIVERSITY,  
(Recognised Under Section 2(f) & 12(B) of the UGC Act, 1956 & B.Tech. Approved by (AICTE))

<b>IV</b>	<ul style="list-style-type: none"><li>• <b>Fruit</b> and vegetable processing methods and products</li><li>• <b>Milk Processing:</b> Classification, standardization, homogenization and packaging.</li><li>• <b>Meat, fish and egg processing:</b> Methods and products; Ageing ; tenderizing; curing; smoking; freezing.</li><li>• <b>Food additives:</b> Classification and products</li></ul>	<b>9</b>
<b>V</b>	<ul style="list-style-type: none"><li>• <b>Nutritional Implications of Food Processing:</b> Causes for loss of vitamins and minerals; Enrichment, restoration and fortification</li><li>• <b>Sensory Analysis:</b> Definition, types of test, use in product evaluation</li></ul>	<b>9</b>
<b>Practical</b>	<ul style="list-style-type: none"><li>• Advance Diploma Courses may be arranged for the students for Food Preservation and Bakery and Confectionery.</li><li>• Visits to food processing units such as Dairy, Cold Storage Plant and Preservation Centres.</li><li>• Prepare resource file</li></ul>	<b>15</b>

**Suggested Readings:**

5. Cherley H (1982). Food Science (2nd edition), John Wiley & Sons, New York
6. Gopalan C. (eds.) (1993) Recent Trends in Nutrition, Oxford University Press
7. International Child Health: A Digest of Current Information
8. Jallinek G (1985). Sensory Evaluation of Food Theory and Practice, Ellis Harwood Chicester  
Jelliffe DE and Jelliffe EFP (1989). Community Nutritional Assessment, Oxford University Press

**M.A./M.Sc.I Year (Semester II) Home Science**  
**Paper 12 :Research Project / Industrial Training**

<b>Programme/Class: M.A./M.Sc.</b>	<b>Year: 1</b>	<b>Semester: II</b>
<b>Subject-Home Science</b>		
<b>Course Code: A130806R/I</b>	<b>Course Title: Research Project / Industrial Training</b>	
<b>Topic will be Decided</b>		