

PROF. RAJENDRA SINGH (RAJJU BHAIYA) UNIVERSITY, PRAYAGRAJ

M.A. HOME SCIENCE EXAMINATION AND SYLLABUS SCHEME (Credit and Grading System)

Annexure-17

Course Code	Course Title	T/P	Credits	Evaluation (MM=100)			
				Internal		External	
				CIE	Practical	ETE	
Semester-I							
HOM-501	Core	ADVANCE HUMAN DEVELOPMENT	T	5	25	-	75
HOM-502	Core	FOOD SCIENCE	T	5	25	-	75
HOM-503	Core	EXTENSION & COMMUNION CONCEPT IN COMMUNITY DEVELOPMENT	T	5	25	-	75
HOM-504	Core	RESEARCH METHODOLOGY	T	5	25	-	75
HOM-531	Core	FIELD WORK/MINOR PROJECT/PRACTICAL	P	4	-	100	-
Semester-II							
HOM-505	Core	CONCEPTS OF NUTRITION	T	5	25	-	75
HOM-506	Core	THEORY OF MANAGEMENT	T	5	25	-	75
HOM-507	Core	FABRIC CONSTRUCTION AND CARE	T	5	25	-	75
HOM-508	Core	CHILDREN WITH SPECIAL NEEDS	T	5	25	-	75
HOM-532	Core	FIELD WORK/MINOR PROJECT/PRACTICAL	P	4	-	100	-
Semester-III							
HOM-601	Core	THERAPEUTIC AND COMMUNITY NUTRITION	T	5	25	-	75
HOM-602	Core	COMMUNICATION TECHNOLOGIES IN EXTENSION	T	5	25	-	75
HOM-603	Core	FABRIC ORNAMENTATION & APPAREL DESIGNING	T	5	25	-	75
HOM-604	Core	STATICS AND COMPUTER APPLICATIONS	T	5	25	-	75
HOM-631	Core	FIELD WORK/MINOR PROJECT/PRACTICAL	P	4	-	100	-
Semester-IV							
HOM-605	Core	ENTREPRENEURSHIP MANAGEMENT AND CONSUMER ECONOMICS	T	5	25	-	75
HOM-606	Core	FAMILY GUIDANCE AND COUNSELING	T	5	25	-	75
HOM-607	Core	INSTITUTIONAL FOOD ADMINISTRATION	T	5	25	-	75
HOM-608	Core	DISSERTATION	T	5	-	-	100
HOM-632	Core	FIELD WORK/MINOR PROJECT/PRACTICAL	P	4	-	100	-

There is:

CIE: Continuous Internal Evaluation.

Practical: 100% Internal

ETE: End Term Examination (University Examination).

M.A. Home Science

Details of Sem. wise PG courses

Semester -I		
	Title	Total Marks
Paper-I	Advance Human Development	75
Paper-II	Food Science	75
Paper-III	Extension and Communication concept in community development	75
Paper-IV	Research Methodology	75
Paper-V	Practical Based on Course	100
Total		400

Semester -II		
	Title	Total Marks
Paper-I	Concepts of nutrition	75
Paper-II	Theory of management	75
Paper-III	Fabric construction and care	75
Paper-IV	Children with special needs	75
Paper-V	Practical Based on Course	100
Total		400

Semester -III		
	Title	Total Marks
Paper-I	Therapeutic and community nutrition	75
Paper-II	Communication technologies in extension	75
Paper-III	Fabric ornamentation and apparel designing	75
Paper-IV	Statistics and computer applications	75
Paper-V	Practical Based on Course	100
Total		400

Semester -IV		
	Title	Total Marks
Paper-I	Entrepreneurship management and consumer economics	100
Paper-II	Family guidance and counseling	100
Paper-III	Institutional Food Administration	100
Paper-IV	Dissertation	100
Paper-V	Practical Based on Course	100
Total		500

SEMESTER-I

Paper-I: Advance Human Development

Unit-1:

Human development: Concepts, Principles, Growth and Development.

Pre-natal period and Birth: Development, genetic and environmental factors delivery and birth.

Unit-2:

Infancy: Physical and perceptual development; Cognitive, social and emotional development.

Unit-3:

Early and Middle Childhood: Physical and motor development; Cognitive development; Social and Emotional development.

Unit-4:

Adolescence and Adulthood: Physical development; Cognitive development; Social and Emotional development

Books and References

1. Chaubey BK (1990) A handbook of education extension, Jyoti publication, Allahabad.
2. Singh R (1987) Text book of extension Sahityakala Prakashan, Ludhiana.
3. Extension programme planning, oxford and IBH publishing company Pvt Ltd New Delhi.
4. Agarwal Neeta and Tripathi Akansha - Manav Vikas
5. Rice FP - Human development, A life span approach, NJ Prentice Hall-1965
6. Shrivastava DN and Verma Preeti- Bal Manovigyan Avam Bal Vikas

Paper-II: Food Science

Unit-1:

Introduction to Food Science: Constituents of Foods- General, physical and chemical properties; Colloidal systems; gels; emulsions.
Enzymes: Importance of enzymes and their application in Food Industry.

Unit-2:

Cereals and Cereal Product:Types, composition and structure; Functional properties of starch; Wheat starch and Gluten formation; Properties of amylase and amylopectin.
Fats and Oils: Types and Sources (Animal and Vegetable); Functional properties and uses in cookery.

Unit-3:

Milk and Milk Products: Composition; Uses in cookery; Effects of Heat, Enzymes.
Eggs: Structure, Composition and Grading; Changes during storage; functional properties.
Meat, Fish and Poultry: Structure and composition.

Unit-4:

Pulses and Legumes: Composition and structure; Selection and variety; Functional properties of pulses.
Vegetables: Composition and Classification; Changes occurring during cooking; Pigments and flavour constituents.
Fruits: Composition, changes occurring during maturation and ripening. Pigments and flavour constituents.

Books and References

1. Bealon GH and Bagos JM (eds.) (1996), Nutrition, in preventive medicine WHO
2. Charley H (1982). Food Science (2nd edition), John Wiley & Sons, New York.
3. Mishra Usha and Agarwal Alka- Ahar Avam Poshan Vigyan
4. M Swaminathan- Advanced textbook on Food and Nutrition, Vol. I and II
5. R Rajlakshmi- Applied Nutrition

Paper-III: Extension and Communication Concepts in Community Development

Unit-1:

Community: Definition concept and characteristics of a community; Structure and organisation of different types of communities: tribal, rural and urban.

Social groups and Organisations: Concept types, characteristics of different social groups, interests, attitudes and motivations for affiliation

Community Leadership: Concept, leadership theories; patterns and characteristics of leadership in different communities; Role of leadership in community development.

Unit-2:

Extension: Meaning, changing concept of extension, philosophy, objectives, principles, functions, components of extension. Community Development Programme. ICAR extension system

Unit3:

Extension Teaching: Methods and Process; Steps in extension teaching methods; Teaching Aids; types, characteristics and functions; Role of Media in the Process of learning; Cone of Learning.

Unit-4

Development Communication: Definition, Nature, Role and Significance of Development Communication; Interrelation between Development and Development Communication; Models of Development Communication.

Books and References

1. Communication for development in the third world theory and practices (1991). Sage publication, New Delhi.
2. Chaubey BK (1990). A handbook of education system, Jyoti publication, Allhabad.
3. Dahama OP and Bhatnagar OP - Education and communication for development, Oxford Publication Company New Delhi
4. Harpalani - Prasar Shiksha
5. Kuppuswami B - Communication and Social Development in India, Media Promoters and Publishers Pvt. Ltd. Mumbai
6. Shaw Pushp Geeta, Sheela Jayas - Prasar Shiksha

Paper-IV: Research Methodology

Unit-1

Social Research: Concept, Nature, Scope, Types of Researches in Home Science.

Methods of Social Research: Induction, Deduction, Qualitative, Quantitative.

Historical, Comparative and Evaluative. Formulation and selection of the Research Problems Participatory Research

Unit-2:

Hypothesis: Concept, Types and Significance

Research design: Concept, Types and Significance.

Sampling: Concept, Types and Significance.

Unit-3:

Sources of Data Collection: Primary and Secondary, Field and Documentary.

Tools of Data Collection: Interview guide, Interview schedule, observation and questionnaire.

Methods of Data Collection: Interview, Questionnaire, Observation, Case Study and Projective techniques.

Unit-4:

Measurement and Scaling.

Processing of Data.

Analysis and Interpretation of Data Report Writing.

Books and References

1. Asthana Vipin, Srivastava Vijay- Educational research and statistics
2. Shrivastava DN- Anusandhaan Vidhia
3. Kapil HK- Research methods in Behavioural Sciences
4. Goode and Halt- Methods of Social Research
5. Paras Nath Roy- Anusandhan Parichay
6. Jain Gopal- research Methodology, methods, tools and techniques, Mangal Deep Publication, Jaipur (1998)

Paper-V: Practical

1. Preparation of teaching aids- Charts, posters, flash card, pupette, literature, etc.
2. Visit to a nearby slum area or other places and report writing
3. Sessional work
4. Viva-voice

SEMESTER-II

Paper-I: Concepts of Nutrition

Unit-1:

Minimal Nutritional Requirements and RDA: Formulation and RDA and Dietary Guidelines; Reference Man and Reference Women; Body Composition.
Energy in Human Nutrition: Energy Balance; Assessment of Energy Requirements; Deficiency and Excess.

Carbohydrates: Digestion; absorption and metabolism (Glycolysis, Gluconeogenesis); Regulation of Blood Sugar; Glycemic Index of Foods; Dietary Fibre; Composition, Properties and Nutritional Significance.

Unit- 2:

Proteins: Digestion, absorption and metabolism Assessment of Protein Quality (BV, PER, NPO); Factors affecting bio-availability.

Lipids: Digestion, absorption and metabolism, synthesis and breakdown of unsaturated fatty acids, cholesterol, phospholipids and triacylglycerol.

Unit-3:

Minerals: Requirements, functions, deficiency and toxicity.

Vitamins: Sources, requirements, functions, deficiency and toxicity.

Unit-4:

Nutrition through the life span: Meal planning during adulthood, pregnancy, lactation, infancy, pre-school age, adolescence.

Books and References

1. Gopalan C. (eds.) (1993) Recent Trends in Nutrition, Oxford University press
2. Jallineck G (1985). Sensory Evaluation of Food theory and practices, Ellis Harwood Chicester.
3. M Swaminathan- Advanced textbook of Foods and Nutrition, Vol. I and II
4. R Rajlakshmi- Applied Nutrition
5. Rice FP- Human Development, A life Span approach, N.J. Prentice Hall, 1965.

Paper-II: Theory of Management

Unit-1:

Management: Concept, Objectives, Nature, Philosophy, Principles.

Decision Making: Concept, Types, Modes of Decision Making, Tools and Techniques.

Unit-2:

Planning: Concept, Nature, Purpose, Principles.

Organization: Concept, Nature, Purpose, Principles and Types.

Staffing: Concept, Principles.

Recruitment: Concept, Types, Principles.

Unit-3:

Directing: Concept, Nature, Types and Significance.

Controlling: Concept, Objectives, Principles.

Monitoring and Evaluation: Concept, Tools and Techniques.

Unit-4:

Personality: Concept, Development, and Determinants.

Attitudes: Concept, Difference between Beliefs and Values

Stress: Concept and Management

Books and References

1. Gross IH and Crendall EW Knoll MM-Management for modern families, Prentice Hall Inc. New Jersey 1980.
2. Patani Manju- Gruh Prabandh
3. Mamoria CB, Personnel management, Himalaya Publishing House, Mumbai, 1998.
4. Vishwanath, worker's Participation in management, Mittal publications, New Delhi 1992.
5. Nickell and Dorsey- Management in family living
6. Bakshi BK- Gruh Prabandh

Paper III: Fabric Construction and Care

Unit-1:

Principles of Fabric manufacture: Characteristics and significance of different processes- Woven, Knitted, Laces and Braids.

Weaving: Types of Weaver- Basic and Decorative.

Knitting: Types of Knitting, Properties.

Felts and Non-Woven: Felting process, Knitting, Bonding and lace- making.

Unit-2:

Fabric finishing Methods: Classification of finishes. Singeing, beating, calendaring, weighing, shrinking, mercerization, Parchmentisation, Wash-N-Wear.

Special Purpose finishes: Flame retardant, Water resistant and repellent, antistatic, stain and soil release finish.

Unit-3:

Dyeing with Chemical dyes: Dyes classification, users. Theory of dyeing; Types of dyeing- Stock dyeing, Yarn dyeing, Piece dyeing.

Unit-4:

Laundry Science: Stains- Classification and methods of removal; Soaps and detergents- Composition, manufacturing, application, merits and limitations.

Whitening agents: Types and functions. Dry cleaning agents, methods, advantage and disadvantage.

Books and References

1. Verma Pramila- *Vastra Vigyan Avam Paridhan*
2. Henry, Sapna and Patni Manju- *Parivarik Paridhan Vyavastha*
3. Singh Vrinda- *Vastra Vigyan Avam Paridhan*

Paper IV: Children with Special Needs

Unit-1:

Introduction to Children with Special Need: Definition and terminology; Types of special children; Children at risk- poverty and gender issues; Genetic and environmental factors in disability; Effect of the disability on the child; Need for intervention, education, rehabilitation; Role of family and child care worker.

Unit-2:

The Child with Mental Retardation: Definition and classification; Causes of mental retardation; Identification; Characteristics; Managing children with mental retardation at home; Special educational measures.

Gifted Children: Definition, characteristics of gifted children, identification, special educational measures, role of parents.

Unit-3:

The Children with communication disorders: Definition and meaning; Classification; Causes; Management and education of children with communication disorders.

Unit-4:

Children with behavioural Disorders: Definition; General causes; Types; Behavioural problems associated with Autism.

Books and References

1. Kirk Samuel, Educating Exceptional children, TBH, New Delhi.
2. Bhargava M. (1994)- Introduction to exceptional children, Sterling Publishers, new Delhi.
3. Agarwal Neeta – Manav Vikas
4. Grewel JS (1998)- Early Childhood Education, foundation in Practices, Harprasad Bhargwa Publication, Agra
5. Soni Romila- Early Childhood care and Education

Paper V: Practical

1. Planning, preparation and calculation of meal for different age groups.
2. Table setting and meal presentation.
3. Identification of weave by sample collection.
4. Sessional work
5. Viva-voice

SEMESTER-III

Paper I: Therapeutic and Community Nutrition

Unit-1:

Basic concepts of Diet Therapy: New trends in delivery of nutritional care and dietary counselling.

Energy modifications and nutritional care for weight management: Identifying the overweight and obese; Factors contributing to obesity; Low energy diet and behavioural modifications; Under weight- etiology and assessment; High energy diets for weight gain.

Unit-2:

Diets for Stomach diseases: Gastric and duodenal ulcers; Diarrhoea and Constipation – symptom and dietary management.

Diseases of the Liver: Viral, Hepatitis cirrhosis of liver.

Diabetes Mellitus: Classification, symptoms, metabolic changes and dietary management.

Diseases of Musculo-Skeletal System: Rheumatoid Arthritis, Osteo-arthritis, gout.

Unit-3:

Concept of Community nutrition: Nutritional problems of the Community and its implications for public health. Causes, incidents, signs and symptoms and treatment of PEM, Iron deficiency, Iodine deficiency, Fluorosis and Lathyrism.

Unit-4:

Assessment of Nutritional Status: Meaning, Need, Objectives and Techniques.

Primary Methods: Anthropometric measurement: Weight, Height, Skin Fold Thickness, Head Circumference, Chest Circumference: Use of Growth Chart, Diet Survey.

Secondary Methods: Vital Statistics; Mortality Rates- Crude death rate; Infant Mortality Rate; Maternal Mortality Rate; Survival Rate; Fertility rate

Books and References

1. Potter N, and Hotchkiss JH (1996). Food science, Fifth edition CBS, Publishers and Distributors, New Delhi.
2. Park K. (2000). Park text book of preventive and social medicine, 18th edition, M/S Banarsidas Bhanot, Jabalpur.
3. WHO (1999). Nutrition for health and development progress and prospects. On the eve of the 21st century WHO INHD, 99.9 Geneva.
4. Bakshi BK- Pathyapathay Avum Upchararth Poshan
5. Davidson and Passmore- Human Nutrition and Dietetics
6. Jelliffe- Clinical nutrition
7. Proudfit and Robinson- Nutrition and Diet Therapy

Paper II: Communication Technologies in Extension

Unit-1:

Communication Systems: Types of communication systems- concept, functions and significant interpersonal, organisational, public and mass communication. Elements, character and scope of mass communication. Mass communication- models and theories; Visual communication- elements of visual design- colour, line, form, texture and space; Principles of visual design- rhythm, harmony, proportion, balance and emphasis; Visual composition and editing.

Unit-2:

Media Systems: Trends and Techniques: Concept, scope and relevance of media in society; Functions, reach and influence of media; Media science in India, issues in reaching out to target groups; Contemporary issue in media: women and media, human rights and media, consumerism and media.

Unit-3:

Advertising: Definition, concept and role of advertising in modern marketing system and national economy.

Unit-4:

Elementary Computer Application in Communication: Introduction to Basics of Computers; Report preparations and presentations; Scanning, Designing and Printing.

Books and References

1. Daham OP and Bhatnagar OP- education and communication for development, Oxford Pub, company, New Delhi.
2. Chaubey BK (1990)- A handbook of extension education, Jyoti Publication , Allahabad
3. Joshi Umer (1997)- Textbook of Mass communication and Media, Anmol Publication, New Delhi
4. Shaw, PushpGeeta, Shaw SheelaJayas- PrasarShiksha

Paper- III: Fabric Ornamentation and Apparel Designing

Unit-1:

Dyeing: Tie and Dye and Batik; Dyeing with natural dyes, use of pigments; Dyeing auxiliaries and their use; Dyeing defects and their remedies.

Unit-2:

Printing: Printing methods- Block, stencil, screen, roller, rotary; Printing styles- direct, resist, discharge, photographic, transfer, flock printing; After treatment of printed goods.

Unit-3:

Embroidery: General embroidery techniques; Hand embroidery-knowledge of 25 hand embroidery stitches; Traditional Indian embroidery- Chikankari, Kasuti, Phukari, Kashida, Kantha, Kutch, and Kathiawar.

Appliqué Work and Quilting: Appliqué Work- basic, hand appliqué ; Machined appliqué. Quilting- the art, quilting tools, designs; Basic quilting technique.

Unit-4:

Layout planning: Calculation and estimation of fabric for garment construction, Types of layout.

Fittings of different garments: Principles, common fitting problems for different figure types

Pattern making

Books and References

1. Agarwal Rajni and Gupta Sanjula- Paridhan Nirman Avam Fashion Designing
2. Patni Manju- Vastravigyan Avam Paridhan Vyavastha, Star publication Agra.
3. Tumter GL-Cutting and tailoring
4. Verma Pramila- Vastravigyan Avam Paridhan

Paper IV: Statistics and Computer Applications

Unit-1:

Statistics: Meaning, Uses and Diagrammatic representation of Data Measures on Central Tendency.

Unit-2:

Correlation: Karl Pearson's Rank Correction Coefficient

Index Number

Probability: Concept and Theory

Chi Square

"t" test

Unit-3:

Fundamental of Computer: History of Computers, Generation of Computer, Language, Components, Applications of Computers.

Operating System and Internet: MS-Windows and Internet.

Unit-4:

MS-Office: MS-Word, MS Excel and Power Point.

Books and References

1. Laudon Kenneth C. and London Jane Price, management information system: A complementary perspective, Macmillan Publishing company, New Delhi.
2. Banerjee, Utpal K. and Sachdeva RK. Management information system: A New Framework, Vikas publishing House, Pvt Ltd, New Delhi.
3. Ethens DN- Fundamentals and Statistics

Paper V: Practical

1. Sample preparation- Embroideries, Tie and dye, Batik and printing
2. Article-applique work.
3. Anthropometric measurements.
4. Drafting and stitching 'A' line frock, ladies suit and petticoats
5. Sessional work
6. Viva-voice

SEMESTER-IV

Paper- I: Entrepreneurship management and consumer economics

Unit -1:

Entrepreneurship management: concept need and process of entrepreneurship development enterprise .Types and role.

Entrepreneurship Motivation and competency: Important feature of entrepreneurship personality.

Unit-2:

Concept of consumer economics: consumer and his wants: origin of human wants, characteristics of wants, classification of wants ; demanded : determinants elasticity.

Unit-3:

Consumer protection: Government protection; public protection; standardization of consumer goods and testing methods.

Unit-4:

Market and Marketing: Concept classification – function types wholesale, retail etc.; Marketing environment ,Marketing Strategies-concept, type based on protection , seller , demand .

Market and Market prices: Definition and types of market prices: Pricing under perfect and imperfect competition and monopoly.

Books and References

1. Patel V. women entrepreneurship developing new entrepreneurs Ahmedabad 1987.
2. East Robert (1990) Changing consumer behaviour, Cassal education limited. Artillery House artillery row London.
3. Garman and Thomas etal (1974) the consumers, world buying, Money management and issue, Tata Mcgraw Hills books Co., New York.

Paper-II: Family Guidance and Counselling

Unit-1:

Family Guidance and Counselling: Basic difference in guidance, advice, counselling and therapy, Basic concept, meaning , definition , nature, scope of family guidance and counselling. Guidance and counselling needs of individuals and families systems

Unit-2:

Principals and objectives of family guidance and counselling
Theories and approaches of guidance and counselling
The Indian approach – meditation and yoga exercises.

Unit-3:

Types of counselling
Qualities and skills of a counsellor
Evaluation of guidance and counselling

Unit-4:

Nature of psychological disorders: at different stages that require Counselling:
Child hood, adolescence, and youth, adulthood and old age
Principals of counselling and therapy: Approach to counselling at different development stage, Family therapy approach

Books and References

1. Nichols M.P. ,Schwartz R.C.; Family Theraphy(2004) Aleyn and Bacon Boston.
2. Nelson-Jones, Richard(1999) Introduction to counselling skills ,stage publication new Delhi
3. Palmer Stephen (1999) Introduction to counselling and psychotherapy sage publication , new Delhi
4. Street Eddy (1994) counselling for family problems , sage publication new Delhi

Paper III: Institutional Food administration

Unit -1:

Introduction to food service systems: characteristics of various types of food service unites

Unit -2:

Management of resources: Finance; determining, the finances need to established or run a unit; budgets; sources of finance; planning adequate cash flow

Space for equipment: steps in planning layouts; determining equipment; selection in placement; maintenance of equipment, lay out analysis

Unit-3:

Material: Menu planning established to different system; Recipe and development and standardization of yield.

Staff: Man power planning, man power placement, recruitment, introduction motivation in performance appraisal.

Unit -4:

Cost accounting/analysis: Food cost analysis; record to maintained; report and trend analysis, marketing in sales management; marketing strategies, sales analysis, market promotion.

Books and References

1. WHO (1999) nutrition for health and development progress and prospects .on the eve of the 21st century WHO INHD, Geneva.
2. Gopalan C.(eds) (1993) Recent trends in Nutrition
3. Mohini Sethi- Institutional management
4. M Swaminathan- Advanced textbook on Food and Nutrition, Vol. I and II
5. Mishra Usha and Agarwal Alka- Ahar Avam Poshan Vigyan

Paper IV: Dissertation

Paper V: Practical

1. Fancy recipes – preparation
2. Planning menu for quantity – banquet, outdoor catering, packed meal and restaurant
3. Sessional work
4. Viva-voice