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SCHEME OF EXAMINATION
&
SYLLABUS
of
M.A. (Home Science) Semester Exam

UNDER

FACULTY OF SCIENCE

Session 2023-24

(Approved by Board of Studies)
Effective from June 2023

30/05/2023 30.5.2023 30.5.23 30/5/23 30/5/2023

M.A.(Home Science)

Session 2022-23

1st Semester

S.No.	Paper No.	Title	Credit
1	Paper I	Basics of Food & Nutrition	04
2	Paper II	Clinical & Therapeutic Nutrition	04
3	Paper III	Extension Education I	04
4	Paper IV	Research Methodology	04
	Practical	Food Science & Nutrition	04
		Total credit	**20**

M.A. (Home Science)

Session 2022-23

2nd Semester

S.No.	Paper No.	Title	Credit
1	Paper v	Textile & clothing	04
2	Paper VI	Textile Designing	04
3	Paper VII	Extension Education II	04
4	Paper VIII	Statistics and Computer Application	04
	Practical	Textile & clothing	04
		Total credit	**20**

M.A. (Home Science)

Session 2023-24

3rd Semester

S. No.	Paper No.	Title	Credit
1	Paper IX	Human Development I	04
2	Paper X	Human Development II	04
3	Paper XI	Nutrition of Women & Children	04
4	Paper XII	Health & Fitness	04
	Practical	Human Development	04
		Total credit	**20**

M.A. (Home Science)

Session 2023-24

4th Semester

S.No.	Paper No.	Title	Credit
1	Paper XIII	Resource Management I	04
2	Paper XIV	Resource Management II	04
3	Paper XV	Food Preservation	04
4	Paper XVI	Entrepreneurship	04
	Practical	Resource Management & Entrepreneurship	04
		Total credit	**20**

Syllabus for MA (Home Science)

I Semester Part-I Theory

Internal Marks- 20

		Theory	Test	Semi	Total
I	Basics of Food Nutrition	80	10	10	100
II	Clinical & Therapeutic Nutrition	80	10	10	100
III	Extension Education -I	80	10	10	100
IV	Research Methodology	80	10	10	100
	Practical – Food Science and Nutrition				100
	Total				500

II Semester

Internal Marks- 20

		Theory	Test	Semi	Total
V	Textile & Clothing	80	10	10	100
VI	Textile Designing	80	10	10	100
VII	Extension Education – II	80	10	10	100
VIII	Statistics & Computer Application	80	10	10	100
	Practical – Textile & Clothing				100
	Total				500

III Semester Internal Marks- 20

		Theory	Test	Semi	Total
IX	Human Development – I	80	10	10	100
X	Human Development – II	80	10	10	100
XI	Nutrition of Women & Children	80	10	10	100
XII	Health & Fitness	80	10	10	100
	Practical – Human Development				100
	Total				500

IV Semester Internal Marks- 20

		Theory	Test	Semi	Total
XIII	Resource Management – I	80	10	10	100
XIV	Resource Management – II	80	10	10	100
XV	Food Preservation	80	10	10	100
XVI	Entrepreneurship	80	10	10	100
	Practical – Resource Management and Entrepreneurship				100
	Total				500

MA (Home Science) I Semester

Paper I

BASICS OF FOOD AND NUTRITION

Marks: 80

Objectives:

This course will enable the student to

1. Understand the functions of food and the role of various nutrients, their requirements and the effects of deficiency and excess (in brief).
2. Learn about the structure, composition, nutritional contribution and selection of different foodstuffs.
3. Be familiar with the different methods of cooking, their advantages and disadvantages.
4. Develop an ability to improve the nutritional quality of food.

Theory: Unit-1

1. Concept of Nutrition – Food; Nutrients, Nutrition, Under and over Nutrition, Health.
2. Functions of Food.
3. Food groups, Balanced diet.

Unit-2 Nutrients: Macro nutrients

Classification, sources, functions Recommended dietary allowances Deficiency and excess (in brief) Water.
Carbohydrates, Fats
Protein, Fiber

Unit-3 Calcium
Iron, Magnesium, Zinc, Fluorine
Iodine, Selenium, Copper, Manganese Fat-soluble vitamins (A,D,E,K)
Water soluble vitamins (Thiamine, Riboflavin, Niacin) Vitamin C, Folic acid
Pyridoxine, Pantothenic acid, B12

Unit-4 Food Production (in brief), Food Composition Structure nutritional contribution and selection factors for the following

Cereals and millets, Pulses
Fruits Vegetables
Milk and milk products, Nuts and oilseeds
Meat, fish and poultry
Eggs
Sugar
Tea, coffee, cocoa, chocolate and other beverages
Condiments and spices
Processed foods

Unit-5 Methods of Cooking, their Advantages and Disadvantages and Effect on Nutritive Value

Improving Nutritional Quality of Foods
Germination
Fermentation
Supplementation
Substitution
Fortification and enrichment

References:

Robinson, C.H., Lawler, M.R. Chenoweth W.L. and Garwick, A.E. (1986): Normal and therapeutic Nutrition, 17th Ed., Macmillan Publishing Co.

Swaminathan, M.S. (1985): Essentials of Food and Nutrition VI: Fundamentals Aspects VII: Applied Aspects.

Hughes, O., Bennion, M. (1970): Introductory Foods, 5th Edn., MacMillan Company.

Williams, S.R. (1989): Nutrition and Diet Therapy, 4th Edn., C.V. Mosby Co.

MA (Home Science) I Semester

Paper II

CLINICAL AND THERAPEUTIC NUTRITION

Marks: 80

Focus:

The course encompasses the various stages of the life cycle and how nutrition is critical at various stages. It briefly familiarizes students with the role of nutrition in common elements.

Objectives:

This course will enable the student to

1. Understand the concept of an-adequate diet and the importance of meal planning.
2. Know the factors affecting the nutrient needs during the life cycle and the RDA for various age groups.
3. Grain knowledge about dietary management in common ailments.

Theory:

Unit-1 Definition of Health & Nutrition

Dimensions of Health (Physical, Psychological, emotional & Spiritual)

Energy Requirements – Factors affecting energy requirements.

BMR, Activity, age, climate, diet – induced thermogensis (SDA physiological conditions).

Concept of nutritionally adequate diet and meal planning.

(a) Importance of meal planning

(b) Factors affecting meal planning

Nutritional, Socio-cultural, Religious, Geographic, Economic, Availability of time.

Unit-2 Nutrition through the life cycle.

(At different activity and Socio economic levels) requirements, nutritional problems, food selection.

(a) Adulthood
(b) Pregnancy
(c) Lactation
(d) Infancy

Unit-3 Principles of diet therapy

Pre-school

Adolescence

Old age

Modification of normal diet for therapeutic purposes, full diet, soft diet, Fluid diet, Bland diet.

Energy modification and Nutrition for weight management.

Identifying the over-weight and obese a etiological factors contributing to obesity, prevention and treatment, low energy diets.

Unit-4 Etiology, symptoms & diet management of the following-

Underweight – etiology and assessment, high energy diet. Diet for Febrile conditions & surgical condition.

Nutritional Anemia

Fevers – Typhoid

Diarrhoea, Constipation, Peptic ulcer, Jaundice, Viral Hepatitis, Cirrhosis.

Unit-5 Diet in disease of the endocrine-

Pancreas – Diabetes mellitus – classification, symptoms, diagnosis, dietary case & nutritional, management of diabetes mellitus. Insulin therapy, oral hypoglycemic agents, special dietetic food, sweetners & sugar substitutes, diabetic coma, Junvenile diabetes.

Disease of the cardio vascular system –

Atherosclerosis Etiology & risk Factors.

Hypertension – Etiology, prevalence Nutritional management & prevention.

Renal diseases – Etiology, characteristic.

Symptoms & Dietary management of Glomerulonephritis Acute & Chronic.

References :

1. Krause, M.V. and Mohan, L.K. 1986: Food, Nutrition and Diet Therapy, alan R. Liss. Saunders Co.,London.
2. Passmore, R. and Davidson, S. 1986: Human Nutrition and Dietetics, Livingstone Publishers.
3. Robinson, C.H., Laer, M.R. Chenoweth, W.L. Ganwick, A.E. 1986: Normal and Therapeutic Nutrition, MacMillan Publishing Company, NewYork.
4. Williams, S.R. 1989: Nutrition and Diet Therapy, 4th Ed., C.V. MosbyCo.
5. Shils, M.E. Olson, J.A. Shike, M. Eds. 1994 : Modern Nutrition in Health and Disease, 8th edn., Lea and Febiger a WaverlyCompany.

MA (Home Science)
I Semester
Paper III
EXTENSION EDUCATION - I

Marks : 80

Theory:

Unit-1 1. Concept of Education

(a) Meaning of Extension

(b) Origin of Extension

2. Extension Education Process

(a) Environment for learning

(b) Role of educator

(c) Role of the people participants.

Unit-2 1. Concept of adult / non-formal education

(a) Meaning

(b) Purpose

2.Communication process

3.Planning at different levels – National to Grassroots.

Unit-3 1.Programmes to enhance food production

(a) National food production programmes.

2.Poverty alleviation efforts.

(a) Programmes for poverty alleviation for rural and urban areas.

(b) Current programmes for rural and urban poor.

Unit-4 Programmes for women and children

Women as target groups – specific measures for women and children such as DWCRA, ICDS, IMY. Current programmes for women as initiated and implemented by the different ministries and departments.

Unit-5 Advertising Media

Different media for advertising – print media, newspapers and periodicals.

Broadcast media – Television – Films.

Non-media advertising.

Outdoor advertisement – Hoardings, Posters, Black Board, Bulletin Boards, Electronic signs, Letter bins, Aerial methods.

MA (Home Science)
I Semester
Paper IV
RESEARCH METHODOLOGY

Marks: 80

Unit-1

1.

1. Science, scientific methods and approach
2. Social research and survey: Meaning, definition, nature, scope, objects, types. Distinction between social survey and research.
3. Pretesting and pilot survey.

Unit-2

1. Fact, theory and concept.
2. Hypothesis: Definition, sources, characteristics, importance, main difficulties in the formation of hypothesis, disadvantages.
3. Sources of data: Primary and secondary sources.

Unit-3

1. Methods or techniques of data collection.
   a. Observation
   b. Interview
2. Schedule
3. Questionnaire
4. Case-study

Unit-4

1. Sampling: Meaning, characteristics, advantages and disadvantages.

   Types : - Random sampling

   a. Purposive sampling
   b. Stratified sampling
   c. Other sampling method

2. Classification and tabulation of data

Unit-5

Analysis and interpretation of data.
Preparation of the report.
Diagrammatic presentation of data.

PRACTICAL
(Food Science and Nutrition)

Marks: 100

Theory:

1. To acquire skills in food preparation techniques
2. To use appropriate methods of cooking for preparation of specific food products.

1. Weights and Measures, standard and household measures for raw and cooked food.
2. Cereal and flour mixtures – basic preparations (15+3).
   - i. Boiled rice and rice pulao
   - ii. Chapati, puri, paratha
   - iii. Sandwiches
   - iv. Pastas
   - v. Pancakes, biscuits, cookies,cakes
3. Pulses and legumes – using whole dehusked and sprouted
4. Vegetables Preparation of Simple salads , Dry vegetables &Curries

5. Planning and preparation of normal and therapeutic diet in relation to special nutrient requirements

1. Infancy &Childhood
2. Pregnancy &Lactation
3. Constipation & Diarrhoea
4. Under-weight &Overweight
5. Peptic ulcer
6. Jaundice, Viral Hepatitis, Cirrhosis
7. Acute glomerulonephritis
8. Chronic glomerulonephritis
9. Diabetes mellitus
   - (i) With Insulin
   - (ii) Without Insulin
10. Hypertension, Atherosclerosis

MA (Home Science)

II Semester

Paper V

TEXTILE &CLOTHING

Marks : 80

Objectives:

1. To develop understanding of different types at fibers, yarns and finishes.
2. To gain practical knowledge of dyeing, printing and weaving.
3. To develop the skills of making paper pattern for different types of garments.

Theory:

Unit-1

1. Classification of Textile fibers – Manufactures process, properties and uses of – Natural fibres – Cotton, Silk, Wool, Synthetic fibres – Polyester, Nylon, Acetate.
2. Types of yarns – Simple, Novelty, Textured yarn, Yarn formation – Mechanical and chemical spinning uses of yarns.

Unit-2

Knitting – Types of knits – Warp & weft knit advantages and disadvantages of knits and their uses.

Non-woven – Felts, Bonded fabric, their uses, Braiding.

Unit-3

1. Finishes – Purpose of finishes
2. General finishes – Scouring, Bleaching, Tentoring, Singeing and Sizing.
3. Special finishes – Mercirizing, special calendaring waterproof and water repellent fire proof wrinkle resistant, shrinkage control.

Unit-4

1. Dyeing – Classification of dyes – Natural and Synthetic.
2. Different types and their suitability to different fibre, direct, acid, basic mordant, Vat Sulphur, Reactive acetate, Azo dyes and pigment colors.
3. Different dyeing methods – Fiber dyeing, yarn dyeing and piece dyeing.

Unit-5 Principles of Clothing Construction

General principles of clothing construction. Drafting and making paper patterns. Taking body measurements for different types of garments. Preparation of fabrics for garment making. Laying out of patterns, cutting and marking.

MA (Home Science)
II Semester
Paper VI
TEXTILE DESIGNING

Theory:

Marks : 80

Unit-1

Experiments and principles of design: Meaning methods of creating importance.

Elements of principles of design as applied, to apparel designing – Harmony, balance proportion, Rhythm & emphasis.

Elements: Lines, shapes / forms.

Colour consideration: Definition, Dimensions, characteristics colour systems and colour schemes.

Unit-2

Classification & Process of designing – Structural

Decorative Realistic Abstract Stylized Geometric Traditional

Big & small design

Unit-3 Fashion – Definition

- Fashion trends in India &changes
- Theories
- Body measurements
- Tailoring tools and equipment's
- Methods of taking body measurements for different garments
- Importance

Unit-4 Fashion Illustrations –

- Pattern making techniques
- Flat pattern
- Drafting
- Draping
- Disposals of fullness
- Plackets
- Frill and gather
- Pleats and tucks
- Darts
- Patchwork
- Seams and seam finishes

Unit-5 Fundamentals of Embroidery –

- Techniques, design colour, uses of different combination –threads;
- Embroidery stick –Types
- Types of thread, needle, used for different fabrics.
- Study of traditional Embroideries of India.
- Kasida of Kashmiri
    - Kantha of Bengal
    - Chichenkari of Lucknow
    - Kutch & kathiawan
    - Kasuti of Karnataka
    - Phulkari of Punjab
    - Gold & Silver (Zariwork)
    - Appliqué work

MA (Home Science)

II Semester

Paper VII
EXTENSION EDUCATION-II

Marks : 80

Objectives: To enable students to -

1. To enable students understand the methods of teaching Home Science.
2. To acquaint the students about the role of extension – education in community development.
3. To create awareness about the role of NGO's in community development.
4. To create an awareness about the importance of public relations.
5. To understand the various programmes, favoring the wellbeing of the community.
6. To develop faith in the capacity of the people to take responsibility for their own development.
7. To understand the role of "leaders" in community development.

Theory:

Unit-1

1. Definition, Philosophy and objectives of Home – Science, Career opportunities in various branches of Home –Science.
2. Methods of teaching Home Science, Importance of Methods.
3. Selecting the methods and making the method effective. Role of Home Science in helping to solve the problems of the community.

Unit-2

1. Definition, scope, philosophy and objectives of extension education. Methods of teaching Extension – education, classification of the methods.
2. Role of the extension worker in community development. Role, function and contribution of Gram Sevika, Mahila Mandals, Youth Clubs, NGOs and other local agencies in Extension – Education.
3. Contribution of U.N. Agencies towards Extension – education – UNESCO, UNICEF, UNDP, ECOSOC, U.N. resolution1325.

Unit- 3 Public Relations

1. Need for public relations prospects, of advertisement, campaign and propaganda in effective communication.
2. Media for social changes: Role of media in social change. Development, communication planning, organization, administration and evaluation of development communication programmes.
3. New avenues for development communication, literacy, women and development, human rights, environment. Research and feedback.

Unit- 4

1. Adult education its meaning and objectives. Various adult education programmes in India.
2. Population education: Definition causes and effect of population growth. Scope of Family planning services health aspect of family planning, National Family Welfare Programmes.
3. Social education: Its meaning and objectives. Social education programmes in India.

Unit- 5 Leadership in Extension

1. Definition of leadership, need and importance, types of leadership.
2. Methods of identifying and selecting local leaders in extension work. Role and qualities of local leaders.
3. Leadership training.

References:

1. Dr. S.V. Supe. An introduction to Extension –Education.
2. Reddy A. (1997). Extension education, Sri Lakshmi Press.Bapatla.
3. Education and communication for Development.
4. O.P. Dahama and D.P.lBhatnagar.
5. C.L. Adivi Reddy – Extension Education
6. Ray G.L. – Naya Prakash, Calcutta (1999).Extension
7. Communication and Management.

MA (Home Science)
II Semester
Paper VIII
STATISTICS AND COMPUTER APPLICATION

Marks: 80

Theory:

Unit-1

1. Statistics: Meaning, definition, scope, importance, characteristics, distrust of statistics.
2. Measurement of central tendency:
    a. Mean
    b. Median
    c. Mode

Unit-2 Graphic presentation of data: Importance, types

- Histogram
- Frequency polygon
- Frequency curve
- Correlation: Definition, meaning and types.
- Methods of determining coefficient of correlation
    - Product moment method
    - Rank correlation

Unit-3 Introduction to computers

What is computer? Characteristics, components of computer system, block diagram of computer, CPU, I/O devices and memory (RAM and ROM), secondary storage devices (Hard disk, floppy disk, magnetic tape etc.)

Analysis of variance

- One way method: Direct and short-cut.

Unit-4 Computer generations

Classification of computer: Analog, digital, hybrid, general and special purpose computers.

Types of computer: Micro, mini, mainframe and super computer.

Chi-square test and goodness to fit.

Application of student t test for small samples.

Unit-5 Working with MS-Word:

1. Getting started with word, formatting text and paragraph. Applying text and language tools. Designing pages with columns and tables, using graphics.
2. Methods of dispersion and variation
    a. Mean deviation
    b. Standard deviation
    c. Quartile deviation

PRACTICAL: (Textile & and Clothing)

Marks: 100

1. Preparation of paper pattern for all age groups
    a. Creeping age
    b. Preschools
    c. For Children wear
    d. For men's wear
    e. For Ladies wear
2. Adoption of the basic block to various clothes & their stitching Saree – Blouses, Salwar, Chudidar Kameez, Petticoats, Frock.
3. Making samples of traditional embroideries of India (any five)
    a. Kashida of Kashmir
    b. Kantha of Bengal
    c. Kasuti of Karnataka
    d. Kutch Kathiawar
    e. Phulkari of Punjab
    f. Chikankari of Lucknow
    g. Gold & Silver (Zariwork)
4. Free hand sketching of simple objects involving various shapes and forms.
5. Drawing designs for various textile articles by adopting principles of design.
6. Drawing and colouring a colour wheel.
7. Painting designs with different colour schemes.
8. Reducing & enlarging a design.
9. Creating various textures.
10. Identification of Textile Fibres
    a. Visual, Microscopic, burning and chemical
11. Garment Construction
    a. Drafting, cutting and stitching of simple garments, such as vest and bib. A- Line Dress and Knickers. Sun suit /romper.

References:

1. Bane, A. 1974: Tailoring, MacgrawHill.
2. Bane, A. 1979: Flat pattern design, McgrawHill.
3. Brary Nathalie 1978: Dress Pattern Designing London, Crossby Lockwood & Staples.
4. Gilelle, D.A. Berte, B.: Figure Types and Size Ranges, Fairchild Publication.
5. Goublourn M. 1971: Introduction pattern cutting, Grading and Modelling, London, B.T. BatsfordLtd.
6. Goldsworthy 1980: Simple Dressmaking, Londown, Mills and BoonLtd.
7. Littman Conie 1977: Pattern making design, Litton Educational Publishing Inc.
8. Muka A. 1979: French Touch, Pittsburgh, Wolfson Publishing Co.,Inc.

M.A. (Home Science)
III Semester
Paper IX
Human Development-I

Max Marks 80

Objective:-

- To Make Students aware of Human Development.
- To enable students become aware of early childhood education.
- To make students aware of changes and problems of adolescents.
- To enable students understand the importance and use of different psychometric tests.
- To get acquainted with the process of counseling.

Theory

Unit I-

The study of Human Development

i. The Three domain

- Biosocial Development
- Cognitive Development
- Psychological Development.

ii. Methods of child study.

- Scientific method, Steps.
- Observation method–
  Theoretical perspective: Use of checklist, establishing reliability in observation, maintaining observation record, report writing and evolution.
- Interview method–
- Theoretical perspective, Development of different types of interview Protocols, analysis and coding of interview data.

Unit II-

- Questionnaire method–

  Theoretical perspectives, development of different types of questionnaire protocols, analysis and coding of questionnaire data.

- Experimental method–

  Theoretical perspectives, merits and demerits.

Case Study.

Theoretical perspectives, development of different types of case study protocol, analysis and coding of data.

Unit III

iii. Psychological Testing –Nature and Uses of psychological tests function and origin Psychometric method.

- Scale for infant assessment
- The Wechsler battery of tests
- Children Apperception test
- Draw a man test

Unit IV

Basic concepts and facts about HIV/AIDS

- Transmission of HIV infection, sign and symptoms of AIDS
- Diagnosis of HIV infection
- Management & care of HIV infected persons
- Prevention of HIV infection
- Counselling of HIV/AIDS person

Unit V

Theories of Personality

i. **Personality and their Types-** Personality Theory by All port and Murphy Adler's theory of Individual psychology, John Locke

ii. **Cognition –** Meaning of cognitive psychology. Piaget's theory of cognitive development.

iii. Contribution and short coming of theory

30/5/23

M.A. 3rd Semester (Home Science)
Paper-X
Human Development-II

Max. Marks-80

Unit-I

Early Childhood care and education ECCE.

i. Importance, need and scope of ECCE

Objective of ECCE Type of preschools- play centers, day care, Montessori, kindergarten, Balwadi, anganwadi etc.

ii. ECCE in India

Pre Independence Period, Post Independence-

Kothari commission, Contribution of five year plan to ECCE Yashpal committee, Maharashtra preschool centre Act.

Unit II

i. Organization of preschool Centers.

Concept of Organization and administration of early childhood centers, Building and equipment:-

Location and site arrangement of rooms, different types and size of room, play ground storage facility, selection of different types of indoor and outdoor equipments.

ii. Role and responsibilities of care giver/ teacher.

Record and Report.

Types – aim and purpose/need, general, characteristic, e.g. anecdotal, cumulative sample work, medical etc.

Unit III

Childhood, creativity and counseling

i. Early Childhood –characteristics, Developmental task skills of early childhood, Emotions during early childhood, Socialization and social behavior, Happiness and Hazards during early childhood.

ii Late childhood –characteristics, developmental tasks, skills of late childhood, hazards and happiness of late childhood, moral Development.

Theory of Kohlberg – behavior during late childhood.

Unit IV

i Definition and concept of creativity types and degree of creativity (everyday creativity and

eminent creativity Domains Insight and problem solving as related to creativity. Approaches to the study of creativity mystical approach (divine gift)

- Psychology dynamical approach(Freud)
- Psychometric approach (Guilford and Torrance)
- Cognitive approach(Weisberg)
- Social personality approach(Weisberg)
- Social personality approach(Mackinnon)
- Confluence approach (Gardner – enhancing creativity –Brain Storming problem solving, creative dynamics and visualization.)

ii Counseling - History of counseling Meaning – Need, Objectives, Functions, Qualities and Skills of counselor, Distinction, between Guidance and counseling,

Unit V Puberty and adolescence

Puberty - Characteristics causes of Puberty, Primary and Secondary Sex Characteristics, Developmental, Tasks, problems during puberty, Happiness and interest, Vocational interest, self-discipline and family relationship,

Adolescence – Characteristics, Developmental Tasks, physical changes, during Adolescence, sex interest and sex behavior and causes of family during adolescence, Hazards and Happiness.

Mental health needs: Sense of identity autonomy, individualism, problems related to physical appearance development and relationship. Problems related to sexuality.

Reference Books

1. Child Development by Elizabeth Hurlock
2. Developmental psychology by Elizabeth Hurlock
3. Nursery school by Katherina Read
4. Nursery in India by Pramila Barookh
5. The psychology of Adolescents – A.T. Jersild 7th Edition Prentic Hall

MA (Home Science) III Semester

Theory: Unit-I Paper XI

Nutrition of Women and Children

Marks: 80

1. Role of women in national development.
2. Women in family and community:
   Demographic changes, menarche, marriage, fertility, morbidity, mortality, life expectancy, sex ratio, ageing, widowhood.

Unit-II

Women and health:

1. Policies and programs for promoting maternal and child nutrition and health.
2. Concept of small family. Methods of family planning, merits and demerits.

Unit-III

Importance of Maternal Nutrition

1. Importance of Nutrition prior to and during pregnancy – prerequisites for successful outcome. Effect of under nutrition on mother and child including pregnancy outcome and maternal and child health – short term and long term effect.
2. Nutritional requirements during pregnancy:
   Adolescent pregnancy, pregnancy and T.B., IUGR, gestational diabetes.

Unit-IV

1. **Lactation:**
   Development of mammary tissue and role of hormones.
   Physiology and endocrinology of lactation – Synthesis of milk components – lactation, effect of breast feeding on maternal health
2. Human milk composition and factors effecting breast feeding. Human milk banking.
3. Management of Lactation:
   Prenatal breast feeding, skill education, Rooming in problems- sore nipples engorged breast, inverted breast.
4. Exclusive breastfeeding

Unit-V

1. **Infant physiology:**

   Pre-term and low birth weight infant – implication for feeding and management.

2. Feeding of infants and children and dietary management.
3. Malnutrition –Etiology and management.

MA (Home Science) III Semester
Paper XII Health and Fitness

Marks: 80

Theory: Objective

This course will prepare the students to –

- Understand the components of health and fitness and the role of nutrition.
- Make nutritional, dietary and physical activity recommendations to achieve fitness and well-being.
- Develop ability to evaluate fitness and well–being.

Unit-I

1. **Definition, components of fitness**
   a. Anatomical fitness
   b. Physiological fitness
   c. Psychological fitness

   - Physiological fitness:

   (a) Growth and development (b) Strength (c) Speed (d) Skill (e) Stamina or endurance, specific fitness, general fitness and health status.
2. Holistic approach to the management of fitness and health: Energy input and output, physical fitness and health inter-relationship.

Unit-II

1. Review of different energy systems for endurance and power activity:
   a. Endurance: Definition, classification of endurance, factors effecting endurance.
   b. Fuels and nutrients to support physical activity:
2. Nutrition in sports: Sports specific requirement.

Unit-III

1. Pre game and Post game meals. Assessment of different mutagenic acids commercial supplements.
2. Diets for persons with high energy requirement, stress.
3. Water electrolyte balance: Effect of dehydration.

Unit-IV

1. Significance of physical fitness in the prevention and management of:
   i. Diabetes mellitus ii. Cardiovascular disorders iii Bone health and obesity
2. Nutrition and exercise regimes for pre and post natal fitness.

Unit-V

1. A. Defining nutritional goals/guidelines appropriate to health and prevention and management of the chronic degenerative disorder-
   (a) Cardiovascular disorders (b) Diabetic mellitus
   B. Various dietary regimes for weight reduction.
2. Alternative systems for health and fitness like Ayurveda, yoga,

M.A. (Home Science)
III Semester

Practical (Human Development)

Max Marks 100

1. Visits to various centers, which cater to the preschool stage e.g. Day care center, Balwadi, Anganwadi, Mobile Crèches.
2. Preparing a resource unit file on the basis of play way method/approach.
3. Preparing teaching material kit and presentation in mock setup.
4. Story and their techniques, types of puppets and mobiles. Art and craft portfolio, song booklet and low cost musical instruments. Readiness games and material picture tails and object talk related materials etc.
5. Tests of creativity torrance test of creative thinking (TTCT) Baqure Mehdi's Indian adaptation.
6. Use of parne's 5 stage method creative problem solving.
7. Use of consensual assessment technique to rate the creative work of children and adults (stories, poems and art work)
8. Conducting parent teacher meetings.
9. Reports and resource files to be maintained by students.

M.A. (Home Science)
IV Semester
Paper XIII
Resource Management -I

Max Marks 80

Objective:-To enable students to –

1. Understand various concepts and principles of management and its functions.
2. Understand the significance of management in changing environment.
3. To develop the ability to use motion and time techniques.
4. To create awareness about resources.

Theory

Unit -I

1. Aspect of home management–
   a. Concepts of home management.
   b. Activities involved in home Management
   c. Development of Managerial ability.
   d. Methods of evaluating ability.

2. Decision Making
   a. Steps of decision making
   b. Modes of decision making –individual group, scientific, snap.
   c. Techniques and tools for decision making
   d. The role of decision making in home management
   e. Stress and conflict during decision making.

Unit –II

1. **Management as a system-**
   a. Definition and elements of general system theory.
   b. Advantages and limitations of system approach.
   c. Comparison of linear and systems thinking.
   d. Application of Resource Management in families and institutions

2. **Time Management–**
   b. Nature of Time
   c. Time demands in different stages of family lifecycle.
   d. Leisure's.

3. **Energy Management–**
   a. Nature of Energy.
   b. Energy demands in different stages of family lifecycle
   c. Fatigue – (i) Physiological (ii)Psychological

Unit –III

1 **Money Management**
   a. Definition, meaning and importance
   b. Role of woman in managing family income budgets.
   c. Techniques used in money management.
   d. Contribution of working women in improving economic conditions.
   e. Family security.

2 **Household equipments and ergonomics**
   b. Trends in equipments available in market.
   c. Equipments in the Indian Homes. Rural and Urban families.
   d. Selection of households' equipments according to ergonomics.
   e. Ergonomics in Home – Anthropometric dimension of workers at work and at rest normal and maximum vertical and horizontal reaches.

3 **Work Simplification**
   a. Meaning and Importance of work simplification.
   b. Principles and techniques of work simplification.
   c. Wrong works Practices.

Unit –IV

1 Community Services/Resources:

a. Definition, importance in daily life, local and National development.

b. Reality and problems of community services.

c. Role of home makers in management of these resources.

2 Resident Course:

a Concept and Importance of residence course.

b. Values, Goals, Standards, and decision making in resident course.

c. Organization of house.

d. Rotation of duties.

e. Evolution of managerial abilities

Unit –V

1 Employment status of woman in India.

a. Need of Self-employment.

b. Agencies promoting self-employment to woman

c. Function of Commercial Banks, Districts Industries Co-operative societies

2. Family Health Management.

a. Contribution of public and private agencies in maintaining family health.

b. Planning of preventive measures.

c. Annual budget for family medical care.

References:

1. Management for Modern families – Gross and Crandall
2. Management in family living – Nickel and Dorsey
3. Motion and Time Study – Alph M.Barnes
4. Work Simplification _ Gerold Nadler
5. Time and Motion study–Mundel
6. Money Management context & concepts R.E. Dean and F.M. Fire

bough (Houghton Muffin Co-Bostan1975)

7. Modern Management Issues and Ideas –Davud R.Hamption.
8. Management a decision making approach – Young Stanley.
9. Ergonomics of Home –Francis and TaylonCo.
10. प्रगत गृह व्यवस्थपन – डॉ आशा निर्मलकर

M.A. (Home Science)
IV Semester
Paper XIV Resource Management -II

Max Marks 80

Objective:-To enable students to –

To enable students –

1. To recognize the family needs in relation to housing responsibilities, housing and interiors.
2. To acquire basic knowledge of principles involved in residential houses and its interiors.
3. To provide knowledge of the principles and methods of creating attractive interiors.

Theory

Unit –I

1. **History of housing-**
   - Concept of housing.
   - Changes in housing need and standards.
   - Housing values and goals at the present time.

2. **Housing in India as affected by trends in-**
   - Population
   - Economics Status.
   - Occupation and family mobility.
   - Social and cultural status.

Unit –II

1. **Cost of house and finance for housing-**
   - Factors influencing house.
   - Estimation of the cost of housing.
   - Ways to control and economizing the cost of housing.
   - Different public and private loan scheme for housing.

2. **Concept of Vastu shastra in housing**

- Historical background
- Placement of rooms
- Location of wall
- Placement of doors
- Placement of accessorie

Unit –III

1. **Landscaping**
   - Importance.
   - Approaching, landscape design with an artistic touch space, line, form, texture, color, balance, rhythm, scale and proportion.
2. **Bonsai**
   - History
   - Preparation of soil
   - Selection of plants
   - Potting and repotting
   - Selection of containers
   - Care

Unit –IV

1. **Furniture-**
   - An important component of interiors
   - Modern trends-wrought iron, nu-wood, syntax, press –woods, cane and molded furniture.
2. **Home Furnishing-**
   - Window Treatment – 1 draperies 2. curtains 3. roller shades 4. valences
   - 5. Venetian blinds
3. **Upholstery fabrics-**
   - Selection of fabrics
   - Wall treatment – wall paper, paints, tiles.
   - Accessories a. hanging b. relation of pictures to room other accessories.

Unit –V

1. **Environment Management-**
   - Fundamental principles of environment and natural re-sources management.
   - Basic concept of ecology and its application in industrial ecology.
2. Role of International organizations in environment management.

M.A. (Home Science)
IV Semester
Paper XV Food Preservation

Max Marks 80

Theory

Unit I

1. Food and It's Preservation
2. Home and Community level Including commercial operations.
3. Principles of food preservation.
4. Causes of spoilage of food.

Unit II

1. Fresh food storage
2. Principles Plant product.
3. Storage, animal product.
4. Storage. Effect of Storage.
5. Condition on Quality
6. Canning – Principles and methodology influence of caning on food quality storage of canned foods.

Unit III **Pasteurization**

1. Effect of food quality
2. Storage of pasteurized food.
3. Drying &Dehydration
   Methods Used and effect on food quality. Types of driers. Storage and deterioration of dehydrated food products.

Unit IV **Use of low temperature**

Refrigeration and freezing methods, principles and application, preparation of foods for freezing influence on food components and structure self-life of frozen foods.

Fermentation

Pickles, Chutneys, ketchups sauces, fermentation- types, products and method uses Establishment of a small scale –industry/cottage industry.

Unit V **Chemical Preservatives**

Preparation of Fruit, Juices squashes, Fruit Syrups, Cordials, Jam , Jelly.

High Acid &High Sugar Products

Common defects, Preservation of crystallized and glazed fruits

Nutritional Implications of food processing

Causes for loss of vitamins and minerals. Enrichment. Restoration and fortification.

Reference:-

1. Oser. B.L.1965: 14 Ed Hawk's Physiological Chemistry, MC Graw Hill BookCo.
2. William S.: 16 The Ed JAOAC Official Methods of Analysis Part I to XI, Manak Bhawan New Delhi.
3. West E.S. Todd W.R. Mason, H.S. and Van Barageen J.T. 1974 4th Ed Text book of Biochemistry, Amerind publishing Co. Pvt. Ltd.
4. Devlin, T.M. 1986: 2nd Ed. Textbook of Biochemistry with clinical Correlations John witey and sons.
5. Murray R.K. Granner, D.K. Mayes P.A. Nd Rodwell V.W. 1993 : 23 rd Ed. Harper's Biochemistry Large Medical Book.

M.A. (Home Science)
IV Semester
Paper XVI Entrepreneurship

Max Marks 80

Theory

Unit I

1. Meaning and definition of Entrepreneur and Entrepreneurships.
2. Qualities of a good Entrepreneur.
3. Entrepreneur and his desire for Achievements

Unit II 1. **Different Forms of Business/Service Establishment:**

a. Franchising
b. excusing agents
c. Distributors
d. Whole sellers
e. Retailers
f. Broker/commission agent

2. Information of different activities required for entrepreneurship.
3. Capacity of problem solving in entrepreneurs and managers

Unit III

1. Conducting Market surveys and collection of required data
2. How to become successful salesperson, marketing skills.
3. Identification of business opportunities.

Unit IV

1. **Soft Skill development.**
   a. Communication
   b. Information seeking
1. Preparation of Preliminary Project Report (PPR)
2. General Insurance a brief knowledge

Unit V

1. Ethics of Business
2 Accounting : introduction procedure
3. Working Capital / Management of cash
4. Calculation of cost of products & Price fixation.

M.A. (Home Science)
Practical

(Resource Management and Entrepreneurship)

Max Marks 100

Section A

1. Designing of Terrace Garden.
2. Designing of partly outdoor & Indoor Landscaping.
3. Bonsai.
4. Drawing house plan for various income groups.
5. Drawing sketching of interior decorative aspect like –interior schemes of room.
6. Study of building materials.
7. Preparation of art object.
8. Floor decoration – Alpna, Rangoli.
9. Flower arrangement.

Section B

1. Preparation of preliminary Project Report.
2. Visit, Project Report of Small scale industries.
3. Conduction of Market survey

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