### SEMESTER – I

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M. A. HOME SCIENCE
SEMESTER I
PAPER NO. HSC 401
RESEARCH METHODS

Objective :-
(1) To understand the significance of statistics and research methodology in Home Science Research.
(2) To understand the types, rules and methods of research and develop the ability to construct data gathering instruments appropriate to the research design.
(3) To understand and apply the appropriate statistics technique for the measurement scale and design.

UNIT – I

(1) Science, scientific methods, scientific approach.
(2) Role of Statastics and research in Home science discipline.
   - Objective of research : Explanation, Control and prediction.
(3) Types of research : Historical, Descriptive, Experimental, case study, social research, participatory research.

UNIT - II

(1) Definition and identification of Research Problem.
   – Selection of research problem
   – Justification
   – Limitations and delimitations of the problem.
(2) Types of Variables.

UNIT - III

(1) Theory of Probability.
   - Population and sample
   - Probability sampling : simple random, systematic random sampling, two stages and multistage sampling cluster sampling.
   - Non-probability sampling purposive quota and volunteer sampling snowball sampling
(2) Basic principles of research Design.
• Purposes of research design, Fundamental applied and action, exploratory and descriptive experimental, survey and case study, ex-past facto.
• Longitudinal and cross sectional, co-relational.

UNIT IV

(1) Qualitative Research Methods.
• Theory and design in qualitative research.
• Definition and types of qualitative research.
• Methods and techniques of data collection
  ▪ Group Discussions
  ▪ Interviews : Key in formats , in-depth interview
  ▪ Observation.
  ▪ Social Wapping
  ▪ Participatory rapid assessment
  ▪ Participatory learning assessment

(2) Data Gathering Instruments
  - Observation, questionnaire, interview scaling methods, case study, home visits, reliability and validity of measuring instruments.

(3) Writing a research proposal.

References:-
8) “संशोधन पक्षियों” – डाएच.एस.एस गुजरात युनिवर्सिटी गुंध निर्माण छोट.
9) “संशोधन पक्षियों” – टिपप शाह - सी.जमनाकास प्रकाशन
M. A. HOME SCIENCE
SEMESTER I
PAPER NO. HSC 402

THEORY
FOOD SCIENCE - I

OBJECTIVES
1) Provide on understanding of composition of various food staff.
2) Familiarize students with changes occurring in various food staff as result of processing and cooking.
3) Enable students to use the theoretical knowledge in various applications and food preparations.
4) Provide adequate theoretical background and understanding about sensory evaluation of food.

UNIT – I
1) Sensory evaluation of foods:
   a. Introduction to sensory analysis
   b. Types of tests
      i. Discrimination / Difference test :- paired test, triangle test, duo-trio test, for multiple samples.
      ii. Quantitative difference tests: - Ranking Numerical, scoring test
      iii. Preference test grading charts.
      iv. Quality tests: - Grading charts, flavor, and profile method.
   c. Factors affecting accuracy of test
   d. Panel
      i. Selection of panel members.
      ii. Training of the judges
      iii. Size of panel
   e. Sampling of foods
      i. Preparation of samples for scoring
      ii. Number of samples
      iii. Environment for evolution

UNIT – II
1) Colloid chemistry:
   a. Denaturation and coagulation protein
   b. Emulsion and forms
   c. Gelatinization & Gel Formation
   d. Browning reactions.
2) Leavening agents.

UNIT – III
1) Egg cookery structure and composition use of egg in cookery.
2) Cereals: General structure, composition, nutritive value storage.
   a. Use of flour for bakery products.
   b. Preparation of matt, starches (including gel formation)
   c. Maize and rice processed products like puffed rice, flakes, popcorn, ready to eat mixes and self raising flours etc.

**UNIT – IV**

1) Pulses:
Composition, Nutritive value, milling preparation of flour, use of flour, storage of pulses.

2) Oil Seeds
Classification, composition, Nutritive value of oil seeds like Ground nut, soya bean (legume) sesame seed, cash walnut, Almond, Pista etc.

Reference Books:
1. Food Science – Bshrelaxmi, New Age International (p) Ltd.
2. Experimental cooking – Lawe Badie.
4. Hand Book of Food Science and Experimental.
5. Food – By M. Swaminathan
7. Food packing – sacharew & griffin a & publication
10. Dairy Technology – s. kumar
13. Quantity food management : principals & application – subject publication.
14. Professional food and beverage service managements Brain verghese Mac Millan Indian Ltd.
15. Experimental Foods laboratory manual by Margaret Me. Williams subject pub.
16. पूजोगामक रंगनारण – डॉ. उमाचेन पटेल
17. आकार विश्लेषण – डॉ. उमाचेन, जनकी पटेल
M. A. HOME SCIENCE  
SEMESTER I  
Paper No. HSC 403  

THEORY  
INSTITUTIONAL FOOD ADMINISTRATION  

OBJECTIVES:  
1. To develop a knowledge base in key areas of institutional food administration.  
2. To provide practical field level experience in institutional food administration.  
3. To impart necessary expertise to functional as a food service manager.  
4. To equip individual to start their own food service unit leading to entrepreneurship.  
5. To develop critical abilities and provides and provide basic grounding in research techniques.  

UNIT – I  
1. Introduction to food service systems.  
   - Evolution of the food services industry.  
   - Characteristics of the various types of food services units.  
2. Approaches to management.  
   - Theories of Management.  

UNIT – II  
1. Management of Resources.  
   A. Finance  
      - Budgets.  
      - Sources of Finance  
      - Planning adequate cash flow  
   B. Space & Equipment  
      - Step in planning layouts.  
      - Determining equipment.  
      - Maintenance of equipment  
      - Layout analysis.  
   C. Material  
      - Menu planning  
      - Purchase  
      - Storage  
      - Gauntly Food production.  
      - Service and modes of delivery.  
   D. Staff  
      - Manpower planning  
      - Recruitment induction, training, Motivation and performance appraisal  
   E. Time and Energy  
      - Measures of utilization and conservation.  

UNIT – III  
1. Cost Accounting / Analysis
a. Food cost analysis
2. Marketing and sales management
   a. Marketing strategies
   b. Sales analysis
   c. Market promotion.

UNIT – IV

1. Quality Assurance
   a. Food Quality
   b. Total Quality management

References:-
   Food Service in Institutions 6th edition. Revised by Harger FV, Shuggart SG
9) Sethi Mohini (1993) Catering management An Intefrated approach 2nd
    management, hodder & Stoughton Publication.
12) Green, E.E Darke, G.G Sweeney, F.F. (1978) Profitable Food and Beverage
    Management . planning, operations, Hayden Book company, New Jersey.
    book Company.
M. A. HOME SCIENCE
SEMESTER- I

THEORY
Paper No. HSC 404

ENTERPRENEURSHIP MANAGEMENT

OBJECTIVES:
1. To provide conceptual inputs regarding entrepreneurship management.
2. To sensitize and motivate the students towards entrepreneurship management.
3. To Orient and impart knowledge towards identifying and implementing entrepreneurship opportunities.
4. To develop management skills for entrepreneurship management.

UNITS – I
1. Conceptual Framework
   - Concept, need and process in entrepreneurship development.
   - Role of enterprise in national and global economy.
   - Types of enterprise – merits and demerits.

UNIT – II
2. The entrepreneur
   - Entrepreneurial motivation – dynamics of meaning and motivation.
   - Entrepreneurial competency – concepts
   - Developing entrepreneurial competencies – requirements and understandings the process, interpersonal skills, creativity, assertiveness achievement, factors affecting entrepreneur’s role.

UNIT - III
3. Launching and organizing an enterprise.
   - Environment scanning – information sources, schemes of assistance, problems.
   - Enterprise selection, market, assessment, enterprise feasibility study, SWOT Analysis.
   - Resource mobilization – finance, Technology row material, site and manpower.
   - Costing and marketing management and quality control.
   - Feedback, Monitoring and evaluation.

UNIT – IV
4. Project Work Planning resource mobilization and implementation
5. Government policies and schemes for support in enterprise development and management.

Reference :-
OBJECTIVES:

1. Planning a sensory Evaluation.
   I. Designing Questionnaire
   II. Designing Score card
   III. Discrimination test
      a. Paired
      b. Triangle
      c. Duo-trio

2. Cereal cookery
   I. Starch – Gelatinization of starch – comparison of fluting content from wheat flour.
   III. Leavened products: (Use of any four)
      a. Fermentation – use of micro organisms
         (Lactic acid, Yeast)
      b. Chemical agents
      c. Egg.
      d. Steam

3. Egg
   I. Use of egg as Binding, thickening, and emulsifying agent
   II. Effect of heat on egg.

4. Pulse cookery
   I. Comparative study of cooking dry, soaked and sprouted puleses in various medium, water time and temperature.
   II. Cooking of soaked pulses in various metal.

5. Thickening Agents. Use of any four thickening agents in cooking from following.
   I. Gram Flour
   II. Corn Flour
   III. Egg
   IV. Custard powder
   V. Maida

6. Binding agents (use of any four)
   I. Egg
   II. Bread Crumb
   III. Any Flour
   IV. Sago
   V. Suji
   VI. Bread
OBJECTIVES:
1. Market Survey and analysis of processed and finished products.
2. Evaluation of food services unit – 2 conventional, commissary.
3. Market survey of food service equipment
4. layout analysis of Kitchens -2
5. Planning means for quantity
   – Banquet
   – Outdoor catering
   – Packed meals
   – Restaurant
7. Cost analysis of menu in
   – College canteen
   – Hostel mess
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**M. A. HOME SCIENCE**

89
OBJECTIVES:-
1. To understand the role of statistics and computer applications in research.
2. To apply Statistical techniques to research data for analyzing & interpreting
data meaning fully.

CONTENTS: -

UNIT – I
1. Conceptual understanding of statistical measures, classification and
   tabulation of data measurement of central tendency measures of variation.
2. Frequency distribution, histogram, frequency, polygons, ogive.

UNIT – II
1. Binomial distribution

UNIT – III
1. Parametric and non-parametric tests
2. Testing of hypothesis Type I and Type II errors. Levels of significance

UNIT – VI
1. Chi-square test, goodness of bi independence of attributes 2 X 2 and r x C
   contingency tables.
2. Application of Students ‘t’ tests for small samples. Difference in proportion
   for means and difference in means.

Reference:-
   California.
   Columbus, oh
3. Long; J.S. (Ed) (1988); common problems,
   Proper solutions Avoiding errors in quantitative research; Beverly Hills; Sage
   publication; California.
   publication New Delhi.
   theory Procedures and Techniques; Sage Publication; California.
M. A. HOME SCIENCE
SEMESTER II

Paper No. HSC 408

THEORY
Food Science II

OBJECTIVES:-

1. Provide an understanding of composition of various food stuff.
2. Familiarize students with changes occurring in various food stuff as a result of processing & cooking.
3. Enable students to use the theoretical knowledge in various applications and Food preparations
4. Provide adequate theoretical background and understanding about sensory evaluation of food

CONTENTS:

UNIT – I

1. Fruits and vegetables:
   – Composition, pigments, nutritive value, storage, spoilage, browning, reaction, preservation, techniques, garlic paste, cordials, pectin, gels.
2. Spices and Continent:
   – Definition, classification, composition.
   – Major and minor Indian spices.

UNIT – II

3. Milk and Milk product
   – Composition, processing and product of milk, types of milk & milk products.
   – Dairy products – yogurt, butter, cheese, ghee, milk powder, khoya paneer, cream and curd.

UNIT – III

4. Beverages:
   – Classification, Soft drinks and its importance in relation to nutrients, alcoholic and non-alcoholic

5. Processed Food:
   – Confectioneries and chocolate products, Bakery products, Dehydrated products.

UNIT - IV

6. Sugar cookery:
   a. Foams of sugar – Granulated, powdered khandsari, Mollasses, Maple and loaf Sugar.
   b. Process of Crystallization
   c. Types of candies to include consistency of sugar syrup.
   d. Non crystalline – chikkies, Barfies
Reference:-
2. Experimental cooking – lewe Badie.
3. Foods Selection and preparation, Sweedom and makeller.
5. Food – By M. Swaminathan
6. Food Packing – Sacharew & Grifin A Vi Publication.
9. Food Science (3rd Edition) Portar Norman New Delhi CBC Publisher
12. Food chemistry – litjon mayar (1960) new york reinhold
13. quantity food management Principles & application subject publication.
14. Professional food and Beverage services management Brain Verghese Mac Millan India. Ltd.
15. Experimental food Laboratory Manual by Margaret me Williams subject pub.
16. पुष्पग्रंथ राधाकुमार – डॉ. उमावेन पटेल
17. आकार विश्लेषन – डॉ. उमावेन, जनकी पटेल
M.A. HOME SCIENCE
SEMESTER – II

PAPER NO. - HSC – 409

PRACTICAL - Computer Application

(A). MS Office
  - MS Word
  - MS Excel
  - MS PowerPoint.
M.A. HOME SCIENCE
SEMESTER – II
PAPER NO. HSC - 410
PRACTICAL - FOOD SCIENCE – II

(A). Fruits and Vegetables :
(1). Effects of cooking on pigments in various mediums (Any Four from following) – Acid, Alkali, Distil water, sugar, salt, Aluminum vessel.
(2). Effect of cooking on fruits and browning reaction.

(B). Milk :
(1). Effect of acid, Alkali, sugar and heat on milk cookery.
(2). Preparation of Paneer and curd by various methods.

(C). Sugar Cookery :
(1). Preparation of crystalline and non – crystalline candies like –
(i) - Fudge and Fondent
(ii) - Chikkies and Barfies.
(2). Preparation of various consistency of sugar syrup - Make any three preparation from it.
(3). Caramallization use in cookery.
OBJECTIVES:
(1). To acquaint the students with house keeping department and its management in the hospitality industry.
(2). To enable students to manage resources in the house keeping department to fulfill the hospitality Function.

UNIT - I
(1). Types of institutions of facing hospitality Services.
(2). Hospitality Functions.
   (i) - Role of housekeeping in hospitality industry.
   (ii) - Housekeeping in relation to commercial and welfare section.

UNIT – II
(1). Management of housekeeping department.
   (i) - Layout of housekeeping department.
   (ii) - Planning, Organization and communication of housekeeping activities.
   (iii) - Co – ordination with other department.
   (iv) - Roles/Responsibilities of personal in the housekeeping department.
(2). Hostess Training.

UNIT – III
(1). Administrative Policies.
   I – Personnel Management: Recruitment training, handing, Personnel Promotion evaluation, distribution of jobs, Schedules job analysis.
   II - Procurement Policies, buying techniques stores, stock control.
   III - Cost control, inventory management, budget process, controlling expiries.
   IV - Safety, security and sanitation, safety fire fighting, first aid safety in equipment use, pest control sanitation standarol.
   V - Uniforms, types selection, distribution and control.
(2). Banquet Management.

UNIT – IV
(1). Energy and water management
   Power requirements, flushing system, water control taps, waste water circulation.
(2). Communication system, public address system, intercom system, music and television.
(3). Maintenance, Repairs and redaction programmes.

References: -
(2). Dix, C (1979) Accommodation operations : MacDonald & Evans.
(10). Ursula Jones and Newtons : Hospitality and catering.
M.A. HOME SCIENCE
SEMESTER – II
PAPER NO. HSC - 411 E – B

THEORY
DEVELOPMENT PROJECT MANAGEMENT

OBJECTIVES: -

The enable students:
To get an insight related to components of project planning.
1) To provide an overview of the significance of general approach and
tools and techniques and –
2) To impart skills in project planning.

UNIT – I

Basic concepts of project planning.
- Basic concepts: Need problem, project feasibility, planning, project
formulation, forecasting, appraisal, PRA importance and objectives of
project formulation, project development cycle and its stages, project
classification.

UNIT – II

Project Identification – Identification of project opportunities, government
policy, regulations, incentives and restrictions methods and techniques of
project identification, prioritization of projects with people’s participation,
prefeasibility, study.

UNIT – III

Project Formulation: Feasibility study and opportunity study – techno–
economic analysis. Project design and network analysis – input analysis –
Financial analysis – social cost – benefit analysis.

UNIT – IV

- Project Appraisal – Comprehensive appraisal of the key components of
the project – project appraisal techniques – decision matrix, system
analysis – urgency and risk analysis break even
- Point analysis, pay back period analysis, rate of return. MPV
Profitability and IPR analysis, risk analysis and social cost benefit
analysis.
- Project Format: Common Format analysis:
Proposal – basic and supportive information required for a project, rules
governing the preparation of project, proposal writing up a project
proposal.

References: -
1) Bhargava, B.S. et al.(1977) Project Identification Formulation and
Appraisal, Metropolitan Book House; New Delhi.
2) Chavada, P. (1992). Project Preparation, Appraisal, Budgeting and


M.A. HOME SCIENCE
SEMESTER – II
PAPER NO. HSC. 412 E – A

THEORY
ADVERTISING AND MARKETING

OBJECTIVES : -

1). To become aware of different market organizations in our economy.
2). To understand the different marketing functions and the distribution system in our economy.
3). To familiarize with the marketing strategies and market research.
4). To understand the role of advertising in sales promotion.

UNIT – I

1) Market Economy
   - Markets, marketing, marketing functions.
   - Marketing environment, marketing research, market segmentation.

UNIT - II

1) Product Development & Forecasting
   - Developing, testing and launching new products.
   - Idea generation, screening and business analysis.
   - Understanding market demand and consumer adoption process.
   - Labeling and packing.
   - Stages in product life cycles.
2) Pricing practices and consumer interest pricing.

UNIT – III

1) Advertising and sales promotion.
   - Advertising objectives, functions, benefits.
   - Advertising budgets and costs of sales promotions.
   - Types of Advertising.
   - Evaluation of advertising effectiveness.

UNIT – IV

1) Personal selling and sales management.
   - Characteristics and importance.
   - Creative selling process.
   - Organizing sales force, training personnel
   - Motivation, evaluation and control of sales force.
2) Service Marketing
   - Marketing strategies.
   - Maintaining quality in services.

References : -
17) Vechan kala and Vigyapan 3rd Edition P.M. Joshi at alc jamanadas & Co.
M. A. HOME SCIENCE
SEMESTER II
PAPER NO. HSC 412 EB

THEORY
Food Packaging

OBJECTIVES:-

This course is designed to enable students to:

- Gain knowledge about various packaging materials and importance of packaging.
- Be familiar with testing and evaluation of packing media
- Be familiar with packaging laws and regulations
- Be able to select appropriate packaging material for preventing environment degradation.

UNIT – I

1. Packaging:
   - Concepts, Definition, classification, Packaging – Development.
2. Packaging of Food:
   - Fresh and processed
   - General characteristics & food preservation.

UNIT – II

1. Primary Packaging media:
   - Properties and application-
     - Proper boards, metals, plastics, wood & glass
     - Labels, cops adhesives
2. Testing and Evaluation of packing media
   - Retail packs [including shelf life evaluation] and transport packages.

UNIT – III

1. Packaging systems and methods for food products – vacuum packaging gas flush packaging, bag in box etc.
2. Food Products General classification and packing types, varieties trends.

UNIT – VI

1. Storage, handling and distribution of packages (foods including palletisation & containerization)
2. Food marketing and role of packaging.
3. Packaging – Laws & Regulation – FDA. PFA, Packaging commodity Rules, Weight & measures act etc.

Reference:-

101
1. Sacharow & griffin, food Packaging – AVI a publication.
7. Robertson G.L food packaging new york marcell dekker Inc.
## M. A. HOME SCIENCE
SYLLABUS FORMATE CBCS
IMPLIMENTED FROM – JUNE 2011

### SEMESTER – III

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M.A. HOME SCIENCE
SEMESTER III
Paper No. HSC. 501
THEORY
ADVANCE NUTRITION

Objective: -
This course will enable the students to
1. Augment the biochemistry knowledge acquired at the undergraduate level.
2. Understand the mechanisms adopted by the human body for regulation of metabolic pathway.
3. Get an insight in to interrelationship between various metabolic pathway.
4. Become proliferation for specialization in nutrition.

UNIT – I
1. Energy Metabolism
   a. Determination of energy value of Food: Bomb calorimeter and oxy calorimeter.
   b. Basal metabolic rate: Measurement and factors affecting basal metabolic rate.
   c. Measurement of energy requirement of an individual with reference to man and women.

UNIT – II
1. Carbohydrates.
   a) Chemistry and classification.
   b) Digestion and absorption.
   c) Metabolism : Glycolysis, TCA Cycle, gluconeogenesis glycogen synthesis.
   d) Regulation of carbohydrates metabolisms, General mechanical, Hormonal regulation Blood glucoses Homeostasis.
   e) Sweeteners ( Nutritive and non-nutritive)
2. Proteins
   a) Chemistry and classifications
   b) Amino acids – structure and classification.
   c) Digestion and absorption.
   d) Metabolism citric acid cycle.
   e) Evaluation of protein quality.

UNIT – III
1. Nucleic acids and Nucleoproteins.
   a) Classification of nucleic acid RNA & DNA.
   b) Metabolism and Biosynthesis of Nucleic acid pyrimidine and
      purine synthesis.
   c) Genetic engineering : Recombinant DNA, RNA Synthesis (Transcription)
2. Enzymes and digestive Secretions.
   a) Enzymes: Nature of enzymes. Mechanism of action of
      enzymes, Physical factor affecting activity, classification and
      no mandatory.
   b) Digestive juices: Saliva, Gastric, Juice, Pancreatic Juice,
      intestinal Juice, the bie etc.

UNIT – IV

1. Lipids
   a) Composition and classification.
   b) Characteristics of Facts, Hardness, Hydrogenation,
      Emulsification, Saponification Rancidity, Effect of Health.
   c) Digestion and absorption.
   d) Types of fatty acids, nutritional significance.
   e) Requirements of Fat.
OBJECTIVES:
1. To impart an in-depth knowledge of style reading pattern making and garment construction techniques.
2. To develop and understand the principles of pattern making through flat pattern and draping.

UNIT – I
1. Detailed study of industrial machines and equipment used for –
   – Cutting
   – Sewing
   – Finishing
   – Embellishment

UNIT – II
1. Study the interrelationship of needs, Thread stitch, Length and Fabric
2. Methods of Pattern making.
   – Drafting
   – Flat Pattern
   – Draping

UNIT – III
1. Developing Paper Pattern
   – Understanding the commercial paper pattern.
   – Layouts on different fabrics, widths and Types.
2. Readymade garments.

UNIT – IV
1. Garments and Garment Details:
   a. Necklines and collars
   b. Sleeve details
   c. Skirts and Pants
   d. Blouses, coats and Jackets
   e. Frills, Fringes and gathers, cowls & cascades
   f. Hemlines and insertions
   g. Lacing, macramés and patch work
   h. Pleats, quilling and ties
   i. Shirring, Smoking and Zips
   j. Yokes and underskirts
   k. Tassels and tucks
2. Basic Rendering Techniques:
   a. Colour matching using different mediums.
   b. Stripes
   c. Checks gingham and plaids
d. Patterns and textures
e. Reducing a Print
f. Shading

References:
1. Armstrong Pattern making for Fashion Desing.
2. Gioello and Berke: Figure Type and size Ramage, Fairchild Publications, New York.
M.A. HOME SCIENCE
SEMESTER III
Paper No. HSC – 503

Practical-Advance Nutrition & Apparel Construction

Practical based on 501
1. Designing through flat pattern- Dart Manipulation
2. Development of variation in sleeves
   a. Sleeves and bodice combination
3. Development of variation in collars
   a. Roll over collar
   b. Collar with bodice (Shaw)
4. Necklines and Facings
   a. Scooped Necklines
   b. Built-up Necklines
   c. Eowl Necklines
5. Plackets
   a. Center button closing
   b. Asymmetrical closing
   c. Double breasted
7. Designing through draping
   a. Basic draping Principles and Techniques
   b. Developing a Pattern
8. Fashion Sketching
9. Term Garments – 2

Practical based on 502 Advanced Nutrition – 1
This course will enable the students and be familiar with qualitative test and quantitative determination.
1. Reaction of monosaccharide and their identification
2. Reaction of disaccharides and their identification
3. Reaction of Polysaccharides and their identification
4. Estimation of lactose in milk
5. Estimation of reducing sugar in food
6. To find our organic constituents of milk, egg and wheat flour
7. Bleeding time and clotting time
8. Estimation of blood protein by biuret method
9. Reaction of protein in food denaturation, coagulation
10. Determination of acid value, saponification and iodine value of natural fat and acid
M.A. HOME SCIENCE
SEMESTER III
Paper No. HSC - 504 E - A
THEORY
CHILD AND HUMAN RIGHTS

Objectives:
– To develop awareness and perspective of Human Rights as a professional in the field of Human Development
– To develop sensitivity to Human Rights with specific reference to children’s rights
– To gain knowledge about charter on Human and Children’s Rights
– To work with women and children to create awareness about their rights and to guide them to access their rights

CONTENTS:

UNIT I
Definition and Evolution of Rights
– Human rights
– Child rights
– Woman’s rights
– Charter
– Convention
– Policy

UNIT II
Status of Indian Children and their Rights
– Gender disparities (infanticide, foeticide, girl child)
– Children in difficult circumstances (children of prostitutes, child prostitutes, child labour, street children, refugee children and child victims of war.)
– Children with special needs.

UNIT III
Status of Women and their Rights
– Status of women in India
– Women and Human Rights
– Foams of violation of women’s rights
  o Violence against women in home, work, places and society
  o Sexual harassment, rape
  o Crime against women
  o Political discrimination
  o Health and Nutrition based deprivations

UNIT IV
Human Rights
– Moral Rights
– Legal Rights
Civil and Political Rights

**Advocacy for Human Rights**

References:
4. D'Souza, C. and Menon, J. Understanding Human Rights (Series 1-4) Bombay: Research and Documentation Centre, St. Pius College.
25. Manav Adhikar and Sanyukta Rastra Sangh, Satis Chaturvedi
M.A. HOME SCIENCE  
SEMESTER III  
Paper No. HSc - 504 E – B  
THEORY  
PROBLEMS IN HUMAN NUTRITION

OBJECTIVES:

The course is aimed at providing an understanding of:

- Nutritional problems/nutrition – related diseases prevalent among the affluent and the less privileged groups, reference to their incidence, etiology and public health significance
- Biochemical and clinical manifestations, preventive and therapeutic measures of the same

CONTENTS:

UNIT – I
1. Historical background prevalence etiology biochemical and clinical manifestations, preventive and therapeutic measures for the following:
   - PEM
   - Vitamin – A deficiency
   - Nutritional anemias

UNIT – II
- IDD
- Rickets, osteomalacia and osteoporosis
- Fluorosis

UNIT – III
2. Historical background prevalence etiology biochemical and clinical manifestations, preventive and therapeutic measures for the following:
   - Obesity and Overweight
   - Diabetes Mellitus

UNIT – IV
- CHD
- Cancer

References:
OBJECTIVES:

- To impart knowledge and understanding of various communication systems.
- To provide a sound knowledge base for the relevance and applicability of the various media used in human communication and their complementary role towards each other.
- To enhance the versatility of the students in the selection and use of media in different socio-cultural environments
- To provide basic knowledge of concept of advertising and use of media in advertising.
- To impart skill in preparation of various Computer Aided Media messages.

CONTENTS:

UNIT I
Communication Systems

- Types of communication systems – concept, functions and significance. Interpersonal, organizational, public and mass communication.
- Elements, characteristics and scope of mass communication.

UNIT II

- 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 III
Media Systems: Trends & Techniques

- Concept, scope and relevance of media in society.
- Functions, reach and influence of media.
- Media scene in India, issues in reaching out to target groups.
- Contemporary issues in media – women and media, human rights and media, consumerism and media.
- Historical background; nature characteristics, advantages and limitations and future prospects of media.
- Traditional media; role in enhancing cultural heritage, co-existence with modern media systems and applicability in
education and entertainment – puppetry, folk songs, folk theatre, fairs.
– Print media; books, newspapers, magazines leaflets and pamphlets.
– Electronic media-radio, television, video, computer based technologies.
– Outdoor Media: exhibition, fairs and kiosks.
– Media Planning and Scheduling, selection of media on the basis of suitability, reach, impact frequency and cost
– Introduction to ethics in mass media, freedom of speech, expression and social responsibility
– Political and Government controls on the media

UNIT IV

Advertising
– Definition, concept and role of advertising in modern marketing system and national economy.
– Inter-relation of advertising and mass media systems.
– Types of advertisements – commercial, non-commercial, primary demand, selective demand, classified and display advertising, comparative and co-operative advertising.
– Techniques of preparation of effective advertisements for various media.
– Ethics in advertising.

Reference:
M.A. HOME SCIENCE
SEMESTER III
PAPER NO. HSC 505 E – B
THEORY
NUTRITION AND HEALTH OF WOMEN

OBJECTIVES:
This course aims to enable students to:
1. Be acquainted with status of women in Family and Society
2. Understand how various factors influence the health and nutritional status of women
3. Plan and undertake various activities to improve the status of women
4. Understand how health of women influence family, community and national development

CONTENTS:

UNIT I
1. Role of women in National Development
2. Women in family and community
   a. Demographic changes, menarche, marriage, fertility, morbidity, mortality life expectancy, sex ratio, aging and widowhood, female-headed families.

UNIT II
1. Women and Work
   a) Environmental stress, production activities, nutrition, health and gender, living conditions, occupational health, health facilities,
2. Women’s nutritional requirements and food needs.

UNIT III
1. Women and Society
   a. Women’s role, their resources and contribution to family and community and effect on nutritional status
   b. Effect of urbanization on women
   c. Impact of economic policies, industrialization and globalization on women
2. Women and Health
   a. Health facilities
   b. Disease patterns and reproductive health
   c. Gender and health
   d. Health seeking behavior
   e. Women- pregnancy and lactation
   f. Safe motherhood
   g. Care of at-risk mothers
   h. Family planning
   i. Women and aging – special concerns in developed and developing societies: Menopause, osteoporosis, chronic degenerative diseases, neurological problems
UNIT IV

1. Women and Nutrition
   1. Situation of women in global, national and local context improving the nutritional and health
   2. Policies and Legislations
      a. CEDAW (Convention on Elimination of all forms of Discrimination Against Women), women’s Right to Life and Health (WRLH)
   3. Empowerment of Women
      a. Role of Education and various national schemes.

References:

1. ACC(SCN Policy Discussion Papers
3. UNICEF (1994): The urban poor and household food security, UNICEF
4. IDRC (1993): Gender, Health and Sustainable Development
5. NGO Committee on UNICEF (1997): Women and Children in urban poverty – what way out?
6. Census Reports, Government of India
7. NFHS Reports
8. UNICEF – State of the world’s children
### M. A. HOME SCIENCE
SYLLABUS FORMATE CBCS
IMPLIMENTED FROM – JUNE 2011

#### SEMESTER – IV

<table>
<thead>
<tr>
<th>Course No</th>
<th>Name of the Subject</th>
<th>Teaching hours per week</th>
<th>Credits</th>
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<tr>
<td>HSC 507</td>
<td>Advance Nutrition -2</td>
<td>3 1</td>
<td>4 4</td>
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<tr>
<td>HSC 508</td>
<td>Advance Apparel Construction</td>
<td>3 1</td>
<td>4 4</td>
</tr>
<tr>
<td>HSC 509</td>
<td>Advance Nutrition &amp; Apparel Construction - Practical base on 507&amp;508</td>
<td>6</td>
<td>4 4</td>
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<tr>
<td>HSC 510 E - A</td>
<td>Early Childhood care &amp; Education</td>
<td>3 1</td>
<td>4 4</td>
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<tr>
<td>HSC 510 E - B</td>
<td>Food Processing &amp; Technology</td>
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<tr>
<td>HSC 511</td>
<td>Dissertation</td>
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<td>HSC 512</td>
<td>Seminar/Project</td>
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<td>Totals</td>
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<td>15 3</td>
<td>26 24</td>
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OBJECTIVES:
This course will enable the students to:
1. Augment the biochemistry knowledge acquired at the undergraduate level
2. Understand the mechanisms adopted by the human body for regulation of metabolic pathway
3. Get an insight into interrelationships between various metabolic pathways
4. Become proliferation for specialization in nutrition

CONTENTS:

UNIT I WATER AND ELECTROLYTE BALANCE
1. Water and Electrolyte Balance
   – Chemistry, distribution and composition of body fluids
   – Osmotic pressure of body fluids
   – Water balance and electrolyte balance – active transport across cell membranes
2. Mineral Balance
   – Sodium, Potassium and chloride: absorption, intake and output regulations
   – Other macro minerals – calcium, phosphorus and magnesium. Absorption, metabolism and regulation

UNIT II VITAMINS
1. Structure, absorption, transport and metabolism biochemical functions and interaction with other nutrients
   – Fat soluble vitamins – A,D,E and K
   – Water soluble vitamins – B complex and Ascorbic acid

UNIT III BLOOD
1. Functions of Blood
2. Composition of blood
3. Blood components (RBC, WBC and Platelets) Of bloods
4. Coagulation
   5. Information regarding hemoglobin, sickle Cell Anemia and Thalassemia

UNIT IV
A. Hormones
   – Definition, characteristics and biological role of Hormones
   – Pituitary gland
   – Adrenal gland
   – Thyroid gland
   – Pancreas

B. Food Toxicities
- Naturally occurring Toxicants in foods
- Chemical contaminants in foods

References:
1. Food and Nutritions by M.S. Swaminathan, Vol. I & II
2. Normal and Therapeutic Nutrition by Robinson
4. Potter, N. and Hotch Kiss, Food Sciences – CBS Publisher, New Delhi.
M.A. HOME SCIENCE
SEMESTER IV
PAPER NO. HSC 508

ADVANCED APPAREL CONSTRUCTION

OBJECTIVES:
- To help develop skills in pattern making and construction
- To create awareness of quality assurance norms and evaluating of quality in apparel

CONTENTS:

UNIT I
1. Fitting – factors affecting good fit, common problems encountered and remedies for fitting defects (upper and lower garments)
2. Clothing for people with special needs
   a. Maternity and lactation period
   b. Old age
   c. Physically challenged

UNIT II
1. Evaluating the quality of apparel
   a. Identification of the components of apparel
   b. Fibre content, shaping devices, underlying fabrics, pockets, necklines, hem treatments, decorative details and alteration potential
   c. Standards for evaluating the various components

UNIT III
1. Elements used in creating design
   a. Concept and scope of fashion, design, classification of fashion
2. Composition
   a. With one element
   b. With more than one element

UNIT IV
1. Colour
   Its sensitivity and composition in dress
2. Harmony
   In form of space coverage to design of dress
3. Fashion Forecasting

References:
2. Natalle Bray : Dress Fitting Published by Blackwell Science Ltd.,
1) ADVANCE NUTRITION – II
1. Estimation of ascorbic and content of foods by tritrimetic method.
2. Estimation of Vitamin – A
3. Enzymes – Effect of ph and temperature on Enzyme activity of amylase on starch.
4. Alkali and acid. – Preparation of dilute solution of common acid and alkali5 and determining their exact normality.
5. Estimation of Hb from blood.
6. Estimation of RBC and WBC from blood.
7. Estimation of urea and uric acid and creatining urine.
8. To prepare chart for normal content of blood.
9. To prepare chart for normal content of urine.
10. Thin layer chromatography identification of amino acids.

2) ADVANCED APPAREL CONSTRUCTION
1. Development of slopers for skirt variations.
   - Low and high waist
   - A line, flared, circular, pleated, yoked with godet / pepulum
2. Pockets.
   - Slashed pockets – welf, bound flaps
   - Inseam pockets – closed and open
3. Placket
   - Fly front opening
   - Zipper in seam without seam
4. Designing, drafting and construction of skirt
5. Fashion sketching
6. Term garment.
OBJECTIVE:
1. To gain knowledge and insight regarding Principles of early childhood care and education.
2. To develop the skills techniques to plan activities in ECCE centers of different types to conduct activities in early childhood care and education and to work effectively with parents and community.

CONTENTS

UNIT - I
1. Principles of Early childhood care and education.
   a. Importance need and scope of ECCE
   b. Objectives of ECCE
2. Types of Preschools/Programmes : Play centers, day care, Montessori, kindergarten, balwadi, anganwadi etc.
3. Concepts of non – formal, formal and play way methods.

UNIT - II
1. Historical Trend (Overview)
   a. Contribution of the following thinkers to the development of ECCE ( their principles, application and limitation) in the content of ECCE.
   b. Pestalozzi, Rousseolu, Proebel, Maria Montessori, John dewey, Gijabhai Badheka, Tarabai modak, M.K. Gandhi, Ravindranath Tagore.
   c. ECCE in India : Pre independence period, Post independence Kothari commission, contribution of five year plans to ECCE – Yashpal committee, Maharashtra preschool center Act.

UNIT - III
1. Organization of Pre School Centers.
   a. Concept of organization and administration of early childhood centers.
   b. Administrative set up and functions of personnel working at different levels.
2. Building and equipment location and arrangement of rooms: play ground selection of different types of outdoors and indoor equipment.
3. Staff / personnel service conditions and roles: role and responsibilities, essential qualities of a care giver/teacher their personal records and report.

UNIT - IV
1. Activities For ACCE
   a. Language Arts : Goal and Language, types of listening and activities to promot listening various activities – ( Songs, Object talk, picture talk, Free conversation, books, games, riddles jokes stories and teacher’s role.)
b. Art and Craft activities (creative activities of expression) Types of activities – Chalk, crayon, paints, paper work and best out of waste. Role of teacher in planning the activity, Motivating children, Fostering, appreciation of art and craft activities.

c. Music : Songs, Objective of Music education establishing, goals, setting the stage and role of the teacher. Three aspects of music, making listening and singing.

d. Mathematics : Goals of mathematics, learning developmental concepts at different stage : Principles of teaching mathematics.

e. Science : Role of teacher in some important science experiences.

References :
OBJECTIVES:
This course is designed for students to:

- Impact systematic knowledge of basic and applied aspects of food processing & technology.
- Provide the necessary knowledge of basic principles and procedures in the production of important food products.

UNIT – I
1. Introduction: main corps grown in the country – importance and storage.
2. Physical principles in food processing –
   a. Refrigeration – Refrigeration, cold storage, cool storage with air circulation, humidity control and gas modification.
   b. Freezing – Changes during freezing, choice for final temperature for frozen foods, freezing methods.
   c. Dehydration – methods of dehydration.

UNIT – II
1. Cereals and Pulses :
   a. Corn wet milling, corn starch products.
   b. Storage and quality of cereal gains.
   c. Rice processing, paraboiled rice, Rice based instant foods.
   d. Pulses – processing elimination of toxic factors, quick – cooking dals, fermentation and germination.

UNIT – III
1. Fruits
   - Structure, composition, physiological and biochemical changes during ripening, handling and storage.
2. Vegetables
   - Harvesting, Post Harvest processing, Caning Freezing, Pickles and chutneys.
3. Spices
   - Processing and extraction of essential oils and colours, storage and preservation.

UNIT – IV
1. Fermentation Technology :
   a. Fermentation technology, Yeast, Milk products, fermented vegetables, Beer, Vinegar
   b. Enrichment and fortification technology, High protein food technology.
2. Additives and Preservatives :
   a. Definition of food additives, acids, bases, sweetners, stabilizer and thickeners.

Reference:


23. Ting, S.V. and Rouself, R.L. Citrus fruits and their products; Analysis and Technology.

27. Srephen, A.M. Food Polysaccharides and their application, Marcel Dekket INC, New York.

M.A. HOME SCIENCE
SEMESTER IV
Paper No. 511
Dissertation

Subject for Paper – 511    Dissertation
should be selected from any related topic of syllabus.
Subject for Paper – 512 Seminar/Project
Should be selected from any related topic of syllabus.