

**GUJARAT UNIVERSITY
HOME SCIENCE POSTGRADUATE
PROGRAMMES FOR GENERAL HOME SCIENCE (COMPOSITE)
(FAMILY AND COMMUNITY SCIENCES)
CURRICULUM AS PER THE CHOICE BASED CREDIT SYSTEM
(Implemented from June-2018-19)**

**M. A. HOME SCIENCE
SYLLABUS FORMATE CBCS
IMPLIMENTED FROM –
JUNE 2018
SEMESTER – I**

Course No.	Name of the Subject	Teaching hours per week			Credits
		Lectures	Others	Total	
HSC 401	Research, Methods	3	1	4	4
HSC 402	Food Science -1	3	1	4	4
HSC 403	Institutional Food Administration	3	1	4	4
HSC 404	Entrepreneurship Management -1	3	1	4	4
HSC 405	Practical -Food Science- 1	-	- 6		4
HSC 406	Practical -Institutional Food Administration	-	- 6		4
	Totals	12	4	28	24

**M. A. HOME SCIENCE
SEMESTER I
PAPER NO. HSC 401
RESERCH 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 Statistics 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 Whapping

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:-

- 1) Bandarkar, P.L and Wilkinson T.S (2000): Methodology and Techniques of social Research, Himalaya publishing home, Mumbai.
- 2) Bhatnagar, G.L (1990) Research Methods and measurements in behavioral and social sciences, agri. Cole publishing academy : New Delhi.
- 3) Dooley, D (1995) : strategies for interpreting qualitative data; sage publications, California.
- 4) Gay. L.R (1981, 2nd Edi.) : Educational Research, Charles, E. Merrill, Colurbus, Ohio.
- 5) Hong, J.S. (Ed) (1988) : common Problems proper solutions : Avoiding Errors in Qualitative research, Beverly Hills, Sage publications.
- 6) Mukherjee, R. (1989) : The quality of life valuation in social research, sage publication, New Delhi.
- 7) Stranss, A. and carbin, J. (1990) : Basis of Qualitative research grounded theory procedures and techniques, sage publication California.
- 8) “ સશં ંધન પઠિઓ” – ડૉ.કે.જી.દેસાઈ ગજુ રાત યુનવસીટી ગર્થ િનમાર્ણ બોડર.
- 9) “ સશં ંધન પઠિઓ” – િદપક શાહ - સી.જમનાદાસ પર્કશન

**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. Emulsion
 - b. Browning reactions.
- 2) Leavening agents.

UNIT – III

- 1) 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.
 - d. Batter and Dough – General methods for mixing batter and dough structure.

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 Groundnut, soya bean (legume)
Sesame seed, cash walnut, Almond, Pista etc.

Reference Books:

1. Food Science – Bshrelaxmi, New Age International (p) ltd.
2. Exprimental cooking – Lawe Badie.
3. Foods selection and preparation, Sweedom and Makeller.
4. Hand Book of Food Science and Experimental.
5. Food – By M. Swaminathan
6. Food Science (2nd edition) charles. H. John wiley & sons. New york.
7. Food packing – sacharew & griffin a & publication
8. Food Packaging – Robert son. G.I. New yourk, Marsell Dekker, Inc.
9. Food science (3rd Edition) portar Norman New Delhi, CBS Publishers.
10. Dairy Technology – s. kumar
11. Experimental cookery – belle leave (1853) new yourk john wiley & sons.Inc.
12. Food chemistry – Liljon Mayar (1960) New york reinhold.
13. Quantity food management : principales & application – subjectpublication.
14. Professional food and beverage service managements Brain verghese MacMillan Indian Ltd.
15. Experimental Foods laboratory manual by Margaret Me. Williams subjectpub.
16. પર્યોગાત્મક રાધંણા – ડૉ. ઉમાબેન પટેલ
17. Aahar iv)an– ડૉ. ઉમાબેન, જાનકી પટેલ
18. Home scale preparation of soaked & sprovted Bengal Gram . Dr. UmaPatel.

M. A. HOME SCIENCE
SEMESTER I
Paper No. HSC 403
THEORY
INSTITUTIONAL FOOD ADMINISTRATION

OBJECTIVES:

1. To developed 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:-

- 1) West, B. Bessie & Wood, Levelle (1998) Food Service in Institutions 6th edition.
Revised by Harger FV, Shuggart SG & Palgne Placio JUNE MacMillan Publication Company.
New York.
- 2) Sethi Mohini (1993) Catering management An Integrated approach 2nd Edition Wiley Publication.
- 3) Kotas Richard & Jayawardardene, C. (1994): Profitable Food and Beverage management, Hodder & Stoughton Publication.
- 4) Brodner, J. Maschal, H.T, Carlon, H.M (1982): Profitable Food and Beverage operation 4th edition,
Hayden Book company, New Jersey.
- 5) Green, E.E Darke, G.G Sweeny, F.F. (1978) Profitable Food and Beverage Management . planning,
operations, Hayden Book company, New Jersey.
- 6) Knootz, H.O. Donnel C.(1968) : Principles of management McGraw Hill 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 raw material, site and manpower.
 - Costing and marketing management and quality control.

UNIT – IV

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

Reference :-

- 1) Meredith, G.G et al (1982) : Practice of Entrepreneurship, ILO Geneva.
- 2) Patel V.C. (1987) : woman Entrepreneurship – Developing, NewEntrepreneurs Ahmedabad EDII
- 3) Akhuri, M.M.P. (1990) Entrepreneurship for women in india, NIESBUS,New Delhi
- 4) Hisrich, R.D. and perers, M.P. (1995) : Entrepreneurship starting,developing and managing a new enterprise.
- 5) Hisrich, R.D. ad Brush C.G. (1986) : The women entrepreneurs, D.C.Health & Co. Toranto.

M. A. HOME SCIENCE
SEMESTER –I
Paper No. HSC 405
Practical -Food Science-I

OBJECTIVES:

Practical based on Food Science-I

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.
 - II. Malt –preparation of malt and use of it in cookery – a comparative study.
 - III. Leavened products : (Use of any four)
 - a. Fermentation – use of micro organisms (Lactic acid, Yeast)
 - b. Chemical agents
 - c. Egg.
 - d. Steam
3. Pulse cookery
 - I. Comparative study of cooking dry, soaked and sprouted pulses in various medium, water time and temperature.
 - II. Cooking of soaked pulses in various metal.
4. Thickening Agents. Use of any four thickening agents in cooking from following.
 - I. Gram Flour
 - II. Corn Flour
 - III. Custard powder
 - IV. Maida
5. Binding agents (use of any four)
 - I. Bread Crumb
 - II. Any Flour
 - III. Sago
 - IV. Suji
 - V. Bread

**M. A. HOME SCIENCE
SEMESTER I
PAPER NO. HSC 406
Practical –Institutional Food Administration**

OBJECTIVES:

1. Market Survey and analysis of processed and finished products.
2. Market survey of food service equipment
3. Planning means for quantity
 - Banquet
 - Outdoor catering
 - Packed meals
 - Restaurant
4. Standardizing recipes.
5. Cost analysis of menu in
 - Hostel mess

**M. A. HOME SCIENCE
SYLLABUS FORMATE CBCS
IMPLIMENTED FROM – JUNE 2018
SEMESTER – II**

Course No.	Name of the Subject	Teaching hours per week			Credits
		Lectures	Others	Total	
HSC 407	Statistics & C0mputer Application	3	1	4	4
HSC 408	Food Science -2	3	1	4	4
HSC 409	Practical - Computer Application	3	1	4	4
HSC 410	Practical-Food Science -2	3	1	4	4
HSC 411EA OR HSC 411EA	Hospitality Administration OR Development Project Management	3	1	4	4
HSC 412EA OR HSC 412EB	Advertising and Marketing OR Food Packaging	3	1	4	4
	Totals	12	4	28	24

M. A. HOME SCIENCE
SEMESTER II
PAPER NO. HSC 407
THEORY
Statistics and Computer Application

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
2. Normal distribution – use of normal probability tables.

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 Contingency tables.
2. Application of Students ‘t’ tests for small samples. Difference in proportion for means and difference in means.

Reference:-

- 1.Dooley. D (1995) Strategies for interpreting Qualitative, sage publication; California.
2. Gay; L.R. (1981 2nd Edition) Educational Research; Charles. E. Mershall,Columbus, oh
3. Long; J.S. (Ed) (1988); common problems, Proper solutions avoiding errors in quantitative research; Beverly Hills; Sage publication; California.
3. Mukherjee. R. (1989) The Quality of life valuation in social research Sage publication New Delhi.
4. Stranss, A and carbin. J (1990) Basis of Qualitative research. Grounded 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 Continents :
 - 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

UNIT - IV

6. Sugar cookery:
 - a. Foams of sugar – Granulated, powdered khandsari, Molasses, Maple and loaf Sugar.
 - b. Process of Crystallization

Reference:-

1. Food Science - B shree laxmi, new Age International (p) ltd. Publishers. New Delhi.
2. Experimental cooking – lewe Badie.
3. Foods Selection and preparation, Sweedom and makeller.
4. Hand book of food Science and Experimental
5. Food – By M. Swaminathan
6. Food Packing – Sacharew & Griffin A Vi Publication.
7. Food Science (2nd Edition) Charles. H John Wiley & sons New york.

8. Food Packaging – Robert son. G.I. New Yourk, Marcell Dekker INC.
9. Food Science (3rd Edition) Portar Norman New Delhi CBC Publisher
10. Dairy Technology – S. Kumar.
11. Experimental cookery – Belle Leave (1953) New york. John Wiley & Sons. Inc.
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. Prayogatmak Randhankala (Gujarati)-Dr. Uma Patel
17. Aahar Vignan(gujarati)-Dr. Uma Patel, Dr. Janki Patel
18. Home scale preparation of soaked & sprovted Bengal Gram . Dr. UmaPatel.

**M.A. HOME SCIENCE
SEMESTER – II
PAPER NO. - HSC – 409
PRACTICAL - Computer Application**

- 1- MS Office
- 2- MS Word
- 3- MS Excel
- 3- 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 Fondant
 - (ii) - Chikkies and Barfies.
- (2). Preparation of various consistency of sugar syrup - Make any three preparation from it.
- (3). Caramalization use in cookery.

M.A. SEMESTER – II
PAPER NO. HSC 411- EA
THEORY
HOSPITALITY ADMINISTRATION

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 hose 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 firefighting, first aid safety in equipment use, pest control sanitation standardly.
 - V - Uniforms, types selection, distribution and control.
- (2). Banquet Management.

UNIT – IV

- (1). Energy and water management
Power requirements, flushing system, water control taps, wastewater circulation.
- (2). Communication system, public address system, intercom system, music and television.
- (3). Maintenance, Repairs and redaction programs.

References : -

- (1). Andrews Snoher (1978). Hotel Housekeeping Training Manual, TataMc Grew Hill Publication Co. Ltd. New Delhi.
- (2). Dix, C (1979) Accommodation operations : MacDonald & Evans.
- (3). Jones C. and Paul. J.V. (1980) Accommodation management. A System Approach Batsford.
- (4). Kesavana. M. (1977). : Hotel Information system casell.
- (5). Branson, E.J. and lennox, M. (1988) Hotel and HospitalHousekeeping, 5th Edition Redwood Books, Trobridge Wilshire, London.
- (6). R. Lewis, T. Begg's M. Shaw, S. Croffot (1986): the practice of hospitality management. Vol. I and II, AVI publishing Co. ins. Westport Connecticut.
- (7). David M. Allen(1983). Accommodation and cleaning services Vol.1&11, Houston Hutchinson and co. (publishers Ltd)
- (8). S. Andrews (1995). : Hotel, housekeeping Training Manual, TataMcGraw Hill Publishing company limited New Delhi.
- (9). Sethi, M and Malhan, S (1993): Catering Management, WileyEastern ltd, New Delhi.
- (10). Ursula Jones and Newtons : Hospitality and catering.
- (11). Andrews snoher (1978) Hotel Housekeeping Training Manual, TataMc Grow Hill Publication co. ltd. New Delhi.
- (12). Dix. C. and Paul J.V. (1980) Accommodation Management, A system approach batsford.

M.A. HOME SCIENCE
SEMESTER – II
PAPER NO. HSC – 411- EB
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 methods 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 peoples 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. NPV 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 Implementation. Tara Mcgrew Hill, New Delhi.
- 3) Emburger et al. (1990). Case Studies of Project sustainability, implications for policy and operations from Asian Experia. World Bank.
- 4) Goel, E.B. (1991). Project Management. Tara Mcgrew Hill, NewDelhi.
- 5) Gupta, R.C. (1990). Management Information Systems. CDs Publishers; New Delhi.
- 6) Little I.M.D Mirless, J.A. (1974). Project Appraisal and Planning for developing countries, Educational Book company; New Delhi.
- 7) Mukherjee, A. (1991). Methodology and database for Centralized Planning with special reference to Decentralized planning in India. Vol. !, 2 and 3.

**M.A. HOME SCIENCE
SEMESTER – II
PAPER NO. HSC- 412 EA
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 : -

- 1) Barnolia, G.R. & Sharma N.K. (1998). Effective Advertising, Marketing and Sales management, Mangaldeep Publications, Jaipur.
- 2) Dhar, P.K. (1991). Indian Economy – its growing. Dimensions, Kalyan Publishers, New Delhi.
- 3) Hawking D.I., Besi, R.J., Coney K.A. (1983). Consumer Behaviours, Revised ed., Newnan, J.W. Motivation Research & Marketing management, Practice Hall.
- 4) Kotler, Philip, (1983). Marketing management Analysis, Planning and Control, New Delhi.
- 5) Schillhan G. Leon, Kauk lazer Lesha (1992). Consumer Behavior, Prentice Hall of India, New Delhi.
- 6) Zikmund, G. William & Michael Daunico (1996). Basic Marketing, West Publishing Co.,
- 7) Maz, M. Parahkas V.N. Montegia (1994). Advertising (4th Edition). Vishal Prakashan Publication.
- 8) Terodhar, et al. (1984) : Advertising 8th edition, Vipul Prakashan Mumbai.
- 9) Dunn, S.W & A.M. Barban (1978): Advertising its role in Modern Marketing 4th Edition. The Dryden Press.
- 10) Woo, J.P. (1958). The story of advertising. The Roynalds Press, New York
- 11) Mohan M. (1996).: Advertising Management with print, Tala McGrew Hill Publishing house, Mumbai.
- 12) Memorra, C.B. Principles and Practice of Marketing in India, Kitab Mahal.
- 13) Vorkey V.O. – Handbook on Marketing Management Everest Publishing House, Mumbai
- 14) Jelliwani, J. (2001): Advertising, Phoenix Publishers, New Delhi.
- 15) Marketing Management 2nd Edition, P.M. Joshi at alc Jamanadas & Co.
- 16) Marketing Principles R.C. Patel 5th Edition, popular Prakashan Suchi.
- 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, ceps 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:-

1. Sacharow & griffin, food Packing – AVI a publication.
2. Hotchikess food & packaging interaction American chemical society.
3. Stanley & Sacharow food packaging.
4. Darry, R & T, Blackie : Principles & Application of MAP- academic & Professions.
5. Bhatia S.C Cannitig & preservations of fruits & Vegetables – new Delhi India.

6. Dalzelt J.M. food Industry & the environment chapmann & how, London.
7. Robertson G.L food packaging new york marcell dekker Inc.
8. Bureau of G & Multon J.K food packaging Technology (vol. 182) VCH publishers, Inc. New York.

**M. A. HOME SCIENCE
SYLLABUS FORMATE CBCS
IMPLIMENTED FROM – JUNE 2018
SEMESTER – III**

Course No	Name of the Subject	Teaching hours per week			Credit
		Lectures	Others	Total	
HSC 501	Advance Nutrition – 1	3	1	4	4
HSC 502	Apparel Design & Construction	3	1	4	4
HSC 503	Practical-Advance Nutrition & Apparel Construction	6	-	6	4
HSC 504 EA	Child and Human Rights	3	1	4	4
	OR				
HSC 504 EB	Problems in Human Nutrition				
HSC505 EA	Communication Technology & Extension	3	1	4	4
	OR				
HSC505 EB	Nutrition and Health of Women				
HSC 506	Seminars/Projects Related to Sub. 501, 502	4	-	4	4
Totals		22	4	26	24

**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 path way.
4. Become proliferation for specialization in nutrition.

UNIT – I

1. Energy Metabolism

- a. Determination of energy value of Food: Bomb calorie meter 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.

UNIT – III

2. Proteins

- a) Chemistry and classifications
- b) Amino acids – structure and classification.
- c) Digestion and absorption.
- d) Evaluation of protein quality.

UNIT – IV

1. Lipids

- a) Composition and classification.
- b) Characteristics of Fats, Hydrogenation,, Saponification, Rancidity, Effect of Health.
- c) Digestion and absorption.
- d) Types of fatty acids, nutritional significance.
- e) Requirements of Fat.

Reference Books-

1. Slampler, Sharp & Donnell : Evaluation Apparel, Quality – Fairchild Publications, New York.
2. Natalie Bray : Dress Fitting Published by Blackwell Science Ltd.,
3. Margolis Design your own Dress pattern published by Double Day and Co. Inc., New York.

M.A. HOME SCIENCE
SEMESTER III
Paper No. HSC – 502
THEORY
APPAREL DESIGN AND CONSTRUCTION

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, macrames 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. Patterns and textures

References :

1. Armstrong Pattern making for Fashion Desing.
2. Gioello and Berke : Figure Type and size Ramnge, Fairchild Publications, New York.
3. Grate and storm : Concepts in clothing, Mc Graw Hill Book, NewYork.
4. Bina Abling, Fashion sketch Book, Fairchild Publications, NewYork.
5. Claire Shaeffers: Fabric sewing Guide, Chilton Book Company, Radnot, Pennsylvania
6. Harold Carr and Barbara Lthan: The technology of clothing manufacture, Oxford BSP Professional Book London.
7. Slampler, Sharp & Donnell: Evaluating Apparel Quality – Fairchild Publications, New York
8. Natalie Bray: Dress fitting published by Black Well Science Ltd.
9. Margohs Design your own pattern published by Double Day and Co. Inc. New York.

M.A. HOME SCIENCE
SEMESTER III
Paper No. HSC – 503
Practical-Advance Nutrition & Apparel Construction

Practical based on 501- 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. Bleeding time and clotting time
7. To find out organic constituents of Milk.
8. To find out organic constituents of egg.
9. To find out organic constituents of Wheat flour.

Practical based on 502- Apparel Construction

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. Cowl Necklines
5. Plackets
 - a. Center button closing
 - b. Asymmetrical closing
 - c. Double breasted
6. Development of Paper Pattern and Construction of Garments (Using checks, stripes, Unidirectional and novelty fabrics)
7. Designing through draping
 - a. Basic draping Principles and Techniques
 - b. Developing a Pattern
8. Fashion Sketching
9. Term Garments – 2

**M.A. HOME SCIENCE
SEMESTER III
Paper No. HSC - 504 EA
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 , feticide, girl child)
- Children in difficult circumstances (children of prostitutes, child prostitutes, child labor, 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
- Forms of violation of women's rights
 - Violence against women in home, work, places and society Sexual harassment, rape
 - Crime against women
 - Political discrimination
 - Health and Nutrition based deprivations

UNIT IV

Human Rights

- Moral Rights
- Legal Rights
- Civil and Political Rights

Advocacy for Human Rights

References:-

1. Butterworth, D. and Fulmer, A (1993). Conflict, Control Power. Perth : Child and Family Consultants.
2. Bruner, T. (1986). Actual minds – possible words. London ; Harvard University Press.
3. Digumarti, B.R. Digumarti, P.L. (1998). International Encyclopedia of Women (Vol.1), New Delhi : Discovery.
4. D'Souza, C. and Menon, J. Understanding Human Rights (Series 1-4) Bombay: Research and Documentation Centre, St. Pius College.
5. Dreze, Jean and Sen, Amartya (1989). Hunger and Public Action, U.K. Oxford University Press.
6. Government of India (1992b). National Plan of Action: A commitment to the Child, Department of Women and Child Development, New Delhi.
7. Government of India (1993c). Education for All: The Indian Scene, Department of Education, New Delhi.
8. Government of India (1993d), Ministry of Finance, Economic Survey 1992-93, New Delhi.
9. Government of India (1994), Ministry of Finance, Economic Survey 1993- 94, New Delhi.
10. Government of Tamil Nadu (1993). Dr. J. Jayalalita 15 Point Programme for Child Welfare, Department of Social Welfare and Nutritious Meal Programme, Madras.
11. Kudchedkar, S. (Ed.)(1998). Violence against Women : Women against violence. Delhi : Percraft International.
12. National Institute of Nutrition (1993). Nutrition Trends in India, National Institute of Nutrition, Indian Council of Medical Research, Hyderabad.
13. National Institute of Public Cooperation and Child Development (1993). A Statistics on Children in India Packet Book 1993, New Delhi.
14. National Institute of Urban Affairs (1993), Urban Child: Issues and Strategies In collaboration with Planning Commission, Ministry of Urban Development and UNICEF, New Delhi.
15. National Law School of India University and United National Children's Fund (1991). Report of a Seminar on the Rights of the Child, National Law School of India University, Bangalore.
16. National Commission for Women (2001). A Decade of Endeavour (1990-2000), New Delhi; National Commission for Women.
17. Sachar, R.K. Verma, Dahawan, S., Prakash, Ved, Chopra, A. and Adlaka, R. (1990). Sex bias in health and medical care allocation, Indian Journal of Maternal and Child Health,
18. UNICEF (1992), Rights of the Child: World Declaration and Plan of Action from the World Summit for Children and the Convention on the Rights of the Child, New Delhi.
19. UNICEF (1993). The Progress of Nations, New York.
20. UNICEF (1994). The State of the World's Children 1994, Oxford University Press, U.K.

20. UNICEF (1990). Children and Women in India: A Situation Analysis: 1990, New Delhi.
21. UNICEF India (1993). Annual Report on Country Situation: 1993, New Delhi.
22. UNICEF India (1993). Annex to the Annual Report on Goals and Indicators, New Delhi.
23. UNICEF India (1993). Policy on Child Labour, New Delhi.
24. Weiner, Myron (1991). The Child and the State in India, U.K. : Oxford University Press.
25. Manav Adhikar and Sanyukta Rastra Sangh, Satis Chaturvedi
26. Manav Adhikar , A N Karia, C Jamanadas & Co.
27. Bal Adhikar and Kayado , Dr. K C Ravl, Guj. Uni. A'bad.
28. Mahila Jagruti And Kanun, Prakes Narayan.
29. Strio and Samaj, A. G. Shah, J. K. Dave.

M.A. HOME SCIENCE
SEMESTER III
Paper No. HSC - 504 EB
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
 - Nutritional anemia

UNIT - II

- Iodine
- Rickets, osteomalacia and osteoporosis
- Fluorosis

UNIT - III

2. Historical background prevalence etiology biochemical and clinical manifestations, preventive and therapeutic measures for the following:
 - Obesity

UNIT – IV

3. Historical background prevalence etiology biochemical and clinical manifestations, preventive and therapeutic measures for the following:
 - Diabetes

References:

1. McCollum, E.V. (1957): History of Nutrition, Houghton Mifflin Co.
2. Waterlow, J.C. (1992): Protein energy malnutrition, Edward Arnold, A Division of Hodder & Stoughton.
3. Bauernfeind, J. Christopher (Ed). (1986): Vitamin A deficiency and its control, Academic Press.
4. WHO (1970): Fluorides and Human Health

5. Rajiv Gandhi National Drinking Water Mission (1993) prevention and control of Fluorosis
Ministry of Rural Development
6. Beaton, G.H. and Bengoa, J.M. (Eds) (1976): Nutrition in Preventive Medicine, WHO
7. Gopalan, C (Ed) (1993): Recent Trends in Nutrition, Oxford University Press
8. Demaeyer E.M. (1989): Preventing and Controlling iron Deficiency Anemia through primary
health care, WHO
9. Sachdeva H.P.S. Chaudhary, P. (Eds) (1994): Nutrition in Children - Developing Country
Concerns, Dept. of Pediatrics, Maulana Azad Medical College, New Delhi
10. Shils, M.E., Olson JA, Shike N and Ross AC(Eds.) (1999): Modern Nutrition in Health and
Disease. 9th Edition, Williams & Wilkins
11. Mohan, L.K. & Ecott – Stump, S. (2000): Krause’s Food, Nutrition and Diet therapy 10th
Edition, W.B. Saunders Ltd.
12. Bamji M.S., Rao P.N. and Reddy V. (Eds.) (1996). Textbook of Human Nutrition. Oxford
and IBH Publishing Co. Pvt. Ltd.
13. Publication of the International Life Science Institute.
14. UNICEF’s State of the World’s Children.
15. World Health Organization’s Reports, Monographs and Technical Report Series.
16. McLaren, D.S. (1992) A Color Atlas and Text of Diet-Related Disorders.

**M.A. HOME SCIENCE
SEMESTER III
PAPER NO. HSC 505 EA
THEORY
COMMUNICATION TECHNOLOGY AND EXTENSION**

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, coexistence 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:

1. Corner, J. Communication Studies – In Introductory Reader.
2. Defluers and Dennis (1994): Understanding Mass Communication.
3. Gupta S.S.: Cases in Advertising and Communication Management in India.
4. Harper and Row (1989): Main Currents in Mass Communication, Agee, Adut and Emery.
5. Joseph, D. (1993): The Dynamics of Mass Communication.
6. McQuail, D. (1994): Introduction to Mass Communication, 3rd Edition, Sage Publication.
7. Ravindran, R.K. (1999): Media and Society.
8. Ravindran, R.K. (2000) : Media in Development Area.
9. Schramm, W. (1988): The Story of Human Communication, from cave painting to the Microchip.
10. Vivian, J. (1991): Media of Mass Communication.
11. Wright, Winters and Zeiger : McGraw Hill, Advertising Management.
12. Zachariah, A. (1999): Media power, People, Politics and Public Interest

**M.A. HOME SCIENCE
SEMESTER III
PAPER NO. HSC 505 EB
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
2. Wallace, H.M. and Giri, K (1990): Health care of women and children in Developing Countries, Third Party Publishing Co. Oakland California
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
9. Weil DEC, Alicbusan AP, Wilson JF, Reich M.R. and Bradley D.J.(1990) The impact of development policies on health, A review of the literature world health organization, Geneva
10. International Nutrition Foundation – Micronutrient Initiative (1999): Preventing iron Deficiency in women and children: Technical consensus on key issues
11. Gopalan, C. and Kaur, S (Eds) (1989): Women and Nutrition in India, Nutrition Foundation of India

**M. A. HOME SCIENCE
SYLLABUS FORMATE CBCS
IMPLIMENTED FROM – JUNE 2018
SEMESTER – IV
M.A. HOME SCIENCE**

Course No	Name of the Subject	Teaching hours per week			Credits
		Lectures	Others	Total	
HSC 507	Advance Nutrition -2	3	1	4	4
HSC 508	Advance Apparel Construction	3	1	4	4
HSC 509	Practical -Advance Nutrition & Apparel Construction	6	-	6	4
HSC 510 E A	Early Childhood care & Education	3	1	4	4
OR HSC 510 E B	Food Processing & Technology				
HSC 511	Dissertation / Extension & Communication (Optional paper to Dissertation)	-	-	4	4
HSC512	Seminar/Project	-	-	4	4
Totals		15	3	26	24

**M.A. HOME SCIENCE
SEMESTER IV
PAPER NO. HSC 507
THEORY
ADVANCED NUTRITION – II**

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 in to interrelationships between various metabolic pathways
4. Become proliferation for specialization in nutrition

CONTENTS:

UNIT I

WATER

1. Water and Electrolyte Balance
 - Chemistry, distribution and composition of body fluids.
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

1. vitamins Structure, absorption, transport and metabolism biochemical functions and interaction with other nutrients
 - Fat soluble – A,D,E and K

-

UNIT III

VITAMINS-2

1. vitamins Structure, absorption, transport and metabolism biochemical functions and interaction with other nutrients
 - Water soluble vitamins – B complex and Ascorbic acid

-

UNIT IV

1. Poisonous elements naturally occurs in Food.

- Toxic Amino Acid
- Neurolytharism
- Toxic alkaloids
- Synojenic glycosides
- Trypsin Inhibitor
- Micro toxic
- Flatulence factors
- Lytharism

2. Poisonous effect developed in Food by chemicals.

- Toxic metals
- Pesticides
- Food processing
- Packaging material
- Environmental

References:

1. Food and Nutritions by M.S. Swaminathan, Vol. I & II
2. Normal and Therapeutic Nutrition by Robinson
3. Berits, H.D. and Grosch (1999), Food Chemistry New York
4. Potter, N. and Hotch Kiss, Food Sciences – CBS Publisher, New Delhi.

M.A. HOME SCIENCE
SEMESTER IV
PAPER NO. HSC 508
THEORY
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. Fiber 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:

1. Slampler, Sharp & Donnell : Evaluation Apparel, Quality – Fairchild Publications, New York.
2. Natalie Bray : Dress Fitting Published by Blackwell Science Ltd.,
3. Margolis Design your own Dress pattern published by Double Day and Co. Inc., New York.

**M.A. HOME SCIENCE
SEMESTER IV
PAPER NO. HSC 509**

Practical -Advance Nutrition & Apparel Construction

1) ADVANCE NUTRITION – II

1. Estimation of ascorbic acid content of foods by titrimetric 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 alkali and determining their exact normality.
5. Estimation of Vitamin-A. (Palak, Coriander)
6. Estimation of RBC and WBC from blood.
7. Estimation of urea and uric acid and creatinine in urine.
8. To prepare chart for normal content of blood.
9. To prepare chart for normal content of urine.
10. Estimation of Vitamin-C

2) ADVANCED APPAREL CONSTRUCTION

1. Development of slopes for skirt variations.
 - Low and high waist
 - A line, flared, circular, pleated, yoked with goaded / peplum
2. Pockets.
 - Slashed pockets – welt, 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.

**M.A. HOME SCIENCE
SEMESTER IV
PAPER NO. 510 EA
THEORY
EARLY CHILDHOOD CARE & EDUCATION**

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/Programme:
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, Rousseau, 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: playground 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 promote 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 :

1. Bhatia & Bhatia (1995). Theory & Principles of education, Daalsa House, Delhi.
2. Brewer. J.A. (1998). Introduction to early childhood education. (3rdEd) Bosnon : Allyn & Bacon.
3. Canol. E.C. and Jan Allen (1993). Early childhood curriculum, University of Tennessee, New York : Macmillan.
4. Day Barbara (1983) Early childhood education, New York, Macmillan.
5. Gordon & Browne (1989). Beginning and Beyond, Second edition, Delman Pub.
6. Grewal. J.S. (1984) Early childhood education, Agra National Psychological corporation pub.
7. Hildebrand Verna (1981). Introduction to early childhood education. N.Y. : Macmillan.
8. Hildebrand Verna (1985). Guiding the young Child, N.Y. : Macmillan.
9. Jenkins. E. (1997). A practical guide to early childhood curriculum, C.V. Moshey Co.
10. Judith. E and Meyers, R.G. (2000). Early childhood counts : A programming guide on early childhood care for development, Washington: The World Bank. (Learning Resource Service.)
11. Kaul. V.(1997). Early childhood education programme, New Delhi.: NCERT.
12. Kohn Ruth (1972). The exploring child. Mumbai : Orient Longman.
13. Kulkarni. S. (1988). Parent Education perspective and approach. Jaipur : Ravat Publications.
14. Maxim G. (1980). The very young, California : Wordsworth.
15. Mohanti & Mohanti (1996). Early childhood care & education. New Delhi : Deep & Deep Publication.
16. Moyley. J.R. (1996). Just Playing, The role and status of play in early childhood Education. Miltron Kaynens : Open University Place.
17. Murlidharan. R. (1991). Guide to nursery school teacher. New Delhi : NCERT
18. Pankajam. G. (1994). Preschool Education. Ambala Indian Pub.
19. Rao. V.K. and S. Khurshid – ul – Islam (eds.) (1997). Early childhood: care and Education. New Delhi : commonwealth Pub.
20. Read Katherine (1980). The Nursery school. Halt Rinehart & Winston.
21. Saraswathi. T.S. (1988). Issues in child Development, curriculum & other Training & Employment, Mumbai : Somaiya.

**M.A. HOME SCIENCE
SEMESTER IV
PAPER NO. 510 EB
THEORY
FOOD PROCESSING AND TECHNOLOGY**

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 crops 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 grains.
 - c. Rice processing, para boiled 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, Canning 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, sweeteners, stabilize and thickeners.

Reference: -

1. Gould , G.W. (1995), New Methods of food preservation, Blackies Academic & Professional London
2. Connor, J.M. and schick, W.A. (1997), Food processing an individual powerhouse in transition, John Wiley and Sons, New York.
3. Stradelman, W.J. and Cotterill, D.J. (1986), Egg. Science and technology, AVI publishing & Co., INC, Westpost.
4. Arthey, D. and Ashurt, P.R. (1996), Fruit processing, Blackies academic professional, London.
5. Philip, R.D. and finley, J.W. (1989). Protein quality and effect of processing, Marcel Dekkern INC, New York.
6. Inglett, G.C. and Munel, L. (1980). Cereals for food and Beverages, Academic Press. New York.
7. Jelen, P. (1985). Reston Publishing Co., INC, A prentice Hall Co., virgina.
8. Hirasa, K and Takenasa, M. (1998), Spice science and technology, Lion Corporation, Tokyo, Japan.
9. Kap, K. Lorenz, K and Brummer, I. (1995). Frozen and Refrigerated dough and batters, American Association of sereal chemists INC. St.Paul. Minnesola.
10. Von Loeseoke, H.W. (1998). Food Technology Series : Drying and dehydration of Foods, Applied Scientific Publishers.
11. Matz, S.A. (1996). Bakery technology and Engineering, Third Edition CBS Publishers, New Delhi.
12. Follows, P.J. (2000), Food processing Technology, Principles and Practice, second edition, CRC Woodhead Publishing Ltd, Cambridge.
13. Hosney, R.C.(1996). Principles of cereal science and technology, second edition, American Association of cereal chemists, St. Paul, Minnosota.
14. Salunkhe, D.K. and S.S. kadam (1995). Handbook of fruit science and technology: Production, composition storage and processing Moncel Dekket INC. New York
15. Askan, A. Freptor, H. (1993). Quality Assurance in Tropical fruit processing, springer – Berlin.
16. Oliveira , A.R. Oliveira, J.C.(1999). Processing food quality optimization and process arressment, CRC, Boca raton.
17. Peter Fellours (Ed.) (1997), Traditional food, processing for profit Intermediate Technology Publications, London.
18. Harris, R.S. and Karmas. E. (1975). Nutrition Evaluation of Food Processing, AVI Publishing Co., WestPost, Connecticut.
19. Febriani, G and Lintas, C. (1988). Durum Wheat. Chemistry and technology, American association of cereal chemist,INC.
20. Fennema, O.R. Powrie, W.D. marth, E.H. Low Temperature preservation of food and living Mather, Mancel Dekker INC. New York.
21. Tannarbaum, S.R. Numitional and safety Aspects of food processing,Mancel Dekket INC, New York.
22. Van – Beynnau, G.M.A. and Roles, J.A. starch conversion technology, Marcel Dekket INC, New York.
23. Ting, S.V. and Rouself, R.L. Citrus fruits and their products; Analysis and Technology.

24. Mathews, R.H. Legumes : Chemistry, Technology and Human Nutrition. Marcel Dekket Inc, New York.
25. Kokinin, J.L. Ho., C.T. and Karwe, M.Y., Food Extention Science and Technology, Marcel Dekket INC, New York
26. Akoh, C.C. and Swanson, B.G. carbohydrate Polysters and fat salsitutes, Marcel Dekket INC, New York.
27. Srephen, A.M. Food Polysaecharides and their application, Marcel Dekket INC, New York.

**M.A. SEMESTER-IV
PAPER HSC-511
DISSERTATION**

Subject for Paper -511 Dissertation

Should be selected from any related topic of syllabus.

OR

**PAPER – 511 : EXTENSION & COMMUNICATION
(OPTIONAL PAPER TO DISSERTATION)**

Objectives:-

- 1 To create answer about various aspects of extension education.
- 2 To develop understanding various aspects of communication in extension education.
- 3 To create awareness about approaches for classification of extension methods.
- 4 To develop understanding regarding advantages, technique for various extension Methods.

UNIT-I

Communication & Extension Education.

- 1 Understanding extension education (Revision from sem-6)
- 2 Concept of communication.
- 3 Elements of communication

UNIT-II

Process of Communication

- 1 Communication Process
- 2 Roll of communication planner
- 3 Major problems of communicating during extension work.

UNIT-III

Programme planning and roll of professionals in extension education

- 1 Programme planning-
 - Concept of Programme planning
 - Developing a plan of work
 - Principles of planning the programme
- 2 Role of Professionals in extension work
 - Significance of professional in extension work.
 - Functions of community worker.
- 3 Characteristics of an ideal community worker

UNIT- IV

Types of Education & their program

- 1 Types of education
 - Community Development program
 - Component & Philosophy of community development

Reference books-

- 1 Dhama O.P. and Bhatnagar, Education and Communication for Development, Oxford co.,2002
- 2 Chandra Arvinda, Shah Anupama And Joshi Uma, Fundamentals of Teaching Home science, Publishers 1989
- 3 Chaubeg B.K., A handbook of extension education.
- 4 Parlikar Kalpana, Arts of teaching Home Science, Ekvira pub.Baroda1990.

**M.A. SEMESTER-IV
PAPER HSC-512
PROJECT/SEMINAR**

Subject for Paper -512 Project /Seminar

Should be selected from any related topic of syllabus.