

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT.

First Year B. A.

Home Science - I

Introduction To Home Science Education And Clothing.

Theory-3periods/week

Theory- 45 marks

Practicals-2 periods/week

Practical- 25 marks

Effect from June 2008

Internal- 30 marks

Unit-I

OBJECTIVES: To enable students to:

- 1 Understanding the concept and need of Home Science education and extension.
- 2 To know various methods of teaching in extension.
- 3 Understand the principles and procedure in extension programme planning.

COURSE CONTENT :-

Chapter-1 :- Introduction to education

- 1.1 Meaning and concept of education.
- 1.2 Types of education.
 - Formal education.
 - Non formal education.
 - Extension education.
- 1.3 Significance of education.

Chapter -2 :- Introduction to Home Science education in brief.

- 2.1 Meaning and concept of Home Science education.
- 2.2 Historical background of Home Science education.
- 2.3 Objectives of Home Science education.
- 2.4 Philosophy of Home Science education.
- 2.5 Major areas of Home Science education.

Chapter -3 :- History and scope of Home science

- 3.1 Educational scope of Home science.
- 3.2 Vocational scope of Home science.
- 3.3 Home science education in India.

Chapter -4:- Method of teaching Home Science.

Methods of teaching: - Definition of each method, selection, How to organize, advantages & limitations of the following methods:-

- (a) Lecture method.
- (b) Discussion method.
- (c) Demonstration method.
- (d) Workshop method.
- (e) Practical method.
- (f) Assignment method.
- (g) Self study method.
- (h) Project method.
- (i) Report drafting.
- (j) Symposium.
- (k) Seminar method.

Chaptr-5 :- Home science extension education

- 5.1 History of Home Science extension.
- 5.2 Meaning & Definition of Home science Extension education.
- 5.3 Main aspects of Home science extension
Origin, needs & concept of Home science extension education.
- 5.4 Philosophy of Home science extension.
- 5.5 Objectives of Home science extension.
- 5.6 Characteristics of Home science extension education.

Chapter – 6 :- Approaches to extension teaching through different methods.:-

Selection, use, advantages & limitations of following extension teaching methods:-

1. Farm and Home Visit.
2. PRA (Participatory rural appraisal techniques)
3. Farmer's call.
4. General meeting.
5. Discussion.
6. Demonstration.
7. Exhibition and farmers fair.
8. Field trip.
9. Campaign.
10. Folk media.
11. Plays.
12. Training Camp.
13. Talk.
14. Game.

Chapter -7 :- Definition of

- 7.1 Audio Aid, Visual Aid,
And Audio Visual Aid.
- 7.2 Classification of Audio – Visual Aids.
- 7.3 Edger Dales “The cone of experience”
- 7.4 The role of audio – Visual aids in teaching learning experience.

Chapter-8 :- Programme of development and their relevance of Home Science.

- 8.1 Objectives of the programme.
- 8.2 Integrated rural development programme (IRDP)
- 8.3 Applied nutrition programme.(ANP)
- 8.4 Integrated Child Development programme.(ICDS)
- 8.5 Development of women and Children in rural areas.(DWACRA)
- 8.6 Revlevance of these programmes to home science.

PRACTICAL

1. METHODS & Principles in Preparing & using the following teaching aids:-

- (i) Posters – 1 practical
- (ii) Charts – 1 practical
- (iii) Graphs – 1 practical
- (iv) Diagram – 1 practical
- (v) Flannel graph – 1 practical
- (vi) Flash card – 1 practical
- (vii) Rod puppet – 1 practical
- (viii) Mobile – 1 practical
- (ix) Display on bulletin board.

Unit-2

INTRODUCTION TO CLOTHING

Objectives

1. To give practice of sewing machine
2. Gain knowledge and skills in the basic methods of clothing construction.

Theory

1 Psychological and sociological importance of clothing.

1 Psychological effect of clothing

- a. Effect on adults.
- b. Effect on children.
- c. Effect on adolescents.

2 Effect of clothes on human behaviour.

- a. Clothes and self expression, physical expression, social expression.
- b. Individuality in dress clothes their importance and status.

3 Tools used for clothing construction, their use, care and Cleaning.

- a. Tools for marking.
- b. Tools for cutting.
- c. Tools for drafting.
- d. Tools for sewing.
- e. Tools for finishing.

4 Basic construction techniques.

- a. Basting (uneven and slip)
- b. Back Stitch.
- c. Hemming.
- d. Lock stitch.
- e. Whip stitch cover.
- f. Preparing bias cloth.

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

PRACTICALS

- | | | |
|---|--|-----------------|
| 1 | Introduction to sewing machine and its different part, Care and cleaning. | – Practical - 2 |
| 2 | Machine faults and ways to rectify them. | – Practical - 1 |
| 3 | Basic sewing technique, seams, plackets, yokes neckline finishes-Bias binding, Bias facing, shaped facing. | – Practical - 1 |
| 4 | Desposal of fullness in garments, darts, tucks, pleats. | – Practical - 2 |
| 5 | Various type of sleeves on paper. | – Practical - 1 |
| 6 | Various types of collars on paper. | – Practical - 1 |

REFERENCE BOOKS

Unit-1

- (1) R. R. Das, Binita Roy-Teaching of Home Science 1979, Sterling Publishers Ltd.
- (2) Arvinda Chandra, Anupama Shah, Uma Joshi-Fundamentals of teaching Home Science.
- (3) S. K. Waghmare –Teaching extension education. Prashant publisher 1980 Vallabh Vidyanagar.
- (4) Dale Edgar – Audio Visual methods in teaching. The Dryolen press, New Yourk,1953.
- (5) Devdas Rajamal P.- Methods of teaching Home Science. NCERT,New Delhi 1977.
- (6) Devdas Rajamal P.- The meaning of Home Science . Sri Avinashllingam college of Home Science Coimbatore-1968
- (7) Introduction to Home Science by Dr. Chandra Sterling publication, New Delhi.
- (8) What is Home Science? Dr. Kalpana Parikar Diamond Publication, Baug Baroda.
- (9) વિસ્તરણ શિક્ષણની મૂળતત્વો – પ્રો ધીરજ ધકાન.
- (10) Supe S.V. Introduction to extension education
- (11) Neepa Mehta, Avani Mehta - Designing graphic Aids. Dept of H.S.C. extension & communications M.S. Univ. Baroda.

Unit-II

- (1) John Wiley Son's –Family clothing.
- (2) Ku Bhanu Patel – Madhu Sharan-Sociological & Psychological aspect of Clothing.
- (3) Reena Bhatia – Charu Arora – Introduction to Clothing and textile.
- (4) Vastra Vigyan evarm Paridhan.
- (5) Rahul Jewel,encyclopedia of dress making.
- (6) Chattopadhyay K. Indian embroidery.
- (7) Reader Digest – Complete guide of sewing.
- (8) Towers, E.I. Steandard process in dress making.
- (9) Mc Calls sewing in colour.

Marking Scheme for Practical Exam – 25 marks

Journal - 4 Marks

Class work - 8 Marks

For unit I

Preparing teaching aid any one – 7 Marks

For Unit II

- a. Basic Sewing technique – 7 Marks
- b. Disposal of fullness in garments – 2 Marks
- c. Sleeves of Collars – 2Marks

Veer Narmad South Gujarat University, Surat.
 First Year B.A.
 Home Science Paper – II
 (Basic Science)

Theory -3 Period / Week
 Practical – 2 Period/ Week
 Effect from June 2008

Theory – 45 Marks
 Practical – 25 Marks
 Internal – 30 Marks

Objectives : The theory and practical course is designed to serve as a sound basis for the study of nutrition , Food science, Biochemistry etc.

THEORY SYLLABUS

Unit-I

1. Elementary knowledge about atom, molecule, Mole concept, Equivalent Wt. Molecular Wt., Symbol, Formula, Valency, Radicals.
2. Definition, Characteristics of Elements, metallic and non-metallic elements. compounds and mixture.
3. Acid and base: Definition, Properties, Types (Strong and Weak) and Uses.
4. Main Properties and uses of the following substances
 - a. Sodium hydroxide
 - b. Potassium hydroxide
 - c. Sodium carbonate
 - d. Sodium bicarbonate
 - e. Sodium Chloride
 - f. Alum
 - g. Boric Acid
 - h. Potassium permanganate
 - i. Plaster of Paris
 - j. Quick Lime
 - k. Sodium benzoate
 - l. Potassium meta-bi-sulphate
 - m. Citric Acid
 - n. Acetic acid
 - o. Steel
 - p. Types of glasses and their uses.
5. Molecular and structural formula, isomerism.

Unit-II

1. Introduction to cell, types of cell(Prokaryotes and eukaryotic), differences between plant cell and animal cell with diagram.
2. Cell organelles, their structure and function.
3. Non – Living cell contents.
4. Blood groups – ABO method and Rh.
5. Flower – Detailed Study of typical flowers
6. Elementary knowledge of vegetables
7. Medicinally important plants –useful parts and their medicinal uses.(e.g. Licorice, Vitex, Cinnamon, cissus guadran gularis, clove, Euealyptus, Vasica, Sucred basil, Nimb, aloe
8. Primary study of Autotrophyhes and Heterotrophes, Food Chain, Food Web, modes of plants nutrition.

Unit-III

1. Origin and evolution of life- Oparin's theory
2. Evidences of evolution
3. Theories of evolution- Lamarck and Darwin
4. Pollution – Air, Water, Soil and Sound pollution.
5. Defensive devices in plants and animals.

PRACTICALS

1. Study of compound microscope.
2. Observation of Plants cells-Mounting :
 - a. Onion Peel, Tomato Cells, Spirogyra.
 - b. Pollen grains of Hibiscus, Datura and Crinum flowers.
3. Observation of non-living cell contents- Mounting
 - a. Starch grains (e.g. Potato, Euphorbia)
 - b. Mineral Crystals of Calcium oxalate (from leaf of pothos, petiole of Pothos, leaf of pisia, phylloclade of opuntia etc.)
4. To detect human blood groups
5. Study of animal cells :(Permanent Slides-Amoeba, euglena, Paramecium)
6. Study of typical flowers – Hibiscus, Datura, Crinum.
7. Study of different types of Vegetables.
8. Study of medicinally important plants as theory syllabus
9. Study of symbiotic, parasitic and insectivorous plants.
10. Study of evidences of evolution
11. Study of defensive devices in plants
12. Study of defensive devices in animals.

Reference

1. A text book of botany by A.C. Datta.
2. General Biology : James Walt Mavor,
3. A text book of Botany in F.Y.B.Sc.Popular Pub., Surat.
4. A Text book of Zoology for F.Y.B.Sc.Popular Pub., Surat.
5. Cytology : Rustogi,
6. Cell Biology : Roberties
7. Loewy A.And Siekarly (1995) Cell Structure and function, Hold New York.
8. Parter K.R.,Bonnevillle M.a.: Fine structure of cells tissues
9. Fundamentals of food and Nutrition : Mudambi
1. Manual of botany practicals by D.K.Apsungikar.
2. જીવશાસ્ત્ર, યુનિ. ગ્રંથ નિર્માણ બોર્ડ, ગુજરાત રાજ્ય
3. વનસ્પતિશાસ્ત્ર પરિચય : ડૉ સોલંકી, પ્રો મોરે વગેરે.
4. જીવવિજ્ઞાન : જયભારત પ્રકાશન કું અમદાવાદ
5. પ્રાયોગિક વનસ્પતિશાસ્ત્ર : ડૉ જૈવિન જોષી, ડૉ હંસાબેન પટેલ. પોપ્યુલર, સુરત.
6. કોલેજ રસાયણશાસ્ત્ર, ભૌતિક, અકાર્બનિક, કાર્બનિક રસાયણશાસ્ત્ર, પોપ્યુલર પ્રકાશન.
7. અકાર્બનિક, કાર્બનિક રસાયણશાસ્ત્ર – પોપ્યુલર પ્રકાશન.

Marking Scheme

Section – I (Rotation)

For each Specimen -04 Minutes

1. Identify and Describe (Animal Cell)	01
2. Identify the pointed part and describe (Typical Flower)	01
3. Identify and Describe (Type of Vegetables)	03
4. “ “ “ “ “	
5. Identify and Describe (Useful Part & Medicinal use)	01
6. Identify and Describe (Mode of Nutrition)	02
7. “ “ “ “ “	
8. Identify and Describe (Evidence of evolution)	01
9. Identify and Describe (Defensive Device in Plant)	01
10. Identify and Describe (Defensive device in animal)	<u>01</u>
Total	11 Marks

Section – II

1. Mounting-Onion Peel /Tomato Cells /Spirogyra /Pollen grains – Viva (05)
 2. Mounting – Starch grains/Mineral Crystals-Viva (05)
- Or**
- TO detect human blood group –Viva
 3. Journal. (04)

Veer Narmad South Gujarat University, Surat.

F.Y.B.A HOME SCIENCE PAPER- I11 INTRODUCTION To NUTRTION

3 Periods /Week Theory	45 Marks Theory
2 Periods /Week Practical	25 Marks Practical
<u>Effect from June 2008</u>	30 Marks Int.
	20 Marks Theory
	10 Marks Pra.

Objectives :

1. To understand the concepts of Food Nutrition & its relation to health.
2. To understand importance & requirements of nutrients for all age groups.

Theory course content

Unit- I

- a. Definitions of food, nutrition & nutrients
- b. Functions of food, Classification of food groups for pyramid importance of food groups, nutritive value of food groups.
- c. Meaning & importance of balance diet
- d. Health & nutrition & their interrelationship
- e. History of nutrition

Unit- II

- a. units of energy and its daily allowances
- b. Methods of determining energy value
- c. Methods of measuring energy need of the body
- d. Factors affecting basal metabolic rate.
- e. Caloric value of protein, carbohydrates and fats
- f. Energy balance and problems associates with it.

Unit- III

Micro Nutrients protein

1. Definition, Classification, Sources, Functions, Properties, Daily allowances, Biological value of Protein, Digestion, Absorption, Nitrogen balance, Deficiency disorder of Protein.
2. Carbohydrates : Definition, Classification, Properties, Functions, Sources, Digestion, absorption, Storage in body, importance of daily diet & Problems associated with it.
3. Lipids (Fats & Oil): Definition, Composition, Classification, Food Sources. Properties, Functions of Fats. Fatty Acid, essential & non essential, Digestion absorption, deficiency & excess of Fat intake in our diet.

Unit- IV

Vitamins : History, Classification, Functions, Sources, Daily allowances effect of hypo & hyper intake of vitamins & their treatment

Vitamin A, D, E, K.

Vitamin C, B, Complex i.e. Thiamin, Riboflavin,

Naicin, Pyridoxine, Cynocobalamin, Folic Acid

Minerals :

Functions, Daily requirement, Food sources, Deficiency of following minerals, calcium Iron, phosphorus, sodium, potassium, flourin & only introduction to trace elements.

Water : as a nutrient, function, requirement, source, dehydration and water intoxication.

Importance in our diet.

Cellulose : Importance in our diet.

Unit- V

Principles and methods of food preparation. Comparative study of various methods including nutritional losses during boiling, steaming, roasting, Frying, stewing, Pressure cooking, microwave cooking and Solar cooking.

Reference:

1. Principles of Nutrition Willson, John Willey & sons.
2. Basic Nutrition & diet therapy Robinson
3. मानव पोषण – युनि. ग्रंथ निर्माणा बोर्ड
4. आहारना मुणभूत घटके – डॉ शुभ लक्ष्मी
5. इन्डामेन्टलस ओई कुडस अन्ड न्युट्रीशन – प्रा. नीलम बुध्देव
6. ड्युमन न्युट्रीशन प्रा. नीलम बुध्देव

Practicals :

1. Calculation of food values	1 Practical
To plan & prepare nutrient. rich Recipes	
Protein rich recipes	1 Practical
Carbohydrate rich recipes	1 Practical
Fats & oil	1 Practical
Vitamin “A”	1 Practical
Vitamin “C”	1 Practical
Vitamin “B1”	1 Practical
Vitamin “B2”	1 Practical
Vitamin “Niacin”	1 Practical
Minerals, Calcium	1 Practical
Minerals, Iron	1 Practical
Minerals, Phosphorous	1 Practical

Marking Scheme For Practical Examination

Journal	- 4 marks
Selection & dish	- 8 marks
Table setting	- 8 marks
Viva	-3 marks
Calculation	-2 marks
Total:	- 25 marks

Veer Narmad South Gujarat University, Surat.

**FIRST YEAR B.A.
HOME SCIENCE-IV
HOME MANAGEMENT
Effect form June 2008**

Theory-3 Periods/week	Theory-	External-45 Marks Internal-20 Marks
Practical-2 Periods/week	Practical	External-25 Marks Internal-10 Marks

A. INTRODUCTION TO RESOURCE MANAGEMENT

Focus :

This Course deals with the management of resources in the family with particular reference to mobilizing all the resource for achieving the family goals. It also deals with-the factors motivating management and management applied to specific resources.

OBJECTIVES :

To create awareness among the students about management in the family as well as the other systems

To recognize the importance of wise uses of resources in order to achieve Goals

UNIT-1 Introduction to Management

- Ch-1 Variety of Meaning
Supervision / Supervisor, Leadership / Leader, Execute / Executive, Organisation / Organiser, Administration/ Administrator, Direction/ Director, Control/Controller, Boss, Governor
- Ch-2 Definitions of Management and Home Management From Dictionary point of view , By Henri Fayol (Father of Modern Management), Mc Farland, Henri Sisk, A Simple preferred Definition, Nickell and Dorsey, R.P.Kotzin, National Conference of family life sub-committee Report, Gross and Crandall, Traditional and Modern Concept of Definitions.

UNIT-2 Motivation in Management

- Ch-1 Values
Definitions- Mid Marget, Dr.Radha Kamal Mukherjee, Nickell and Dorsey Etc, Characteristics, Origin and Motivating Values, Types of Values-By Paker, By Super, By Lindsey, Factors affecting Values
- Ch-2 Goals
Definitions, origin and Types of Goals, Long Term, Short Term, Means end, Related to Personal, Family, real, Group etc.
- Ch-3 Standards
Meaning, Classification-As to context, fixedness and Quality.

UNIT-3	Resources and their Management in the Family
Ch-1	Resources
	Definitions, Meaning and Classification
Ch-2	Family characteristics influencing management
	A. Family
	Introduction, Meaning, Definitions-Elliot and Merrill, Besong and Besong, Burges and Loke
	Types of Family in India
	On the basis of residence, Authority, Lineage Marriage, Succession, Number and structure, Advantages and Disadvantages of Joint and Nuclear Family
	B. Family Life Cycle
	C. Life Styles
Ch-3	Management Process
	A. Definition and Meaning of Management
	B. Development and importance of Management
	C. Home Management is a mental Process
	D. Conceptual Frame work of Management
	E. Steps involved in Management Process
	Step-1 Planning
	Characteristics, Definition and Steps involved in Planning
	Step-2 Controlling
	Definition and Steps involved in controlling- Implementation, checking, adjustment
	Step-3 Evaluation
	Importance, Relation to goals and values
Ch-4	Time Management Process
	1. Meaning of time-Clock time, Psychological time, Biological Time, Time Cost
	2. Planning of Time Management
	Family life cycle and demand of time
	Time used for activities
	Rest period
	Factors affecting time planning
	Steps in making time plan
	3. Controlling
	4. Evaluation
	Gnath Chart for evaluation of time
Ch-5	Energy Management Process
	1. Planning
	a) Family life cycle and demand of energy
	b) Energy used for various activities
	c) Fatigue-Types, Reasons (External and Internal)
	Mesures to relieve fatigue
	d) Step in making energy plan
	2. Controlling
	3. Evaluation

- UNIT-4 Work Simplification**
1. Techniques of Work Simplification formal and Informal techniques
 2. Mundell's Classes of Change
 - a) Changes in hand and body motion
 - b) Changes in work and storage space and equipment
 - c) Changes in the stages of working method
 - d) Changes in raw materials
 - e) Changes in finished product
- UNIT-5 Decision making in Management**
- Ch-1 Meaning and Definitions
- By Peter Drucker, By Geroge R. Terry, By R.S. Davar, From Webster Dictionary
- Ch-2 Steps in Decision Making
- A. Problem analysis
 - Perception of the problem
 - Identification of the problem
 - Analysis
 - B. Search for alternatives
 - C. Evaluation of alternatives
 - D. Selection of the best solution
Risk involved, Economy, Timing, Limitations
- Implementation of decision
Feed back of Decision
- Ch-3 Types of Decision
Major and Minor
Programmed and Non-Programmed
Routine and Basic
Personal and Group
- Methods of taking Group Decisions
- UNIT-6 Communication in Management**
- Ch-1 Definitions
Oxford Dictionary, Keith Davis, Mc Farland
- Ch-2 Importance and objectives of Communication
- Ch-3 Elements of Communication
Sent Message, Medium, Language, Receive Contexts

Reference:

1. Gross, Crandall: Management for Modern Families
Appleton century crofts Inc.
2. Nickel and Dorsey: Management in Family Living
Wiley Eastern Ltd. New Delhi
3. Dr. Saksena S.C: Business Administration and Management
Sahitya Bhawan, Agra
4. Swanson V. Introduction to Home Management
Coller, Mac Millan Publisher, London
5. Singh P.N. Developing and Managing Human Resources
Suchandra Publication, Bombay
6. Fontana D: Managing time
Excel Books, New Delhi
7. Atkinson, JacQueline: Better Time Management
Indus, New Delhi
8. Bharathi and Jacintha: Family Resoruce Management
Discovery Publishing House, Delhi

B.HOUSE HOLD EQUIPMENTS

Focus :

This Course inted to impart knowledge and understanding of construction of Household equipment, material used, selection criteria, maintenance and care

OBJECTIVES

To enable students to :

1. Recognize base materials, finishes in the construction of household equipment
2. Understand the principles underlying the operation use, care and storage
3. Be aware of new trends in equipment

UNIT-1 Materials used for household equipment

- Ch-1 Base Materials, Iron, Aluminum, Steel, Copper, Brass, Glass, Borosilicate, Soda lime Silica, Plastic, etc.
- Ch-2 Finished- Mechanical and Applied Finishes
- Ch-3 Insulating materials-Mica, Fibre Glass,Mineral Wool, rock Wool, Cork, Plastic Foam, Rubber etc.
- Ch-4 Assignment
Market survey of Electrical and Non Electrical Equipments in the Local market and write two recipes using any six electrical equipments

Marking Scheme for Practical Exam

Journal	4 Marks
Assignment	5 Marks
Construction	6 Marks
Figure	2 Marks
Use	6 Marks
Viva	2 Marks
Total	25 Marks

B.HOUSE HOLD EQUIPMENTS PRACTICAL

Focus : The course on household equipment's designed to learn the operation and care of electrical and non-electrical equipments.

OBJECTIVES :

To make the Students aware of

1. Understanding operation and care of various household equipments of new trends in equipments in the market

UNIT-1 Learning the use and care of different

Ch-1 Kitchen equipments (15)

- a. Refrigerator
- b. Mixer, Grinder, Juicer, Slicer, Grater, Whipper, Kneader
- c. Tea Kettle, Coffee Percolator / Tea-Coffee Maker
- d. Tandoor-Electric and Non Electrical
- e. Oven-Electric and Microwave
- f. Toaster-Pop-up and Sandwich maker grill
- g. Deep Fryer
- h. Snack chef-waffles maker
- i. Ele.Rice Cooker + Ele.Multi Steam cooker
- j. Hot Plate and cooking range

Ch-2 Cleaning Equipment

- a. Vaccum Cleaner, Mopper (1 Prac)

Reference:

1. Ehrenkantz f.and Lydia I
Equipment in the home,Harper and Row Publication
2. Peet and Thye : Household Equipment – John Wiley and Sons
3. Vargese M.A. : Household Equipments Mannual S.N.D.T.Uni,Mumbai
4. K.Nath : Eleccrical Appliances,Hind Pocket Books, Delhi
5. K.K.Bali : Home Appliances,Orient Paperbacks, Delhi
6. મંજરી આચાર્ય : ગૃહ ઉપકરણોની ઓળખાણ