

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT**

**HOME SCIENCE SEMESTER SYSTEM (CBCS)**

**F.Y.B.A.SEMESTER-I**

**2011-2012**

		NO. OF PAPER	CREDIT
FOUNDATION COMPULSORY	COMP.LANG. ENG./GUJ./HINDI	01	03
CORE ALLIED	GROUP-I SANS/STATS/ HOME SCIENCE EDUCATION-1	01	03
FOUNDATION ELECTIVE	GROUP-II 1.ENVIRONMENT 2.HUMAN RIGHTS	01	03
CORE COURSE	1.FUNDAMENTALS OF FOODS AND NUTRITION-I 2.HOME MANAGEMENT-I	02	08
SUBJECT ELECTIVE	1. BASIC SCIENCE-I 2. INTRODUCTION TO CLOTHING –I	02	08
EXTENSION ACTIVITY	NCC NSS PTI	02	03

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**HOME SCIENCE SEMESTER SYSTEM (CBCS)**

**F.Y.B.A.SEMESTER-II**

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FOUNDATION COMPULSORY	COMP.LANG. ENG/GUJ./HINDI	01	03
CORE ALLIED	GROUP-I SANS/STATS/ HOME SCIENCE EXTENSION EDUCATION-II	01	03
FOUNDATION ELECTIVE	GROUP-II 1.ENVIRONMENT 2.HUMAN RIGHTS	01	03
CORE COURSE	1.FUNDAMENTALS OF FOODS AND NUTRITION-II 2.HOME MANAGEMENT-II	02	08
SUBJECT ELECTIVE	1.BASIC SCIENCE-II 2.TRADITIONAL & HOUSE HOLD TEXTILES , INDIAN EMBROIDERY - II	02	08
EXTENSION ACTIVITY	NCC NSS PTI	02	03

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT**

**F.Y.B.A.**

**SEMESTER-II**

**HOME SCIENCE EXTENSION EDUCATION -II**

**Effect from 2011-2012**

Theory-3 Periods/week

Theory-External- 70Marks

Internal- 30 Marks

Core Allied - (3 Credits)

**Objectives**

- 1 To become aware of the need of Home science extension education
- 2 To become familiar with methods of extension teaching and use them.
- 3 To become aware of the National policies for development of women.
- 4 To develop basic sewing skills to make students self- reliant.

**Course content**

**1 Home science extension education**

- 1.1 History of Home science extension.
- 1.2 Meaning and Definition of Home science extension .
- 1.3 Philosophy of Home science extension.
- 1.4 Principles of Home science extension.
- 1.5 Characteristics of Home science extension education.

## **2 Objectives of Home science extension.**

### **3 Approaches to extension teaching through different methods.**

3.1 Selection, use, advantages and 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 Group discussion.
- 6 Demonstration.
- 7 Exhibition and Farmer's fair.
- 8 Field trip.
- 9 Campaign.
- 10 Folk songs and Drama.
- 11 Training camp.
- 12 Talks.
- 13 Game.

**4 4.1 Role of extension worker.**

4.2 Qualities of extension worker.

5 National programmes related to Home science

5.1 Community development programme. (CDP)

5.2 Integrated Rural development programme (IRDP)

5.3 Applied Nutrition Programme (ANP)

5.4 Integrated Child Development Scheme (ICDS)

5.5 Training of Rural Youth for Self Employment (TRYSEM)

5.6 Development of Women and Children in Rural Areas.(DWCRA)

## References:-

- 1 Supe, S.V.- An Introduction to Extension Education, Oxford & IBH Publishing Co.Pvt. Ltd., New Delhi.
- 2 Sandhu, A.-Extension Programme Planning Oxford & IBH Publishing Co.Pvt. Ltd., New Delhi.
- 3 S. Venkataiah,- New Dimensions of Extension Education, Anmol Publication Pvt. Ltd., New Delhi.
- 4 Choubey, B.K.- A Handbook of Extension Education, Jyoti Prakashan, Allahabad.
- 5 Greval, I.A. and Tamber, R.S.,- An Introduction to Extension Education, Punjab Agriculture University, Ludhiana.
- 6 Dhakan Dhiraj- ବି ଚରଣ ଶି ଉନ୍ମୂଳ ଚ ଘି
- 7 Neepa Mehta –Avani Maniar Designing Graphic Aids
- 8 Waghmare, S.K.- Teaching Extension Education, Prashant Publisher, Vallabh Vidyanagar.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY , SURAT**

**F.Y.B.A.**

**SEMESTER-II**

**HOME SCIENCE-I**

**FUNDAMENTALS OF FOODS AND NUTRITION-II**

**Effect from 2011-2012**

Theory-3 Periods/week

Theory-External-45 Marks

Internal-20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Core Course -3 (4 Credits)

**OBJECTIVES:**

1. The course enables the students to understand the functions of food and the role of various nutrients and the effect of deficiency and excess.
2. To learn about the composition and nutritional contribution and selection of different food stuffs.
3. To be familiar with different methods of cooking, their advantages and disadvantages.
4. To develop the ability to improve the nutritional value of food.

**CONTENT:**

**THEORY:**

**UNIT-I**

**Micro Nutrients**

1. Vitamins-Classification, sources, functions ,RDA, deficiency, and excess
  - a. Fat soluble vitamins A, D, E, K.
  - b. Water soluble vitamins C and B complex-B1, B2, Niacin, B6, Folic acid, B12.

## UNIT-II

2. Minerals- Sources, functions, deficiency and excess-Calcium, Phosphorus, Iron, Magnesium, Selenium, Sodium, Potassium, Chloride, Fluoride, Iodine, Copper

## UNIT-III

Water-Sources, water balance and requirement, Hypo and hyper intake in our body and functions of water

## UNIT-IV

Basic terminology used in food preparation.

- 1 .Pre-preparation-Peeling, scraping, paring, cutting, grafting, steeping, centrifuging, emulsification, homogenization, germination, fermentation
2. Mixing terms-Beating, blending, cutting , creaming folding

## UNIT-V

Methods of food preparation

Boiling	-Poaching
Pressure cooking	-Stewing
Brewing	-Braising
Solar cooking	-Baking
Steaming	-Roasting
Puffing	

## PRACTICALS:

### UNIT-I

Preparation of recipes rich in

1. Vitamin-A
2. Vitamin-C
3. Vitamin-B1
4. Vitamin-B2
5. Vitamin-B3
6. Phosphorus
7. Calcium
8. Iron

### UNIT-II

Preparing recipes using different methods of cooking

1. Boiling
2. Pressure cooking
3. Steaming
4. Solar cooking
5. Baking
6. Frying-Deep & Shallow
7. Germination
8. Fermentation

## REFERENCES:

1. F.P. Antia-Diet Therapy
2. Mudambi and Rajgopal-Fundamentals of Foods and Nutrition
3. M. Swaminathan-Food Science, Chemistry and Experimental Foods
4. Neelam Buddhdev, Bhavna Vaid-Human Nutrition
5. R.Rajalaxmi-Prayukta poshan
6. Thangam Philip-Modern Cookery

**VEER NARMAD SOUTH GUJARAT UNIVERSITY , SURAT**

**F.Y.B.A.**

**SEMESTER-II**

**HOME SCIENCE-II**

**HOME MANAGEMENT-II**

**Effect from 2011-2012**

Theory-3 Periods/week

Theory-External-45 Marks

Internal-20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Core -4 (4-Credits)

**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-I

### Ch-1. Management Process

- A. Definition and Meaning of Management
- B. Development and importance of Management
- C. Home Management as 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-2 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-3 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) Measures 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.(Pen-Pencil)
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

## **B.HOUSE HOLD EQUIPMENTS**

### **Focus :**

This course intend to impart knowledge and understanding of construction of Household equipment, material used, selection criteria, maintenance and care.

### **OBJECTIVES**

To enable students to :

1. Recognize Insulation materials 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.

Ch-1. Insulating materials-Mica, Fiber Glass, Mineral Wool, Rock Wool, Cork, Plastic Foam, Rubber etc.

Ch-2 Assignment

Market survey of Electrical and Non Electrical Equipments in the local market and write two recipes using any six electrical equipments.

## REFERENCES:

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

## **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.
  1. Kitchen and cleaning equipments
    - a. Toaster-Pop-up and Sandwich maker grill
    - b. Deep Fryer
    - c. Snack chef-waffles maker

- d. Ele. Rice Cooker
- e. Ele. Multi Steam cooker
- f. Hot Plate and cooking range
- g. Vacuum Cleaner.

Reference:

1. Ehrenkranz 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 Manual S.N.D.T. Uni, Mumbai
4. K.Nath : Electrical Appliances, Hind Pocket Books, Delhi
5. K.K. Bali : Home Appliances, Orient Paperbacks, Delhi

**VEER NARMAD SOUTH GUJARAT UNIVERSITY , SURAT**

**F.Y.B.A.**

**SEMESTER-II**

**HOME SCIENCE-III**

**BASIC SCIENCE-II**

**Effect from 2011-2012**

Theory-3 Periods/week

Theory-External-45 Marks

Internal-20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Subject Elective -3 (4-Credit)

Objectives:

- This course is designed to serve as a sound basis for the study of nutrition, food science, biochemistry etc.

- Acquaint students with-

- The physical environment, its components and major issues.
- The impact of human activities on environment.
- The action needed for checking environment threats.

Theory syllabus:

UNIT-I

1 Flower-Detailed study of typical flowers.

2 Elementary knowledge of vegetables.

3 Primary study of Auto tropes and Heterotropes , Food chain, food web

4 Modes of plant nutrition.

UNIT-II

1 Defensive devices in plants.

2Defensive devices in animals

3 Biogeochemical Cycle: Water cycle, Nitrogen cycle and Carbon Di Oxide cycle.

### UNIT-III

1 Origin and evolution of life-Oparin's theory

2 Evidence of evolution.

### UNIT-IV

1 Pollution: Definition, causes, effects and control measures of air water, soil and noise pollution.

2 Elementary knowledge about Biodegradable and non bio degradable waste materials.

### PRACTICALS:

1 Study of typical flowers : Hibiscus, Dhatura and Crinum flowers.

2 Mounting: Pollen Grains of Hibiscus, Dhatura, and Crinum flowers.

3 Study of different types of vegetables.

4 Study of Symbiotic , Parasitic and Insectivorous plants

5 Study of defensive devices in plants.

6 Study of defensive devices in animals.

7 Study of evidences of evolution.

8 Differentiate biodegradable and non bio degradable waste materials.

### PRACTICAL:

Section I (Rotation)

(04 minutes for each specimen)      15-marks

Identify and describe following–

1 & 2 Parts of typical flowers( 2 specimens)

3 & 4 Types of vegetables( 2 specimens)

5 Symbiotic/Parasitic plant

6 Insectivorous plants

7 Defensive device in plants

8 Defensive device in animals

9 Evidence of evolution

10 State waste materials used is biodegradable or non biodegradable

### SECTION-II

1 Mounting: Pollen grains of Hibiscus, Datura / Crinum flower with viva  
06-marks

2 Journal

04-marks

## REFERENCES:

1 E.P. Odum - Fundamentals of Ecology.

2 Mudambi – Fundamentals of Foods and Nutrition

3 P.K.G. Nair- Principles of Environmental Biology

૪ જીવશાસ્ત્ર, યુનિ. ગ્રંથ નિર્માણ બોર્ડ, ગુજરાત રાજ્ય.

૫ વનસ્પતિશાસ્ત્ર પરિચય, ડૉ. સોલંકી, પ્રો. મોરે

૬ પ્રાયોગિક વનસ્પતિશાસ્ત્ર, ડૉ. જૈવિન જોષી, ડૉ. હંસાબેન પટેલ, પોપ્યુલર પ્રકાશન, સુરત.

૭ કોલેજ રસાયણશાસ્ત્ર, ભૌતિક, કાર્બનિક, અકાર્બનિક, રસાયણશાસ્ત્ર, પોપ્યુલર પ્રકાશન, સુરત.

૮ જીવવિજ્ઞાન, જયભારત પ્રકાશન, અમદાવાદ.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY , SURAT**

**F.Y.B.A.**

**HOME SCIENCE - IV**

**SEMESTER-II**

**TRADITIONAL & HOUSE HOLD TEXTILES & INDIAN EMBROIDERY**

**Effect from 2011-2012**

Theory-3 Periods/week

Theory-External- 45 Marks

Internal- 20 Marks

Practical-2Periods/week

Practical-External-25-Marks

Internal-10 Marks

Subject elective- 4 (4-Credits)

Objectives:-

- (1) To become aware of the rich traditional textiles of India.
- (2) To become familiar with embroideries of India.
- (3) To make the students aware of buying suitable material for different household linen according to their use.

Course content:-

Ch.- 1 Study of Traditional textiles:-

(A) Dyed and printed textiles of India

- (1) Kalamkari (painted and block printed)
- (2) Patola of Gujarat
- (3) Tie and dye of Gujarat and Rajasthan
- (4) Pochampally and Telia rumals of Andhra Pradesh
- (5) Ikats of Orissa

(B) Woven textiles of India:-

- (1) Brocades.
- (2) Shawls of Kashmir.
- (3) Muslins and saris of Bengal.
- (4) Saris of Chanderi.
- (5) Paithani saris.
- (6) Baluchar Butedar

Ch- 2 Traditional embroideries of India:-

- (1) Kantha of Bengal
- (2) Phulkari of Punjab.
- (3) Kasida of Kashmir.
- (4) Chikankari of Lucknow.
- (5) Embroidery of Kutch and Kathiawar.
- (6) Kasuti of Karnataka.
- (7) Chamba rumal of Himachal Pradesh.

Ch.-3 Household textiles:- Selection of following household textiles regarding texture, design, Colour and durability of the fabric

- (a) Table linen.
- (b) Towels.
- (c) Bed sheets and pillow covers.
- (d) Curtains and draperies.
- (e) Blankets.

Practicals:-

(A) Traditional embroideries of India:-

- (1) Kantha of Bengal
- (2) Phulkari of Punjab.
- (3) Kasida of Kashmir.
- (4) Chikankari of Lucknow.

(5) Embroidery of Kutch and Kathiawar.

(6) Kasuti of Karnataka.

(7) Chamba rumal of Himachal Pradesh.

(B) Modern embroideries:-

(1) Satin stitch.

(2) Slip stitch.

(3) Fishbone stitch.

(4) Chain stitch.

(5) Long and short stitch.

(6) Sequins and Zari work.

References:-

(1) Chattopadhyay Kamaladevi, Handicrafts of India, New Delhi, Indian council of cultural Relations.

(2) Pramila Varma, Vastra Vigyan evam Paridhan.

(3) Pandit Savitri, Indian Embroidery and its variegated charm, Baroda, faculty of Home science.

(4) Amita Patel, bhartiye kashidakari

(5) Dantyaagi S., Fundamentals of Textiles and their care, Orient Longman Ltd.

Marking scheme:-

Journal 5 marks

1<sup>st</sup> Q Traditional emb. (one sample) 10 marks

(theory-4, motif, colour combination and

Cleanliness- 2 marks each)

2<sup>nd</sup> Q Modern emb. (one sample) 10 marks

(theory-4, motif, colour combination and

Cleanliness- 2 marks each)

Total -----  
25 marks