



Re-Accredited 'B++' 2.86 CGPA by NAAC

VEER NARMAD SOUTH GUJARAT UNIVERSITY

University Campus, Udhna-Magdalla Road, SURAT - 395 007, Gujarat, India.

વીર નર્મદ દક્ષિણ ગુજરાત યુનિવર્સિટી

યુનિવર્સિટી કેમ્પસ, ઉદ્ધના-મગદલ્લા રોડ, સુરત - ૩૯૫ ૦૦૭, ગુજરાત, ભારત.

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-: પરિપત્ર :-

વિનયન વિદ્યાશાખા હેઠળની સંલગ્ન હોમસાયન્સ વિષયની તમામ કોલેજોનાં આચાર્યશ્રીઓને જણાવવાનું કે, શૈક્ષણિક વર્ષ ૨૦૨૩-૨૪ થી અમલમાં આવનાર Home Science S.Y.B.A.(Sem-3 & 4) અને T.Y.B.A. (Sem-5 & 6) નો પેટાસમિતિએ તૈયાર કરેલ અભ્યાસક્રમ સંદર્ભે હોમસાયન્સ વિષયની અભ્યાસ સમિતિની તા.૨૮/૧૨/૨૦૨૨ની સભાનાં ઠરાવ ક્રમાંક:૨ સંદર્ભે નીચે મુજબ કરેલ ભલામણ વિનયન વિદ્યાશાખાનાં અધ્યક્ષશ્રીએ વિનયન વિદ્યાશાખાની મંજૂરની અપેક્ષાએ વિનયન વિદ્યાશાખ વતી મંજૂર કરી એકેડેમિક કાઉન્સિલને કરેલ ભલામણ એકેડેમિક કાઉન્સિલ તા.૩૦/૦૧/૨૦૨૩ની સભાનાં ઠરાવ ક્રમાંક:૦૮ થી સ્વીકારી મંજૂર કરેલ છે. જેની આથી જાણ કરવામાં આવે છે.

હોમસાયન્સ વિષયની અભ્યાસ સમિતિની તા.૨૮/૧૨/૨૦૨૨ની સભાનાં ઠરાવ ક્રમાંક:૨

:: આથી ઠરાવવામાં આવે છે કે, શૈક્ષણિક વર્ષ ૨૦૨૩-૨૪ થી અમલમાં આવનાર S.Y.B.A. અને T.Y.B.A. Home Science નો પેટાસમિતિ દ્વારા તૈયાર કરેલ અભ્યાસક્રમ સ્વીકારી તે મંજૂર કરવા વિનયન વિદ્યાશાખાને ભલામણ કરવામાં આવે છે.

એકેડેમિક કાઉન્સિલની તા.૩૦/૦૧/૨૦૨૩ની ઠરાવ ક્રમાંક: ૦૮

:: આથી ઠરાવવામાં આવે છે કે, શૈક્ષણિક વર્ષ ૨૦૨૩-૨૪ થી અમલમાં આવનાર Home Science S.Y.B.A. (Sem-3 & 4) અને T.Y.B.A. (Sem-5 & 6) નો પેટાસમિતિએ તૈયાર કરેલ અભ્યાસક્રમ સંદર્ભે હોમસાયન્સ વિષયની અભ્યાસ સમિતિની તા.૨૮/૧૨/૨૦૨૨ની સભાનાં ઠરાવ ક્રમાંક: ૨ સંદર્ભે ઉપરોક્ત મુજબ કરેલ ભલામણ વિનયન વિદ્યાશાખાનાં અધ્યક્ષશ્રીએ વિનયન વિદ્યાશાખાની મંજૂરની અપેક્ષાએ વિનયન વિદ્યાશાખ વતી મંજૂર કરી એકેડેમિક કાઉન્સિલને કરેલ ભલામણ સ્વીકારી મંજૂર કરવામાં આવે છે.

(બિડાણ: ઉપર મુજબ)

ક્રમાંક : એસ./હોમસાયન્સ/પરિપત્ર/૨૭૪૯/૨૦૨૩
તા.૦૧-૦૨-૨૦૨૩


કુલસચિવ

પ્રતિ,

- ૧) વિનયન વિદ્યાશાખા હેઠળની સંલગ્ન હોમસાયન્સ વિષયની તમામ કોલેજોનાં આચાર્યશ્રીઓ.
..... આપશ્રીની કોલેજ/ડિપાર્ટમેન્ટના સંબંધિત શિક્ષકોને જાણ કરી અમલ કરવા સારું.
- ૨) અધ્યક્ષશ્રી, વિનયન વિદ્યાશાખા.
- ૩) પરીક્ષા નિયામકશ્રી, પરીક્ષા વિભાગ, વીર નર્મદ દ. ગુ. યુનિવર્સિટી, સુરત.
.....તરફ જાણ તેમજ અમલ સારું.

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A. SEMESTER- III

Home Science CC-5

Family Meal planning-I

With effect from 2023-2024

Total credit-4/week

Total External 50 Mark

Theory credit 3/ week

(Theory 30 + Practical 20)

Practical credit 1 (2 period/week)

Total Internal 20 Mark

● FOCUS: The course focuses on meal planning for various age groups according to their nutritional needs.

● OBJECTIVES: This course will enable the student to

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

● COURSE CONTENT:

● THEORY:

Unit.1 Meal Planning

- 1.1) Definition and importance
- 1.2) Principles and factors to be considered in meal planning
- 1.3) Process in meal planning
- 1.4) Classification of activities based on occupation and food adequacy for adults

Unit.2 Planning balance diet

- 2.1) Use of food groups in planning balanced diet, factors affecting its
- 2.2) Planning meals for normal man and woman
- 2.3) Points to be considered while planning meals for normal man and woman

Unit.3

- 3.1) Nutrition during pregnancy
 - i) Physiology changes
 - ii) Complications
 - iii) Nutritional requirements and meal planning
 - iv) Points to be considered while meal planning
- 3.2) Nutrition during lactation

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[Signature]

- i) Nutrition requirements and meal planning
- ii) Points to be considered while meal planning
- iii) Nutritional composition of mother's milk and comparison other's animals milk
- iv) Factors affecting the composition and out of mother's milk-mother's diet, lactation period

3.3) Effects of malnutrition on nutritional status and methods to improve malnutrition

Unit.4

(A) Nutrition during infancy

- 4.1) Growth and development
- 4.2) Nutritional requirement
- 4.3) Breast feeding- meaning and importance of colostrum, advantages
- 4.4) Weaning- meaning, introducing liquid, semi liquid and solid foods

Points to be considered while introducing Weaning foods

4.5) Artificial feeding- circumstances under which it is to be given. Advantages and disadvantages of bottle feeding. Care and sterilization of bottle. Preparation of milk.

4.6) Supplementary feeding- different Supplementary foods for infants

- a) Points to be considered while introducing Supplementary foods
- b) Low cost Supplementary foods developed in India

(B) Childhood infectious disease

- i) Cold, Cough and Fever
- ii) Measles and mumps
- iii) Diarrhea, Vomiting, Constipation
- iv) Intestinal worms

●PRACTICALS:

- (1) Calculation of nutrients present in different foods
- (2) Planning, preparation and calculating whole day's meal of
 - i) Sedentary worker (male/female)
 - ii) Moderate worker (male/female)
 - iii) Heavy worker (male/ female)
 - iv) Pregnant woman
 - v) Lactating woman

(3) Preparation of---

- i) Soya and peanut milk for infant
- ii) Different Supplementary foods (two recipe)

(4) A survey of different baby foods available in local market and study of their nutritive value.

● MARKING SCHEME:

Selection of dish	2 mark
Preparation	5 mark
Planning	5 mark
Calculation	2 mark
Viva	2 mark
Journal	4 mark
Total	20 mark

● REFERENCES:

1. Mudambi sumati R. and Rajgopal M.V. (1990) Fundamentals of foods and nutrition, New delhi: Wiley, Eastern Ltd.
2. Raheena M. Begum (1989) A textbook of foods, nutrition and dietetics, New Delhi: Wiley Eastern Ltd.
3. Srilakshmi B. (1990) Dietetics, New age international (P) Ltd, Wiely, Eastern Ltd.
4. Gopalan C., Ramsastri B. and Balasubramanian S. (1993) Nutritive value of Indian foods, National Institute of nutrition, Hyderabad
5. Dr. Vrindra Singh, Meal planning (Hindi version)



VEER NARMAD GUJARAT UNIVERSITY, SURAT

S. Y. B. A. SEMESTER- III

HOME SCIENCE- CC – 6

ART AND CRAFT- I

Effective from 2023-2024

Total credits- 04

External Theory- 30

Theory- 3 periods/Week

Practical- 20

Practical- 2 Periods/Week

Internal - 20

FOCUS: This is an Introductory course on foundation of Art and Design, its design elements and principles of art and design in context of regional, traditional and contemporary art.

OBJECTIVES:

1. To understand the elements principles of design.
2. To promote, group learning in study of art and craft.
3. To develop skill in creating designs and making art objects.
4. To appreciate art and craft.

COURSE CONTENT

THEORY

UNIT- I

- 1.1 Concept of Art, Craft and Design.
- 1.2 Difference between Art and Craft

UNIT- 2

- 2.1 Aims of Design
- 2.2 Types of Design – Definition, Meaning, Types and requirements of good design, Study of utility articles as structural and decorative designs.

UNIT- 3 Elements of Art and Design.



3.1 Primary elements

- (a) Point- (i) Definition (ii) Characteristics
- (b) Line- (i) Definition, (ii) Characteristics, (iii) Effects (iv) uses of line in architectur interior, nature, etc. (v) types – Straight and curved, thin and thick
- (c) Plane- Types
- (d) Volume- Types

UNIT- 4 Secondary elements

- (a) Space- Meaning, types
- (b) Shape- Meaning, types
- (c) Texture- Meaning, types- Transparent and opaque
- (d) Form
- (e) Light
- (f) Colour

PRACTICALS:

(1) Line :-

1. Road signs and symbols
2. Facial expression
3. Conventional symbols
4. Mehandi with delicate lines – Horizontal, Vertical, Curved, Standing etc.
5. Draw a design showing 3-D effect
6. Draw free- hand design showing rangoli patterns.
7. Nail and thread techniques, make a card
8. Origami- Paper folding, Make a card for small children's birthday

(2) Space:-

1. Produce 2 design on paper by using stencil and show positive and negative Spaces and manipulate various parts of the stencil to create two/three designs out of it.
2. Produce a design on paper by using a template which will be useful for Making greeting cards, invitation cards, Overlap the motifs to create Interesting spaces.

(3) Texture:-



1. Collage making
 - (a) Cloth activity
 - (b) Wool activity
 - (c) Paper activity
2. Collect samples of each of the following types of texture:- Transparent Opaque, Translucent, Hard, Soft, Medium and Rough.
3. Describe the textures of the following materials: Glass, Velvet Cactus, Ice cream
4. Shape:- Positive and Negative

MARKING SCHEME:-

Q-1 Unit 1 to 2	07 marks
Q-2 Unit 3 to 4	07 marks
Class work	02 marks
Journal	04 marks
Total	20 marks

REFERENCES:-

1. Anna Hong Rutt, Home Furnishing (Unit- I, II, III, IV)
2. Collingwood R.G., The Principles of Art, Oxford Unit, Press, London. (Unit-IV)
3. Craig and Rush, Homes with Character (Unit- I, II, III, IV)
4. Donald Anderson, Elements of Design (Unit- I, II)
5. Faulkner And Faulkner, Inside Today's Home (Unit- I, II, III, IV)
6. Garreston Frouz, Theory and Practical of color, studio Vista Publishers, London. (Unit- II)
7. Goldstein and Goldstein, Art in Everyday Life, McMilan CO. Ltd. (Unit- I, II, III, IV)
8. Grames M. The Art of Color and Design, McGraw Hill Co., New York (Unit- I, II, III, IV)



VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
S.Y.B.A. SEMESTER- 3
HOME SCIENCE-CC-7
FAMILY CLOTHING
Effective from June 2023-2024

Total credits- 04
Theory- 3 Credits (3 Periods/week)
Practical- 1 Credit (2 Periods/week)

Theory- External- 30 Marks
Internal- 10 Marks
Practical- External-20-Marks
Internal-10 Marks

FOCUS:-

- 1. To develop the consciousness for clothing, its importance, safety, care and comfort.**
- 2. To apart knowledge regarding selection of clothing.**
- 3. To develop skills for garment constructor**

OBJECTIVES:- To make the students learn about:-

- (1) Principles of pattern making and cutting.**
- (2) Selection of proper clothing.**
- (3) Different types of embellishment.**
- (4) Taking care and storage of clothes made from different types of fabrics**

COURSE CONTENT:-
THEORY

UNIT- I General principles of Pattern Cutting.

- 1.1 Pattern making- Drafting, Flat pattern, Draping.
- 1.2 Tools and equipments used for pattern making.
- 1.3 Marking on professional pattern.
- 1.4 Precautions while making the pattern.
- 1.5 Use of paper pattern.
- 1.6 Transferring the pattern marking to the fabric.
- 1.7 Different materials used for patterns.
- 1.8 Necessity and advantages of pattern making.
- 1.9 Types of pattern

UNIT- II

- 2.1 Points to be considered while buying clothes- budget, age, complexion, Season, residence, occasion, fashion etc.
- 2.2 Buying readymade garments-
Guide to judge good workmanship in readymade garments-
Types of fabric, cutting, stitching, finishing, comfort, hems, fitting, pockets, fastening, plackets, yokes, collars etc.
- 2.3 (i) Advantages and disadvantages of readymade, tailor made and Home made garments.
(ii) Comparison between readymade, tailor made and home made garments.



UNIT-III

3.1 Apparel Embellishment

- (i) Structural Embellishment
- (ii) Functional Embellishment
- (iii) Aesthetic Embellishment

UNIT- IV

4.1 Renovation and mending of clothes

- (i) Patch:- Plain, printed, checks and lining.
- (ii) Darning.

4.2 Care and storage of clothes made from various fabrics.

PRACTICALS:-

1 Taking correct body measurement for different types of garments, taking Measurement from stitched garments, average measurement

2 Make samples

- (i) Finishing Necklines- 'U' shape, 'V' shape, square and sweetheart
Using bias binding, bias facing and shaped facing
- (ii) Plackets
- (iii) Yokes
- (iv) smocking

3 Construction of children's garments

- (i) Zabla
- (ii) Sunsuit
- (iii) Baby frock

MARKING SCHEME:-

Q 1	2 Samples from practical no. 2	04 marks
Q 2	Stitching any one garment	06 marks
	Class work	06 marks
	Journal	04 marks
		Total 20 marks

REFERENCES:-

- 1 Reena Bhatia & Charu Arora- Introduction to Clothing and Textiles.
- 2 Neelima, Fashion and Textile Design, Sonali publications, 2009, New Delhi- 110002
- 3 Pramila Varma- Vastra vigyaan evam paridhan
- 4 Raul Jewel- Encyclopaedia of dress making
- 5 Jacob Anna Thomas, The Art of Sewing, UBS Publishers and Distributors Ltd., New Delhi, 1993.
- 6 Veena Samani, Hina Sanvat, Malini Pathak, Dress Designing, Pravin Pustak Bhandar, Rajkot (Gujarati)

VEER NARMAD SUOTH GUJARAT UNIVERSITY, SURAT

B. A. SEMESTER-III

FAMILY & COMMUNITY SCIENCE-CE-7

HUMAN DEVELOPMENT

Effective from June 2023-24

Total credits-04

External Theory-30 Marks

Theory- 3 credits(3periods/week)

Practical-20 Marks

Practical-1 credits(2periods/week)

Internal-20 Marks

Objectives: -

1. To learn about mother care before and after birth of child.
2. To develop understanding regarding developmental tasks of child at Various stages of development.
3. To understand role of adult to promote child development.

UNIT:-1.

- 1.1 Human Reproductive System: Male and Female: - Structure and functions Of the reproductive organs, structure of Ovum and Sperm, Menstrual cycle.
- 1.2 Bases of human development: - structure and types of chromosomes, gene, heredity-meaning and its interrelation, sex determination.
- 1.3 Antenatal/prenatal development of foetus:- Fertilization, Implantation, Intrauterine development and growth of foetus, (Basic information)

UNIT:-2.

- 2.1 Diagnosis of Pregnancy and Medical examination of Pregnant woman.
- 2.2 Antenatal care of mother.
- 2.3 Prenatal influences on the child:- Biological risks, age of mother, illness, Physical characteristics, diet & nutrition stress & emotional strain.

UNIT:-3

- 3.1 Normal delivery : Basic information about stages of labour.
- 3.2 Care during delivery, immediate care of foetus and mother after child birth
- 3.3 Normal puerperium and its management in brief.

UNIT:-4

- 4.1 Infancy : Signs of neonate health , Care of neonate and infant.
- 4.2 Premature baby and its management.
- 4.3 Vaccination : Importance and schedule of vaccination.
- 4.4 Family planning: Methods and Importance.

PRACTICALS

- (1) Study of female reproductive system using models/charts etc.
- (2) Study of male reproductive system using models/charts etc.
- (3) Measurement of body temperature.
- (4) Measurement of pulse rate and respiratory rate.
- (5) Study of Body Mass Index (BMI).
- (6) Demonstration of uses of Sphygmomanometer-manual or digital.
- (7) Visit to Maternity home.

Marking Scheme

- | | |
|--|---|
| 1. Identify and describe pointed parts – Specimen No. 1 to 5 | 5 |
| 2. To measure Body temperature/Puls rate/Respiratory rate and viva | 6 |
| 3. To Demonstration of Sphygmomanometer/To determine BMI | 5 |
| 4. Journal | 4 |

Total marks:20

REFERENCES: -

1. Text book of human Physiology- C.C. Chattarji
2. Child development- Elizabeth Hurlock

3. Infancy and childhood development and its contexts-Newman & Newman
john, Wiely.
4. માનવશરીર વિજ્ઞાન તથા પ્રાથમિક સૂતિકાશાસ્ત્ર-દિલિપ પી. મેહતા
5. A Text book of Obstetrics- V.I. Bodyazhina, Mir Publication, Moscow.
6. Where there is no doctor-A healthcare hand book by David Werner-
(Gujarati version by Dr. kiran Shinglot, Locost Vadodara.
7. Essentials of Medical Physiology- K. Sembulingam & P. Sembulingam



VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A SEMESTER-3

FAMILY AND COMMUNITY SCIENCE-CE-8

EXTENSION EDUCATION AND AUDIO VISUAL AIDS

Effective from June 2023-24

Total Credits-04

Theory-3 periods/Week

Theory External-30 Marks

Internal-10 Marks

Practical-2 Periods/Week

Practical External-20 Marks

Internal-10 Marks

OBJECTIVES:

To enable the students to:

- (1) Understand the basic information about Extension Education
- (2) To develop their abilities in selecting and using various Audio-visual aids.

COURSE CONTENT

THEORY

UNIT-I

- (a) Historical Back ground of Extension Education
- (b) Extension Education as a Profession
- (c) Extension Education and its Relationship with other Social Science.

UNIT-2 Home Science extension Worker

- (a) Role of Extension Worker
- (b) Qualities of Extension Worker
- (c) Training of Home Science Extension Worker

UNIT-3 National Programme related of Home Science

- (a) ICDS (Integrated Child Development Programme.)
- (b) IRDP (Integrated Rural Development Programme)
- (c) TRYSEM (Training of Rural Youth for self Employment)
- (d) DWCRA (Development of Women And Children in Rural Area)

UNIT-4 General Principles in Selecting and using following audio Visual aids

- (a) Overhead Projector
- (b) CD Player
- (c) DVD Player
- (d) Computer

PRACTICALS

Use of following Audio Visual aids

- 1 Overhead Projector
- 2 C.D Player
- 3 DVD Player
- 4 Computer

MARKING SCHEME:

Q-1	One Practical (from practical 1 to 2)	06 Marks (Th-2+Pra-4)
Q-2	One Practical (from practical 3 to 4)	06 Marks (Th-2+ pra-4)
	Journal	04 Marks
	Class Work	03 Marks
	Total	20 marks

REFERENCE

- 1. O.P Dhama, O.P.Bhatnagar Education and Communication for development.
- 2. V.K Dube/Indiro Bishnoi Extension Education & Communication.
- 3. Gita pushp show joyas shila show, Robin show Pushp Prasar shiksha.

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

S.Y.B.A. SEMESTER- IV

HOME SCIENCE CC-8

FAMILY MEAL PLANNING – II

Effect from 2023-2024

Total Credits 4

Total External 50 Mark

Theory Credit (3 periods/week)

(Theory 30 + Practical 20)

Practical 1 Credit (2 periods/week)

Total Internal 20 Mark

●FOCUS: The course throws focus on dietary management, concept and dimensions of health.

●OBJECTIVES:

This course will enable the student to,

1. Understand the concept of an adequate diet and the importance of meal planning
2. Know the factors affecting the nutritional needs during the life cycle and RDA for various age groups
3. Gain knowledge about dietary management in specific conditions.

● COURSE CONTENT:

THEORY:

Unit.1 Health

- 1.1) Concept of health
- 1.2) Dimensions of health (physical, mental, social, spiritual, emotional and vocational)

Unit.2 (A) Nutrition for pre school children

2.1

P. Patel
Dean, Faculty of Arts

boys and girls

i) Growth and development

ii) Nutritional requirements

iii) Meal Planning

iv) Nutritional problems such as obesity, eating disorders, predisposition to osteoporosis, Anaemia, under nutrition

3.2) Nutrition for industrial workers

i) Nutritional requirements

ii) Causes of malnutrition

iii) Measuring for improving malnutrition

Unit.4

4.1) Nutrition for athletes

i) Nutritional requirements

ii) Meal composition and effect of tea, coffee and alcohol on athletic performance

iii) Meal Planning for athletes

4.2) Nutrition during an old age

i) Physical changes

ii) Nutritional needs

iii) Nutritional problems such as osteoporosis, obesity, neurological dis function, anaemia, malnutrition, constipation

4.3) Nutrition in specific conditions



i) Obesity- definition, etiology, symptoms, risk factors and treatment

ii) Under weight- definition, etiology, symptoms, risk factors and dietary treatment

●PRACTICALS:

(1) Calculation of nutrients present in different foods

(2) Planning, preparation and calculating whole day's meal of-

a) Preschool children (1 to 3 and 4 to 6 years)

b) School going children (7 to 9 and 10 to 12 years)

c) Adolescent boys and girls

d) Obese person

e) Under weight person

f) Industrial worker

g) Old age person

h) Athlete

●MARKING SCHEME:

Selection of dish 2 Mark

Preparation 5 Mark

Planning 5 Mark

Calculation 2 Mark

Viva 2 Mark

Journal 4 Mark

Total 20 Mark

●REFERENCES:

1. Mudambi Sumati R. and Rajgopal M.V. (1990) Fundamentals of Foods and nutrition, New Delhi : Wiley, Eastern Ltd.

2. Raheena M. Begun (1989) A textbook of foods nutrition and dietitics, New Delhi : Wiley Eastern Ltd. .

3. Srilaxmi B. (1990) Dietitics, New age international (P) Ltd. Wiely, Eastern Ltd.

4. Gopalan C., Ramasastrri B. and Balsubramanian S. (1993) Nutritive value of Indian foods, National Institute of Nutrition, Hyderabad

5. Dr. Vrinda Singh, Meal Planning (Hindi version)



VEER NARMAD GUJARAT UNIVERSITY, SURAT

S. Y. B. A. SEMESTER- IV

HOME SCIENCE- CC – 9

ART AND CRAFT- II

Effective from 2023-2024

Total credits- 04

External Theory - 30

Theory- 3 periods/Week

Practical - 20

Practical- 2 Periods/Week

Internal - 20

FOCUS: This is an Introductory course on foundation of Art and Design, its design elements and principles of art and design in context of regional, traditional and contemporary art.

OBJECTIVES:

1. To understand the elements principles of design.
2. To promote, group learning in study of art and craft.
3. To develop skill in creating designs and making art objects.
4. To appreciate art and craft.

COURSE CONTENT

THEORY

UNIT- I Colour

- 1:1 Classification of colour- Primary, Secondary, Intermediate, Tertiary and Quaternary
- 1:2 Qualities of colour- Hue, Value, Intensity.
- 1:3 Colour Schemes- Related and Unrelated

UNIT- II Principles of Design – Harmony

- 2:1 Definition, Aspects of Harmony,
- 2:2 Types – Repetition, Contrast, Transition, Harmonious lines and shapes
- 2:3 Application to painting, to design, to hanging curtains, to arrangement to Interiors, Harmonious sizes.
- 2:4 Harmony of texture, Harmony of ideas, Application to exterior and interior Design.

UNIT- III Principles of Design-

3:1 Proportion

- (I) Definition, Aspects of Proportion
- (II) Space relationships: the Greek Oblong how to divide a space-Lines which Apparently alter proportion, application to Exterior and Interior Design, Scale or consistence sizes.

3:2 Balance-

- (I) Definition- How to balance objects-
- (II) Types, Formal and informal balance, in pictorial composition Application to decorative design, to exterior design, to advertising interior design.

UNIT- 4 Principles of Design-

4:1 Emphasis-

- (I) Definition, Simplicity-a Factor in emphasis what do emphasize subordination and standard for backgrounds how to emphasize Grouping, use of colour contrast.
- (II) Surface patterns, of plain space, unusual lines and colours, how much to Emphasize, application to displays, to advertising and to interior where to Emphasize- Centre of interest.

4:2 Rhythm-

- (I) Definition- How to gain Rhythm – Through Progression of sizes, Continuous line Movement and Repetition.
- (II) Application or rhythm to exterior and interior design, to displays and Advertisement.

PRACTICALS :-

1. Colour:-

- (I) Prepare colour wheel with any medium- water colour, Poster colour, Oil paint, Paper, Cloth, or on computer
- (II) Development of various tints and shades of the same hue using any medium or On Computer.
- (III) Colour schemes – related and unrelated
- (IV) Collect samples of locally available flower, leaves, trees, birds, grass, butterflies, Flowerbeds, landscape, cards, sun rise and set etc. Describe colour schemes with

Variety of tints and shades and different moods (emotional aspect)

2. Proportion

- (I) Enlargement, reduction and completion of design
- (II) Concept of space division through gift wrapping with gift paper.
- (III) Using proportion of 2:3 make flower arrangement- Stick flower vase and Draw
And colour flower arrangement

3. Rhythm

- (I) Draw any five design motifs. Observe and describe different types of rhythm in
Each motif.
- (II) Collect any three designs from different states and describe rhythm seen in it

4. Harmony

- (I) Lettering- Practice various fonts using gel pens, Calligraphy and stencils like Round
Chancery, Old English, etc. (any -2)
- (II) Expressive and decorative lettering
- (III) Make colour harmony in flower arrangement, gift packing, painting, Rangoli
etc.
- (IV) Make journal covers using lettering, subject name, class, roll no, exam no.
And Art Elements and Principles.

5. Balance

- (I) Collect samples of dress designs / furnishings where types of balance are used.
- (II) Decorate any one motif with colours and materials of your choice Briefly
Describe psychological of formal and informal balance as visible to you in
Completed motif.

MARKING SCHEME:-

Q-1 From practical 1 to 2	07 marks
Q-2 From Practical 3 to 5	07 marks
Class work (5 journal covers)	02 marks
Journal	04 marks
Total	20 marks

REFERENCES:-

- 1. Anna Hong Rutt, Home Furnishing (Unit I, II, III, IV)
- 2. Collingwood R.G. The principles of Art, Oxford Univ. Press, London. (Unit-IV)
- 3. Craig and Rush, Homes with Character (Unit I, II, III, IV)

4. Donald Anderson, Elements of Design (Unit I, II)
5. Faulkner and Faulkner, Inside Today's Home (Unit I, II, III, IV)
6. Garreston Frouz, Theory and Practice of color, Studio Vista Publishers
7. Goldstein and Goldstein, Art in Everyday life, McMillan Co. Ltd. (Unit I, II, III, IV)
8. Grames M., The Art of color and Design, McGraw Hill CO, New York (Unit I, II, III, IV)

A handwritten signature in blue ink, appearing to be 'W. S. D.', with a horizontal line extending to the right.

VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT
S. Y. B.A. SEMESTER - 4
HOME SCIENCE- CC-10
HOUSEHOLD & TRADITIONAL TEXTILES

Effective from June 2023-2024

Theory- 3 Credits (3 Periods/week)

Theory- External-50 Marks

Internal-20 Marks

Practical- 1 Credit (2 Periods/week)

Practical- External-20-Marks

Internal-10 Marks

FOCUS:- This course throws focus on the importance of household textiles and their selection and care. Also impart knowledge about our Traditional textiles.

OBJECTIVES:

1. Introduction to Household textiles
2. Identify the special features in the traditional clothing
3. Examine the influences of traditional costumes to the change in clothing practices.
4. Study the present day costumes.

COURSE CONTENT

THEORY

UNIT-1 Introduction to Household textiles with relation to selection regarding texture, design, colour, Size, use, suitability, durability and care of the fabric

1.1 Table linen-

Table cloth and table cloth guard, table mats, runners, table napkins

1.2 Towels-

Manufacturing process, weaves design and sizes of different types of towels
Turkish towel, bath towel, beach towel, hand and face towel, kitchen towel,
Dish towel.

UNIT- II

2.1 Bed linen and blankets

Bed linen- Types and sizes -Bed sheets, bed spreads, bed covers,

2.2 Pillows and pillow covers

2.3 Blankets and quilts- Types and materials used.

Unit- III curtains and draperies

3.1 Selection of curtains and draperies

3.2 Types of curtains and draperies

UNIT- IV- Traditional textiles of India

4.1 Dyed and printed textiles of India

- 1 Kalamkari
- 2 Patola and Sambalpore sarees
- 3 Tie and dye of Gujarat and Rajasthan
- 4 Pochampalli and Telia rumal of Andhra Pradesh.
- 5 Ikats

4.2 Woven textiles of India

- 1 Brocades
- 2 Shawls of Kashmir
- 3 Muslins of Bengal
- 4 Chanderis and Baluchar Butedar
- 5 Paithani and Pitambar

PRACTICALS:-

- 1 Application of embroidery:- on any one garment or any household article.
- 2 Make quilted sample:- shoulder bag or any household article.
- 3 Make one curtain sample.
- 4 Make crochet sample:- any one.
- 5 Knitting samples:- 4 basic stitches, 4 decorative stitches.

MARKING SCHEME:-

Q 1 (From Practical- 1, 2 & 3)	05 marks
Q 2 (From Practical- 4 & 5)	05 marks
Journal	04 marks
Class work	06 marks
Total 20 marks	

REFERENCES:-

1. Varma Pramila, vastra vigyan evam Paridhan
 2. Dr. Bela Bhargava, Vastra vigyan evam dhulai kala, University Book House Pvt. Ltd., Jaipur
 3. G.P. Sheri, Vastra vigyan ke mool siddhant, Aggrawal Publishers, Agra
 4. Brinda sinh, Vastra vigyan ke mool siddhant, Panchsheel prakashan, Jaipur
 5. Dr. Bimlesh Kumari, Vastra vigyan evam dhulai, Discovery Publishing House, New Delhi.
 6. Geeta Pushp Shaw and Joyce Sheela shaw, vyavaharik vastra vigyan, Vinod Pustak Mandir, Agra
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VEER NARMAD SUOTH GUJARAT UNIVERSITY, SURAT

B. A. SEMESTER-IV

FAMILY & COMMUNITY SCIENCE-CE-9

FIRST AID & HOME NURSING

Effective from June 2023-24

Total credits-04

External Theory-30 Marks

Theory- 3 credits (3periods/week)

Practical-20 Marks

Practical- 1 credits(2periods/week)

Internal-20 Marks

Objectives: -

1. To learn about the steps of first aid.
2. To learn and create awareness about home nursing.

UNIT: 1

- 1.1 Introduction of first aid: - Definition, Aims and scopes, Main principles, Characteristics of first aider, Rules of first aid.
- 1.2 First Aid Box: - (1) Necessary points for preparing first aid box.
(2) Equipment: - Contents used in first aid box and it's uses.
- 1.3 Very brief information about anatomy and physiological process of Human being.

UNIT: 2

- 2.1 Dressing and Bandages:
 - (1) Dressing: Definition, Types and Uses.
 - (2) Bandages: Definition, Types and Uses.
- 2.2 Wound and Bleeding: Types, Signs and Symptoms of external and internal bleeding and their First aid.
- 2.3 Respiration- Artificial Respiration: Definition and Methods.
- 2.4 Causes, Types, Sings and symptoms and First aid of following situations.

- (1) Asphyxia
- (2) Choking
- (3) Strangulation- Hanging
- (4) Suffocation-Smoke- Poisonous gases.
- (5) Drowning.
- (6) Electric shock-Stoke.

UNIT:3

3.1 Causes,Types,Sings,Symptoms & First aid of following specific problems.

- (1) Fracture and Sprain of Joints.
- (2) Burns and Scalds.
- (3) Heart attack.
- (4) Poisoning

3.2 First aid of Miscellaneous condition:

- (1) Foreign bodies in eye,ear,nose and throat.
- (2) Snake bites: poisonous- non-poisonous snakes.

3.3 Importance of blood groups and blood donation.

UNIT:4

Home nursing: Definition, care-management of bed ridden patient.

PRACTICALS

1. Study of equipments-contents used in first aid box.
2. Methods of artificial respiration (Demonstration)
 - (I) Holger nelson method.
 - (II) Sylvester method.
 - (III) Shefer method.
3. Stop bleeding and dressing of wound. (Demonstration)
4. Application of triangular bandages:
 - (i)Open, broad, narrow bandages.
 - (ii) Reef knot, flavhich knot- Ring pad.
 - (iii)Slings- Arm sling and collar bone sling.
- 5.Application of roller bandages: Simple spiral, reverse spiral and figure of 8.
6. Study of various methods of transporting and handling the Injured persons.
7. Bed making for a patient. (Demonstration)



MARKING SCHEME:

1. Identify and describe: (4 samples from first aid box) 6 Marks
2. Do as directed: (any one-Demonstration) 5 Marks
Artificial respiration-Holger nelson method/Shefer method.
Stop bleeding and dressing of wound.
Transporting the injured persons- Pick-a-back/Fireman lift/With four hands.
Bed making for patient.
3. Bandaging: (Any one) Simple spiral/ reverse spiral / figure of 8. 5 Marks
4. Journal 4 Marks

Total Marks: 20

REFERENCES:

1. American Red cross- Family health and home nursing.
2. British Red Cross-Practical first aid.
3. Manual of first aid (Gujarati) The authorized manual of st. john ambulance association, published by Red cross road, New Delhi.
4. Human Physiology-C. C. Chatterjee.
5. Where there is no doctor; a health care handbook (Gujarati version)
By Dr. Kiran Shinglot, Locost, Vadodara.



VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A SEMESTER-4

FAMILY AND COMMUNITY SCIENCE-CE-10

Social Welfare And Community development

Effective from June 2023-24

Total Credits-04

Theory-3 periods/Week

Theory External -30 Marks

Internal-10 Marks

Practical-2 Periods/Week

Practical External-20 Marks

Internal-10 Marks

OBJECTIVES:

- 1 TO develop an understand of the meaning ,goals and programme of Community Development.
- 2 To develop the meaning , concept of social welfare.
- 3 Develop understanding about the various social welfare organizations Contributing to the perspective of social work in india.
- 4To develop their abilities in using various audio-visual aids.

COURSE CONTENT

THEORY

UNIT-I Community development Programme.

- (a) Definition of Community development
- (b) Essential elements of Community development
- (c) Aims of community development
- (d) Types of community development programme.

UNIT-II Historical background of Community development programme.

- (a) History of community development programme in india.
- (b) Philosophy of Community development programme.

UNIT-III (a) Organization set-up of community development programme.

(b) Process of community development

UNIT-IV Social welfare.

(a) Meaning and definition of social welfare

(b) Concept of Social welfare

(c) Early Welfare Organizations

- Bramhmo samaj
- Prathana samaj
- Ramkrishan mission
- Theosophical society

(d) Recent welfare Organization

- Central Welfare Board
- State Welfare Board
- Council for advancement of people Action and Rural Technology.(CAPART)
- Khadi Village Industries Corporation.(KVIC)
- Taluka panchayat
- District Panchayat.

(e) International Welfare Organization

- WHO
- UNESCO
- UNICEF
- FAO

PRACTICALS

Uses of following Audio- Visual Aids

1 LCD Projector

2 Mobile (Cell Phone)

3 Digital Camara

4 Internet

MARKING SCHEME:

Q-1 One Practical (from practical 1 to 2) 06 Marks (Th-2+Pra-4)

Q-2 One Practical (from practical 3 to 4) 06 Marks (Th-2+ pra-4)

Journal	04 Marks
Class Work	03 Marks
Total	20 marks

REFERENCE:

- 1 Dilip Agraval, "Samaj karya evam Jankalyan"
2. O.P Dhama, O.P.Bhatnagar Education and Communication for development.
- 3 V.K Dube/Indiro Bishnoi Extension Education & Communication.



VEER NARMAD SOUTH GUJARAT UNIVERSITY SURAT

B.A. SEMESTER – V

HOME SCIENCE – (CC-11)

(DIET THERAPY-I)

With effect from 2023-2024

Total – 4 Credits/ week

Total External – 50 Marks

Theory: 3 Credits/ week

Theory – 30 Marks

Practical- 1 Credit (2 Periods/week)

Practical – 20 Marks

Internal – 20 Marks

FOCUS: - This course emphasizes the importance of diet in therapeutic management & the role of the dietitian as a part of the medical team engaged in ensuring patient's health & well-being.

OBJECTIVES:

1. To provide practical laboratory training in the preparation of special diet.
2. To understand the role of diet in the management of a various diseases and apply same to patients.
3. To adopt these diets by patients with various disorders.

THEORY:

UNIT –1 INTRODUCTION

- Basic concepts of the diet therapy.
- Role of dietitian as a member of health team.
- Therapeutic adaptations of the normal diet- soft diet, liquid and semi liquid diet.
- Methods of feeding.
- Factors in nutritional care of the patient.

UNIT – 2 MODIFICATION OF THE DIET IN FEVERS AND INFECTIONS.

- Classification
- Metabolic changes
- Principles of dietary planning :
 1. Tuberculosis
 2. Typhoid
 3. Malaria

UNIT –3 MODIFICATION OF THE DIET IN GASTRO INTESTINAL DISORDERS:-

Etiology, Symptoms, Diagnosis (wherever applicable) and Principles of the diet.

A. Patel
Dean, Faculty of Arts

[Signature]

- Indigestion
- Gastritis
- Peptic ulcer
- Diarrhoea
- Constipation
- Sprue

UNIT – 4 (A) MODIFICATION OF DIET IN LIVER AND GALL BLADDER:-

Etiology, symptoms diagnosis (wherever applicable) and principles of the diet.

- Jaundice
- Cirrhosis of liver
- Hepatic coma
- Cholecystitis & cholelithiasis

(B) Definition, symptoms, diagnosis and principles of diet in food allergy

(C) Nutritional anemia

PRACTICALS:

1. Keeping in mind the recommended daily nutritional requirements of the patient, students should plan a day's menu and calculate nutritive value for the same.
2. Foods should be categorized as follows
 - Foods to be avoided
 - Foods to be taken
 - Foods to be taken in limited amount.
3. One of the recipes from the menu plan should be selected and actually prepared by the students.
 - Clear liquid and full liquid
 - Soft diet
 - Typhoid
 - Tuberculosis
 - Diarrhoea
 - Atonic constipation
 - Spastic constipation
 - Peptic ulcer
 - Sprue
 - Jaundice
 - Anemia



MARKING SCHEME

Whole day's planning	
Selection of dish	05 Marks
Taste	04 Marks
Calculation	03 Marks
Viva	02 Marks
Journal	04 Marks
Total	20 Marks

REFERENCES :

1. Garrow J.S. & wpt (1993) "Human Nutrition & Dietetics" Churchill living stone.
2. Sizer F.S. & Whitney E.N. (1997) "Nutrition" word worth publishing company. London
3. Antia F.P. (1989) "Clinical Dietetics & Nutrition" Oxford University press (Bombay)
4. Kruse M.M. Mahan L.K. & Escotts S. (1996) Kruse's "Food Nutrition & Diet Therapy"
Philadelphia. W.b.Saunders.
5. B.Shrilaxmi "Dietetics".



metals used. Upholstered furniture-frame, base for spring, fabrics, filling and construction of mattresses, Pillows and their filling, stone, marble, silver furniture, carved furniture.

4.3 Furniture arrangement

4.4 Cleaning and care Furniture

4.5 Flower Arrangement

PRACTICALS:-

Unit-I Furniture layout and planning of floor plan on graph paper. 4 Practicals

- (a) Living room- Western/Indian
- (b) Bed room-Single/Double/Children
- (c) Kitchen-"U", "L", "I", "II" wall platforms(Any one)

Unit-II Furniture layout and planning of elevation plan on graph paper. 4 Practicals

- (a) Living room- Western/Indian
- (b) Bed room-Single/Double/Children
- (c) Kitchen-"U", "L", "I", "II" wall platforms(Any one)

Unit-III Draw a floor plan and elevation plan of any three furniture on drawing sheet and color it with color schemes you have learned. 3 Practicals

- (a) Sofa
- (b) Kitchen cabinet
- (c) Wall Unit
- (d) Ward robe
- (e) Easy chair
- (f) Side chair
- (g) Stool

MARKING SCHEME:-

Q 1 Unit 1 to 2	05 Marks
Q 2 Unit 3	05 Marks
Journal	04 Marks
Class work	06 Marks
Total	20 Marks

REFERENCES:-

1. Anna Hong Rutt, Home Furnishing(Unit-I)
 2. Bela Bhargav-Family Resource Management-(Unit I,II,IV,VI)
 3. Bhatt N.D., Elementary Drawing, Anand, Charotar Publication House
 4. Conran Terrance, New House Book (Unit-II,III,IV)
 5. Craig &Rush, Homes with Character
 6. Deshpandey R.S., Modern Ideal Homes for India (Unit-III,IV)
 7. Deshpandey R.S., Build Your Own Home, United Book Corporation. Unit-III,IV)
 8. Veena Gandotra-Interior Design &Decoration (Unit-I,II,III,IV)
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VEER NARMAD SOUTH GUJARAT UNIVERSITY SURAT
B.A. SEMESTER – V
HOME SCIENCE – CC-13 (TEXTILE SCIENCE - I)
With effect from 2023-2024

Total – 4 Credits/ week

Theory : 3 Credits/ week

Theory : External – 30 Marks

Internal – 10 Marks

Practical- 1 Credit (2 Periods/week)

Practical : External – 20 Marks

Internal – 10 Marks

FOCUS:- This course covers classification, properties, uses of fibers, yarns and fabrics, manufacturing process of yarns and fabrics.

OBJECTIVES:-

1 To acquire knowledge of different fibres, yarns and fabrics used in Textiles.

2 To acquire knowledge of manufacturing process of fabrics.

COURSE CONTENT:-

THEORY

UNIT- 1 Fiber manufacturing process

1:1 Manufacturing process of fibers

(A) Natural fibers

1 Cellulose fibers:- Cotton, Linen

2 Protein fibers:- Wool, Silk

3 Mineral fibers:- Asbestos, glass fibers.

(B) Man made fibers

1 Cellulosic fibers:- Rayon

2 Non cellulosic fibers:- Nylon, Polyester, Acrylic

UNIT-2 Yarn structure

2:1 Spinning Process:-

1. Dry spinning (2) Wet spinning

2:2 Types of yarn:-

1. Simple yarn – Simple Standard yarn, Tow ply or cable yarn

2. Complex Yarn or Novelty yarn

(i) Complex single yarn- Slub yarn, flock yarn,

- (ii) Complex ply yarn - Boucle Yarn, Ratline and Gimp Yarn, Loop yarn, Knot or spot, nub yarn &, Grandrelle Yarn , Seed Yarn , Spiral or cork screw yarn, Chenille
- (iii) Textured Yarn

2:3 Yarn properties- Thread and yarn, yarn twist, yarn numbers

UNIT-3 FABRIC CONSTRUCTION- WOVEN FABRICS

3:1 Weaving process- construction of loom

3:2 Types of weaves

1. Plain weaves:- Plain weave, Rib weave, Basket weave, Twill weave & its types, Satin & Sateen weave, ,Herringbone , Hack a back, Honeycomb,
2. Decorative weaves:- Dobby weave, Jacquard weave, Leno weave, Surface Figure weave,Lappet weave, Spot weave, Pile weave, Double Weave,Bird Eye.

UNIT- 4 FABRIC CONSTRUCTION- NON –WOVEN FABRICS

4:1 Non woven fabrics:- Felt, bonded fiber fabrics

(A) Knitted fabrics- 1 Weft or Filling knits 2 Warp knits

(B) Braided fabrics, Nets, Laces, Multi component fabrics, Tufted fabrics

PRACTICALS:-

1. Identification of Textile fibers

(a) Microscopic test (b) Burning test

2. Construction of following garments:-

(i) Dress- (a) Top (b) salwar/ chooldidaar

(ii) Sari blouse – Plan/ princes

3. Construction of weaves on paper.

- (i) Plain Weaves – Plain weave, Rib weave, Basket weave, Twill weave- Even twill & uneven twill, Satin & Sateen weave, Hack a back ,Herringbone , Honeycomb
- (ii) Decorative weaves:-, Leno weave, Surface Figure weave, Pile weave, Bird Eye.



MARKING SCHEME

Q 1 Identification of fibers	02 marks
Q 2 Construction of any one garment	05 marks
Q 3 Making weave	03 marks
Class work	06 marks
Journal	04 marks

Total 20 marks

REFERENCES:-

1. Bernard P. Corbman, Textiles: Fiber to Fabric, McGraw-hill International editions, 1983
2. Hess K.P., Textile fibers and their use
3. Joseph M., Introduction to textile science
4. Potter and Corbman, Fiber to Fabric, McGraw-hill International editions
5. Shinkle J.H., Textile Testing
6. Wingate, I.B., Textile Fabrics and their Selection, Prentice Hall, New Jersey
7. Barkers, A.F., Handbook of Textiles, Abhishek Publication, Chandigarh, 1998
8. E.P.G. Gohl L.D. Vilensky, Textile Science, CBS Publishers & Distributors, Delhi, 1987
9. Hall, A.J., The Standard Handbook of Textiles, The English Language Book Society & Heywood Books, 1965
10. Reena Bhatia & Charu Arora, Introduction to Clothing & Textiles, Madhu Printery, Baroda, 1999.
11. Raul Jewel, Encyclopedia of dress making, A.P.H. Publishing Corporation, New Delhi.
12. Anna Jacob Thomas, The Art of Sewing, UBS Publishers Distributors Ltd.
13. Zarakar K.R., Zarakar System of Cutting, Navneet Publications Ltd.
14. होमी डावसी पटेल, लाबेला डेशन बुक ओफ कटिंग, हरहरी पुस्तकालय, सुरत
15. Parikh J.D., Manmade fabrics for developing countries, Sasmira, Bombay
16. pr)win a[vm (slie D<i.(nw) ~)viAtv (rt& p¾l)k[Sn
17. vA#i(vXin a[vm pr)win Avit) Big<v ~)n)vis p¾l)k[Sn
18. vA#i(vXin a[vm pr)win b\&ºdi(sh p>cS)l p¾l)k[Sn



VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A. SEMESTER – V

Home Science CC- 14 (Food Preservation)

With effect from 2023-2024

Total Credits 4 / Week

Total External 50 Mark

Theory Credits 3 / Week

(Theory 30 + Practical 20)

Practical credit 1/week (2 period/week)

Total Internal 20 Mark

● FOCUS:

The course has been formulated to give a clear understanding of the various principles involved in Food Preservation and the storage methods which enhance shelf life of Foods and ensures safety.

● OBJECTIVES:

- 1) To understand the scientific principles underlying food Preservation.
- 2) To develop skill and techniques in food Preservation securing safety. Conservation of nutrients and palatability.
- 3) To understand the basic principles underlying food Preservation as an income generating activity.

● COURSE CONTENT:

THEORY:

Unit.1: Introduction to food Preservation

- 1.1) History, scope and importance of food Preservation.
- 1.2) Basic principles of food Preservation.
- 1.3) Classification of methods of food Preservation.
- 1.4) Equipment used in food preservation.
- 1.5) Food spoilage- General principles, causes, physical and chemical changes during food spoilage.
- 1.6) Primary sources of micro organisms in foods- physical and chemical methods used in the destruction of micro organisms (sterilization and disinfection)

Unit.2 : Preservation by temperature

- 2.1) Preservation by use of low temperature
 - a) Principles involved in freezing.
 - b) Different methods of freezing various foods.
 - c) Changes during freezing
 - d) Types of containers used.
- 2.2) Preservation by use of high temperature.
 - a) Different methods.

b) Types of containers used

c) Spoilage of canned foods

Unit.3: Preservation by osmotic pressure

3.1) High concentration of sugar

a) Jam: Definition, materials used, step-by-step method of preparing jam. Quality of good jam. Difficulties in preparing jam. Spoilage of jam.

b) Jelly: Definition, materials used, step-by-step method to preparing Jelly. Theory of Jelly formation. Quality of an ideal Jelly. Difficulties in preparing Jelly. Spoilage of Jelly.

c) Marmalade: Definition, Types, materials used. Step-by-step method to prepare marmalade. Quality of good marmalade. Spoilage of good marmalade.

3.2) High concentration of salt

a) Pickles: Pickling process, types and methods of preparation. Spoilage and causes of pickles.

b) Chutneys and Sauces : Types, methods of preparation. Spoilage and causes of Spoilage.

Unit.4:

4.1) Milk and milk products: Various methods of milk Preservation. Types, manufacturing process of cheese, butter and ghee.

4.2) Food Poisoning: Types, causes, symptoms and Preservation.

● PRACTICALS:

1) Sterilization.

2) Freezing vegetables and fruits.

3) Jam.

4) Jelly.

5) Marmalade.

6) Pickles.

7) Chutney.

● MARKING SCHEME:

Q.1 Write any one procedure of the following.

4 Mark

Sterilization/Canning/ Freezing

Q.2 Prepare any one of following.

4 Mark

Chutney/ Pickle

Q.3 Prepare any one of following.

6 Marks

Jam/Jelly/Marmalade

Q.4 Viva

2 Mark

Q.5 Journal

4 Mark

Total Mark: 20

● REFERENCES:

- 1) "Advantech food science" Reytrope wood. Orient Longman Bombay 1973
 - 2)"Food microbiology" Fraizer w.c.
 - 3)"Preservation of fruits and vegetables " Girdharilal G.S. Siddappa
 - 4)"Food Preservation " by CFTRI, Mysore
 - 5) "The brochure of home seed food preparation series" by CFTRI, Mysore
 - 6) "Modern food Preservation " MCWILLIAMS and Paine subject publication
 - 7)"Home scale food preparation " by CFTRI, Mysore
 - 8)"Food Science" by B. Srilaxmi
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VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A SEMESTER-5

HOME SCIENCE-CC-15

COMMUNICATION IN EXTENSION

Effective from June 2023-24

Total – 4 Credits/ week

Total External – 50 Marks

Theory: 3 Credits/ week

Theory – 30 Marks

Practical- 1 Credit (2 Periods/week)

Practical – 20 Marks

Internal – 20 Marks

OBJECTIVES:

To enable students to:

- (1) Understand the Process of Communication in development process.
- (2) Understand the Process and Principles in extension programme Planning.

COURSE CONTENT

THEORY

UNIT-I

- Definitions of Communication.
- (b) Meaning of communication
- Importance of Communication
- Scope of Communication
- Process of Communication

UNIT-2

- Principles of communication media.
- Various media for Communication.
- Various Problems accruing during Communication.
- Reasons related to Problems.
- Remedies for problems

UNIT-3

(A) Various model of communication Process

- O.P Dhama model
- Westley and Machean model
- Leagans Model
- Lasswells Model

(B) Basic function of Communication

- The Information Function
- Command or Instructive Function
- Influence or Persuasive Function
- Integrative Function

UNIT-4

(A) Communication Approaches

- Individual Approach
- Group Approaches
- Mass Approaches

(B) Communication and Extension methods

- Radio talk
- Television Programme
- Demonstration
- Workshop
- Exhibition

PRACTICALS

Preparing and using for communication in Extension following aids:

1. Cartoon
2. Pamphlet
3. Leaflet
4. Folder
5. Finger Puppet
6. Mask Puppet



MARKING SCHEME

Q-1 Practical (1 to 3)	06 marks (Th 2 + Pr 4)
Q-2 Practical (4 to 6)	05 marks (Th 2 + Pr 3)
Journal	04 marks
Class Work	05 marks
Total	20 marks

REFERENCES:

1. O.P. Dhama, Education and communication for development, 2nd edition, Oxford & IBH publishing co. pvt. Ltd, New Delhi.
2. G.L. Ray, Extension communication Management. 4th edition 1999 Naya Calcutta, India.
3. મીતા રાજપુરા, ગૃહવિજ્ઞાન વિસ્તરણ અને પ્રત્યાયન



VEER NARMAD SUOTH GUJARAT UNIVERSITY, SURAT

B. A. SEMESTER-V

HOME SCIENCE-CC:16

(HUMAN PHYSIOLOGY-1)

Effective from June 2023-24

Total credits-04

External Theory-30 Marks

Theory- 3 credits(3periods/week)

Practical-20 Marks

Practical-1 credits(2periods/week)

Internal-20 Marks

OBJECTIVES: -

1. To Understand structure and function of various organs of Physiological System of Human being.
2. Understand alterations of structure and function in various organs on Disease conditions.
3. To serve as a sound basis for the study of nutrition and food science.

UNIT:1

- 1.1 Enzyme: Definition, composition, properties, mode of action, Enzyme-Inhibitor, Coenzyme, Nomenclature and classification, Biological Importance
- 1.2 Animal tissues: Definition, Types, Structure and function of various Tissues.

UNIT:2

Digestive System: (A) Anatomy and process of digestion.

(B) Accessory digestive Glands: structure and function.

UNIT:3

- 3.1 Circulatory system: (a) Composition and function of blood.
(b) Structure and function of Heart, Artery and Ven.
(c) Coagulation of blood.
- 3.2 Immune System: (a) Antigen-Antibody concept and definition.

(b) Cells of immune system.

(c) Types of Immunity.

UNIT:4

Respiratory System: (A) Structure and function of respiratory organs.

(B) Mechanism of respiration.

PRACTICALS: -

1. Biochemical test of Starch, Protein and Lipid.
2. Effect of enzyme Amylase on Starch.
3. Preparation of blood smear.
4. Study of Animal Tissues: - Simple squamous epithelium, Areolar tissue, Striated muscles and Modulated nerve fibre.
5. Study of Human Physiological systems from models, charts etc.
(i) Digestive system. (ii) Circulatory system (iii) Respiratory system.

MARHING SCHEME: -

- | | |
|--|---------|
| Que.-1 Do as directed of the following & viva | 5 marks |
| Effects of enzyme Amylase on Starch OR | |
| Prepare blood smear. | |
| Que.-2 Biochemical tests: (any one) starch, Protein, Lipid | 3 marks |
| Que.-3 Identify and describe specimens no. 1to 4 | 8 marks |
| Journal- | 4 marks |

Total Marks: 20

REFERENCES: -

1. Human physiology – C. C. Chatterjee.
2. Human Physiology -Wright
3. Essentials of Medical Physiology – K. Sembulingam, P. Sembulingam.
Jaypee Brothers Medical Publisher (P) Ltd.
4. Manavsharir karyavigyan tatha prathamik sutikashastra. (GUJ.) Dilip Mehta
5. Pranishastra- Gujarat granth nirman board, Ahmedabad.
6. Manual of laboratory technique- National institute of Nutrition, Hydrabad.



VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A. SEMESTER – VI

HOME SCIENCE – CC-17

(DIET THERAPY-II)

With effect from 2023-2024

Total – 4 Credits/ week

Total External – 50 Marks

Theory: 3 Credits/ week

Theory – 30 Marks

Practical- 1 Credit (2 Periods/week)

Practical – 20 Marks

Internal – 20 Marks

OBJECTIVES :

1. To provide practical laboratory training in the preparation of special diet.
2. To understand the role of diet in the management of a various diseases and apply same to patients.
3. To adopt these diets by patients with various disorders.

COURSE CONTENT

THEORY:

UNIT-1

1.1 Modification of the diet in the disease of pancreas – diabetes mellitus

- Types
- Cause
- Symptoms
- Diagnosis
- Dietary modification
- Insulin therapy
- Oral hypoglycemic agent
- Sugar substitutes
- Complications
- Non pharmacological treatment

UNIT-2 DIETARY MODIFICATION IN HYPERTENSION AND CARDIOVASCULAR DISORDERS

2.1 Hypertension :

- Definition, classification, symptoms, causes, nutritional requirements, prevention
- Dietary modification
- Non pharmacological treatment
- Use of salt alternatives

P. Patel
Dean, Faculty of Arts

[Signature]

2.2 Low blood pressure : Definition, causes, symptoms and dietary modification

2.3 Atherosclerosis : causes, symptoms and dietary modification

2.4 Diet bypass surgery and heart attack

UNIT – 3 MODIFICATION OF THE DIET IN RENAL DISORDERS :-

Etiology, symptoms, diagnosis (wherever applicable) and principles of the diet.

3.1 Glomerulonephritis

3.2 Nephrotic syndrome

3.3 Renal failure/uremia

3.4 Dialysis

3.5 Urinary calculi

UNIT – 4

4.1 Modification of the diet in musculoskeletal disorder

Etiology, symptoms and dietary modification.

- Rheumatoid arthritis
- Osteoporosis
- Gout

4.2 (a) Nutritional and non-nutritional etiological factors of cancer

(b) Management of cancer patients in relation to the clinical treatment and cachexia.

PRACTICALS:

- 1) Keeping in mind the recommended daily nutritional requirements of the patient, students should plan a day's menu and calculate nutritive value for the same.
- 2) Foods should be categorized as follows
 - Foods to be avoided
 - Foods to be taken
 - Foods to be taken in limited amount.
- 3) One of the recipes from the menu plan should be selected and actually prepared by the students.
 - Over weight diabetic male
 - Pregnant diabetic female
 - Diabetic child
 - Moderate hypertension
 - Low blood pressure
 - Atherosclerosis
 - Heart attack
 - Acute nephritis
 - Gout

MARKING SCHEME:

Whole day's planning	05 Marks
Selection of dish	04 Marks
Taste	02 Marks
Calculation	03 Marks
Viva	02 Marks
Journal	04 Marks
Total	20 Marks

REFERENCES:

1. Garrow J.S. & wpt (1993) "Human Nutrition & Dietetics" Churchill livingstone
2. Sizer F.S. & Whitney E.N. (1997) " Nutrition" wordworth publishing company
3. Antia F.P. (1989) "Clinical Dietetics & Nutrition" Oxford University press (Bombay)
4. Kruse M.M. Mahan L.K. & Escotts S. (1996) Kruse's " Food Nutrition & Diet therapy" Philadelphia. W.b. Saunders.
5. B.Shrilaxmi "Dietatics".



VEER NARMAD SOUTH GUJARAT UNIVERSITY SURAT
T B.A. SEMESTER – VI
HOME SCIENCE – CC-18 (Family Finance Management)
With effect from 2023- 2024

Total – 4 Credits/ week

Theory : 3 Credits/(3 Periods /week)

Theory External – 30 Marks

Internal - 10 Marks

Practical :1 Credit (2 Periods/week)

Practical External – 20 Marks

Internal – 10 Marks

FOCUS:

The course on financial management is designed to understand the Function of family as an economic unit. The income expenditure, credit, savings and investments are the other aspects the course dealt with.

OBJECTIVES: To enable students to-

- 1 Understand the internal and external factors affecting financial decision.**
- 2 Be able to use to make wise use of money.**
- 3 Develop entrepreneurship skills.**
- 4 Analyze the environment related to small scale industry and business.**

UNIT-1 Money Management

1:1 Importance and meaning of money.

1:2 Types of family income

- (i) Money income**
- (ii) Real income**
- (iii) Psychic income**
- (iv) Total income**

1:3 Stages of Money Management Process.

(A) Planning

- (i) Recognition of goals**
- (ii) Family life cycle**
- (iii) Analysis of long and short term income**
- (iv) Coordinating short and long time income use with needs**
- (v) Methods of handling money**

(B) Controlling

(C) Evaluation

UNIT- 2 Budget

2.1 Budget meaning & Definition

2:2 Importance and types of budget

2:3 Steps involved in making budget

2:4 Types of budget

UNIT-3 Savings and Investment

3:1 Purpose and meaning of savings

3:2 Types of savings

(A) Compulsory savings

(i) Provident fund

(ii) Pension plan I

(iii) Gratuity

(B) Voluntary savings

(i) Bank-types of accounts

(ii) Post office savings scheme

(iii) Unit Trust of India

(iv) Shares

(v) Mutual Fund

(vi) Debentures

(vii) Life Insurance Policy- Types and schemes

3:3 Investment - Types and meaning of investment

UNIT-4 Credit

4:1 Meaning and Definition

4:2 Family's use of credit

4:3 Basis of credit

4:4 Types of credit

4:5 Legal credit instruments

PRACTICALS:

1 Fabric painting

4 practicals

(1) Tach brash (Round & Flat)painting

(2) One stroke (Round & Flat)painting

(2) Shading

Make a sample on saree / choonary / bed spread / wall piece

2 Non conventional printing

2 practicals

(1) Vegetable printing (2) Spray printing (3) Finger tips printing

(4) Leaf printing

Make a sample on saree / choonary / Table Mats / Table lamp shade

3 Pottery Painting /Tiles (Marbling or poster)Painting /Glass Painting

2 practicals

4 Floor Decoration

2 practicals

(1) Flowers and leaves

(2) Saw dust

(3) Pulses and Grains

(4) Alpana

(5) Kolam

(6) Karothi

(7) Salt

MARKING SCHEME :

Q 1 Fabric painting / Non conventional Printing	04 marks
Q 2 Pottery Painting /Tiles Painting /Glass Painting	04 marks
Q 3 Floor Decoration	03 marks
Journal	04 marks
Class work	05 marks
	Total 20 marks

REFERENCES :

- 1 Bigelow: Family Finance**
 - 2 Gross And Crandall: Management For Modern Families**
 - 3 Nickell And Dorsey: Management in Family Living**
 - 4 Nickell , Rice and Tucker- Management in Family Living**
 - 5 Fevicryl Hobby Ideas- Published by Pidilite Industries Limited**
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EER NARMAD SOUTH GUJARAT UNIVERSITY SURAT
B.A. SEMESTER – VI
HOME SCIENCE – CC-19 (TEXTILE SCIENCE - II)
With effect from 2023-2024

Total – 4 Credits/ week

Theory : 3 Credits/ week

Practical- 1 Credit (2 Periods/week)

Theory : External – 30 Marks

Internal – 10 Marks

Practical : External – 20 Marks

Internal – 10 Marks

FOCUS:-

To make the students learn new and innovative methods of textile finishes, dyeing processes and printing processes

OBJECTIVES:-

- 1 To make the students aware of various finishes given to fabrics.**
- 2 To make the students aware of different types of dyes and their application.**
- 3 To impart the knowledge about types of printing**

COURSE CONTENT:-

THEORY

UNIT- 1 FINISHES

- 1:1 Objectives of finishes
- 1:2 Routine and General finishes- Beetling, Bleaching and scouring, Brushing Calendering,
- 1:3 Special finishes - Calendaring, Schreinerling, Moire, Embossed Polishing, Glazed, Cire, Raised, Napping, Flocking.

UNIT- 2 Dyestuffs and their application

- 2:1 History of dyeing
- 2:2 Types of dyes:-
 - (a) Natural dyes- Vegetable, Animal and Mineral dyes.
 - (b) Direct, Azoic, Acid and Mordant, Cationic; Disperse, Vat, Sulphur, Reactive and Pigment Dyes.
- 2:3 Application of colour –
Fibre, yarns and fabric dyeing

UNIT- 3 Printing

- 3.1 History of printing.
- 3.2 Types of printing

- (i) Direct printing- Block, Roller, Duplex and Photographic printing.
- (ii) Resist printing- Tie and dye, Batik, Ikat, Stencil and Screen.
- (iii) Discharge Prints.
- (iv) Transfer printing

UNIT-4 Laundry

- 4.1 Soap- Types, manufacturing process.
- 4.2 Detergent- manufacturing process and properties

PRACTICALS

1. Printing on cloth

- (a) Block Printing
- (b) Stencil printing
- (c) Batik printing
- (d) Tie and dye- Knotting, Marbling, leheriya (Waved) ,Stripes , circles ,clump tying, Folded squares, twisting.

2. Knitting- sweater/ lady's cardigan

3. Macramé- any one decorative article

4.Laundering- preparation and application of

- (1) home made starch
- (2) Ready starch

MARKING SCHEME

Q 1 Printing	04 marks
Q 2 Knitting/Macrame	04 marks
Q 3 Starching	02 marks
Journal	04 marks
Class work	<u>06 marks</u>

Total 20 marks

REFERENCES:

1. Bernard P.Corbman, Textiles:Fiber to Fabric, McGraw-hill International editions,1983
2. Hess K.P., Textile fibers and their use
3. Joseph M.,Introductory Textile Science, Fortworth harcount Brace Jovanovich College Publishers
4. Potter and Corbman, Fiber to Fabric, McGraw-hill International editions
5. Shinkle J.H.,Textile Testing

6. Wingate, I.B., Textile Fabrics and their Selection, Prentice Hall, New Jersey
 7. Barker, A.F., Handbook of Textiles, Abhishek Publication, Chandigarh, 1998
 8. E.P.G. Gohl, L.D.Vilensky, Textile Science, CBS Publishers & Distributors, Delhi, 1987
 9. Hall, A.J., The Standard Handbook of Textiles, The English Language Book , Society & Heywood Books, 1965
 10. Reena Bhatia & Charu Arora, Introduction to Clothing & Textiles, Madhu Printery, Baroda,1999.
 11. Russ S, Fabric Printing by Hand, Studio Vista London
 12. Lammer Jutta, Print your own fabric, BT Bestford Ltd. London
 13. S.R.Sharma & Vijay Kaushik, Textiles and Laundry, Anmol Publications P vt. Ltd. N.D.
 14. Shevai V.A., Technology of Printing, Vol. II, Bombay Sevaka Publications.
 15. Deulkar D., Household Textiles and Laundry Work, Atmaram & Sons., New Delhi
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 17. vA#i(vXin a[vm pr)win Avit) Big<v ~)n)vis p¾l)k[Sn
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VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A. SEMESTER-VI

HOME SCIENCE CC-20

(FOOD PRESERVATION-II)

With effect from 2023-2024

Total Credits: 4 credit/week

Total External – 50 Mark

Theory: 3Credits/week

(Theory-30+ Practical 20 Mark)

Practical: 1 Credits/Week (2 periods/week)

Total Internal- 20 Mark

● OBJECTIVES:

- (1) To understand the scientific principles underlying food Preservation.
- (2) To develop skills and techniques in food preservation ensuring safely, conservation of nutrients and palatability.
- (3) To understand the basic principles underlying food Preservation as an income generated activities.

● COURSE CONTENT:

● THEORY:

Unit:1 Preservation by drying and dehydration

- 1.1) Principles involved
- 1.2) Various methods of drying
- 1.3) Different types of driers
- 1.4) Packing and storage of dried foods

Unit:2 Preservation by preservatives

- 2.1) Natural preservatives
- 2.2) Artificial preservatives

Unit:3 Preservation by irradiation

- 3.1) Source of ionizing radiation
- 3.2) Units of measurements
- 3.3) Application of irradiation on different foods
- 3.4) Use of radiation in food preservation

Unit:4 Preservation of fruits, beverages & government laws

- 4.1) Preservation of fruit juice- by pasteurization, chemical, adding of sugar, freezing, drying, carbonation, filtration and others methods

4.2) Fruit beverages- squash and cordial, juice and syrup, carbonated beverages, fruit juice powder, juice concentrates

4.3) 1) Food Adulteration- meaning, types, most common food adulterants and their effects on health

Common household methods to detect adulterants in different foods

2) Laws governing food standards, significance- PFA act, FPO, BIS, Agmark, M MPO

3) Food additives- types, advantages and disadvantages

● PRACTICALS:

1) Sterilization

2) Drying of vegetables, fruits and Cereals

3) Preservation of fruit juice by addition of sugar and chemicals

4) Tomato ketchup

5) Squash

6) Synthetic syrup

7) Common household methods to detect adulterants in different foods

- Cereals, milk, fats, oils, spices and honey

● MARKING SCHEME:

Q.1 Write any one procedure of the following.

4 Mark

Sterilization / Drying/ Cordial

Q.2 Prepare any one of the following

6 Mark

Tomato ketchup/ Squash/ Synthetic syrup

Q.3 Detect adulterant from any one

4 Mark

Cereal/ Milk/ Fat/ Oil/ Spices/ Honey

Q.4 Viva

2 Mark

Q.5 Journal

4 Mark

Total 20 Mark

● REFERENCES:

1) ' Advance food Science ' Roytrope wood, orient Longman Bombay 1973

2) ' Food microbiology ' Fraizer w.c.

3) ' Preservation of fruits and vegetables ' Girdharilal G.S. Siddappa

4) ' Food Preservation ' by CFTRI, Mysore

5) ' The brochure of home seed preparation series' by CFTRI, Mysore

- 6) 'Modern food preservation ' McWilliams and Paine surjeet publication
 - 7) 'Home Scale food preparation ' by CFTRI, Mysore
 - 8) ' Food science ' by B. Srilaxmi
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VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT

B.A SEMESTER-6

HOME SCIENCE-CC-21

FOLK MEDIA IN EXTENSION

Effective from June 2023-24

Total – 4 Credits/ week

Total External – 50 Marks

Theory: 3 Credits/ week

Theory – 30 Marks

Practical- 1 Credit (2 Periods/week)

Practical – 20 Marks

Internal – 20 Marks

OBJECTIVES:

1. To help students to understand the principles and procedures in extension
2. Programme planning
3. Develop skills in working with people.
4. Develop skills in the use of folk media.
5. To enable students to become an effective Home Science extension worker.

COURSE CONTENT

THEORY

UNIT-1

- Concept of extension programme planning.
- Meaning and definition of extension programme planning.
- Importance of extension programme planning.
- Scope of extension programme planning.

UNIT-2

- Steps for Extension Programme Planning.
- Extension Programme planning process.

UNIT-3

- Signification of folk media in developmental communication.
- Function of folk media in social change.
- Scope of Communication in folk media.

UNIT -4

(a) Types of folk media

- Folk music
- Folk dance
- Folk drama
- Puppets
- Street play

(b) Effect area in folk media

(c) Selection of folk media

- Modernization of traditional society in folk media.
- Criteria for selection of any one or combination of message the context and time and other resources.

PRACTICALS

1. Studying the profiles of the rural areas

Formulate one questionnaire to study the socio Economic background of rural people.

2. Planning one extension programme for lower income group people.

Perform folk dance, folk song, street plays to create awareness among

3. Community people.

4. Planning and conducting one demonstration with the help of appropriate audio-visual aids.

5. Planning and delivering one extension talk with appropriate audio visual aids

Note-Students will maintain record of their practice experience.

MARKING SCHEME

Q-1 Planning an extension programme for lower income group. 04 marks

Q-2 Preparation of questionnaire 03 marks

Q-3 Extension talk or Demonstration 04 marks

Journal 04 marks

Class Work 05marks

Total 20marks

REFERENCE

1. Prashar Vigyan, DR.smt Sunita Mishra, University pub, New Delhi.
2. Gramin prashar Shiksha,,aMehta Jayshree S. Aavishkar Publishers, Jaipur.
3. Modern Trends in teching Technology, Romesh Varma ., Anmol Pub New Delhi.
4. Textbook of Mass Communication and Media, Uma Joshi.
5. Basic elements of Extension Education, Patience Building, Reference book.



VEER NARMAD SUOTH GUJARAT UNIVERSITY, SURAT

B. A. SEMESTER-VI

HOME SCIENCE-CC:22

(HUMAN PHYSIOLOGY-2)

Effective from June 2023-24

Total credits-04

External Theory-30 Marks

Theory- 3 credits(3periods/week)

Practical-20 Marks

Practical-1 credits(2periods/week)

Internal-20 Marks

OBJECTIVES: -

4. To Understand structure and function of various organs of Physiological System of Human being.
5. Understand alterations of structure and function in various organs on Disease conditions.

To serve as a sound basis for the study of nutrition and food science.

UNIT: 1 Excretory System

- 1.1 Structure and Function of organs of Urinary System- Kidney, Ureter and Urinary bladder.
- 1.2 Process of formation of Urine.
- 1.3 Skin-Structure and Functions.

UNIT: 2 Nervous System

- 2.1 Brain- Structure and Functions.
- 2.2 Spinal cord- Structure and Functions.
- 2.3 Reflex Arch- Reflex Action.

UNIT: 3 Endocrine glands

- 3.1 Location and Function of various Endocrine gland of Human being.
Effect of hormones of Pituitary gland, Thyroid gland, Parathyroid gland, Adrenal gland, Ilets of Langerhans and Gonads.

UNIT: 4

4.1 Information about worms found in human body.

4.2 Modern methods of diagnosis of diseases.

X-Ray (Radiation photograph), Angiography, C. T. Scan, MRI, Sonography
And Endoscopy.

PRACTICALS:

1. Detection of sugar, protein and bile in Urine.
2. Study of worms found in human body.
3. Study of Human physiological systems (As per theory syllabus) with the help of charts, models etc.
(A) External structure of organs of Excretory system and Nervous system.
(B) Location and hormones of Pituitary gland, Thyroid gland, Parathyroid Gland, Adrenal gland, Ilets of Langerhans and Gonads.
4. Identification of modern methods of diagnosis of diseases by charts, models etc.: - X-ray, Angiography, C. T. Scan, MRI, Sonography and Endoscopy.

MARKING SCHEME: -

- Que.-1 Identify and describe specimen No. 1 to 6. (worm-1, From system-2
From gland-2 and modern method-1) 12 Marks
- Que.-2 Detection of sugar, Protein and bile in given sample. 4 Marks
- Journal 4 Marks

Total Marks 20

REFERENCES: -

1. Human physiology – C. C. Chatterjee.
2. Human Physiology -Wright
3. Essentials of Medical Physiology – K. Sembulingam, P. Sembulingam.
Jaypee Brothers Medical Publisher (P) Ltd.
4. Manavsharir karyavigyan tatha prathamik sutikashastra. (GUJ.) Dilip Mehta
5. Pranishastra- Gujarat granth nirman board, Ahmedabad.
6. Manual of laboratory technique- National institute of Nutrition, Hydrabad.