

**VEER NARMAD SOUTH GUJARAT UNIVERSITY**

**M. A. - II**

**Home Science Paper – V**

**Physiology**

(Effect From June –July 2002)

Theory mark External 45 Internal 20

Practical mark External 25 Internal 10

**THEORY SYLLABUS :**

- (1) Classes of organic molecules classification , chemistry , metabolism and importance in human body – carbohydrates, proteins, Lipids, Nucleic Acids.
- (2) External and internal structure of organs involved in digestion of food salivary glands, stomach, small intestine, Large intestine , Liver and pancreas , chemistry properties and functions of digestive secretions : Saliva. gastric Juice pancreatic juice , intestinal juice , bile juice , Digestion and absorption of food , changes occurring in the large intestine : fermentation putrefaction and feces formation, Diseases of gastro – intestinal tract, Liver , Biliary tract and pancreas
- (3) Regulation of water and electrolyte balance : structure of kidney and Urinary system ; Regulation of sodium , chloride and water balance ; Regulation of potassium , calcium and hydrogen ion concentrations ; Disorders of kidney and Urinary system.
- (4) The endocrine glands and their hormones : pituitary , thyroid parathyroid Adrenal gonads , gastro – intestinal tract thymus, pineal , placenta ; mechanism of hormone . secretion . Hormonal feed back.
- (5) Enzymes : Definition, properties , classification , nomenclature, composition , action, co- enzymes , physical Factors altering enzyme activity.
- (6) Defence mechanisms of the body : immunology, foreign chemicals and stress, Effector cells of immune system, specific and non specific immune responses : antigen – antibodies concept antibody production, functions of antibodies ; transfusion reactions and blood groups & hazard of Rh group , Vaccinations.
- (7) Vitamins : classification, chemistry , properties , metabolism, physiological activities Dietary sources, human deficiency, hyper vitaminosis.
- (8) Disorders in Lipid metabolism; heart diseases and other complications in human body.

- (9) Disorders in Blood glucose level Blood pressure (Hypo- Hyper ), complications in the human body.
- (10) Blood and Body Fluids : composition of blood – Erythrocytes , Leucocytes Hemolysis , Hemoglobin's , plasma, Albumin, Alpha, Beta and gamma globulins ; biological role ; functions of plasma proteins; co – agulation of blood, Lymph, functions of blood.
- (11) Metals in Food – copper , Iron, Aduminium Tin, Zinc calcium, lead, sodium and potassium; effects on food, metal toxicity.
- (12) Physiological role of minerals and complications caused in human body due to their deficiency.
- (13) Alcoholism and Drug addiction; their effects on human physiology.
- (14) Some very common medicinal plants used to cure diseases;
  - (1) Ocimum; (2) Adhatoda (3) Aloe, (4) Vitex (5) Harde
  - (6) Jethi madh, (7) Behda (8) clove (9) cardamon, (10) Termeric
  - (11) Terminalia, (Arjun – Sadad) (12) Mentha (13) Dam vel.
  - (14) Brahmi. (15) Methi (16) Madhunasi. (17) Calotropes.
  - (18) chitarak (plumbago)

## **PRACTICALS :**

- (1) Estimation of sugars, bile and Acetone in Urine.
- (2) Estimation of cholesterol in blood.
- (3) Determination of Alcohol in blood.
- (4) Blood groupings.
- (5) R,B.C. W.B.C. counting.
- (6) Determination of sex by Barrbody method.
- (7) Determination Ascorbic acid in fruits.
- (8) Saponification Value of fat.
- (9) Qualitative Test for carbohydrates, proteins & Fats.
- (10) Enzyme activity : 1.Amylase 2. Urease 3. Invertase.
- (11) Study of vital organs of human body : use of charts & Modell.

## **REFERENCES ( BOOKS )**

- (1) Davison S passmore R . Human Nutrition and Dietetics . English Language Book Society , 1972.
- (2) Swaminathan N., Essentials of food and Nutrition Ganesh & co. 1980.
- (3) Vondeb, Sherman, Luciano . T.M.H. Edi.
- (4) Fairley, J.L. and kilgour G.L. Essentials of Biological chemistry . Reinhold publishing corpo. New York. 1966.
- (5) Burtin , B.T. Human Nutrition , Hill Burns co. 1979.
- (6) chetterji. Human physiology Vol. I & II .
- (7) A Text Book of Biochemistry – A.V.S.S. Ramarao . L.K.S. public vishakhapatnam.
- (8) Bio chemistry – West & Todd.
- (9) Practical Biochemistry. Rajgopal & S. Ramakrishanan.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY**

**M. A. Part – II**

**Home Science Paper – VI**

**New Developmental Issues & Extension Techniques :**

(Effect From June –July 2002)

Theory- 6 periods / week

Total mark : 70 Internal 30

**Objectives :-**

To enable students to :

- 1 Become aware of the means of communication and make plans to use them.
- 1 Become aware of the extension programmes planned by the Govt. for helping the society.

**Ch.- 1 Communication planners :- Role & Training :-**

- 1.1 Meaning & scope of communication and communication planning.
- 1.2 Elements in the planning process.
- 1.3 Technological options & problems of planning for future change.
- 1.4 Qualities of a communicator.
- 1.5 Functions of communication planner.

**Ch.-2 Developmental Issues of communication :-**

- 2.1 Communication in developing Countries.
- 2.2 Mass Media are class Media.

**Ch.-3 Communication through satellite :-**

**Ch.-4 Communication of Innovation :-**

- 4.1 concept of Innovation
- 4.2 characteristics of Innovations .
- 4.3 Factors Influencing Innovation.
- 4.4 Diffusion of Innovation and communication.
- 4.5 Innovation Adoption process.
- 4.6 Classification of adopters.

## **Ch.5 Social welfare & welfare Organization .**

- 5.1 concept of social welfare .
- 5.2 welfare state.
- 5.3 welfare Organization
- 5.4 International agencies involved in community development & Social welfare.
- 5.5 Amenities & services for Rural development.

## **Ch.6 Social organization , Dis- organization & changes in Rural organizations :-**

- 6.1 Definition, Relationship of social organization with social structure.
- 6.2 Normality of social organization.
- 6.3 Social disorganization in India.
- 6.4 Types of social disorganization.
- 6.5 Types of organization – Non- government organization vs Govt. organization , Activists vs non- activist.

## **Ch.7 Group mobilisation & leadership Developments :-**

- 7.1 (a) Definitions of Group Types of Group.
- (b) Group in the rural community & methods to approach them.
- 7.2 (a) Leadership for development .
- (b) Types of Leader.
- (c) Theories of Leadership.
- (a) Some principles of democratic leadership.

## **Ch.8 Community development programme in India.**

- 8.1 Definition of community development .
- 8.2 History of community development programme in India.
- 8.3 Philosophy behind the community development.
- 8.4 Objectives & C.D. Programme .
- 8.5 Organization of community development programme .
- 8.6 Scope of community development .
- 8.7 Impact of community development programme on rural life in India.

## **Ch.9 Programme Planning & Five Year Plans.**

### 9.1 Programme Planning. :-

- (a) Meaning & Principle of programme planning as applied to extension programmes.
- (b) Basic principles used in educational planning .
- (c) Programme planning & Programme projection .

### 9.2 Developing a Plan of work.

- (a) Definition & Analysis of the concept.
- (b) Plan of work – Importance & Scope in extension.
- (a) Elements of Plan of work.
- (b) Guidelines for developing a written annual plan of work.
- (c) Selecting methods & Structuring learning experiences.

### 9.3 National Plans in India :-

- (a) National planning committees/ Govt. planning in India.
- (b) The planning machinery & method of making plans.
- (c) Planning Commission.
- (d) Five Year plans.
- (e) Achievement during Various Plan Periods.
- (f) Weaknesses in Our Planned programme.

## **Ch.10 Training Principles & Practices :-**

### 10.1 Meaning of Training.

### 10.2 Education versus training.

### 10.3 Types of Training for Extension workers.

### 10.4 principles of extension training.

### 10.5 Problems & Prospects of training.

### 10.6 Ministry of education & social welfare.

### **References :-**

1. O.P. Dhama : Education and communication for Development, oxford & I.B.H. Publishing Co. New Delhi. 1985.
2. chatter R.K.- Mass communication , National Book Trust New Delhi.
3. Kumar K.J. – Mass communication in India. Jai co, Bombay.
4. Paul Lagans :- Extension education in community development .
5. Ramani W.N. – communication in Home science Extension , Lady Irwin collage, New Delhi.
6. Kuppuswamy B- communication and social Development in India, sterling publication .
7. Waghmare S.T. Teaching extension education.

### **Journals :-**

1. Communication Institute of Mass communication New Delhi.
2. Social welfare : central social welfare Board New Delhi.
3. Yojana, Government of India.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY**

**M. A. - II**

**Home Science Paper – VII**

**Interior Decoration.**

(Effect From June –July 2002)

Theory- 4 periods / week

Practical –2 period /week

Theory : 45 mark

Practical : 25 mark

**Objectives :-**

1. To Apply one's asthetic and creative ability in making attractive and functional interiors.
2. Acquire skills in the profession of a Interior decorator .

**I. Introduction :-**

1. Concept of Interior Decoration in India.
2. Basics of Interior Decoration and developing good taste.
  - a) Good Taste and Optical illusion.
  - b) Effect of culturing .
  - c) Distribution of attention.

**II Language of Design.**

- (a) Line.
  - (i) Horizontal (ii) Vertical (iii) Curved (iv) Diagonal
- (b) Effect of Line in Interior Decoration
  - (i) Form :
- (c) Texture :
  - (i) Types of textures
  - (ii) Effect of various textures in Interior decoration.
- (d) Space : Organization and use of space.
- (e) pattern : Units of design.
- (f) Colour : Importance of colour in Interiors.

**III Principles of Design.**

Art principles like Harmony , Balance , Proportion, Emphasis and Rhythm.

**IV Application of elements and principles of Design in**

- (a) Home
- (b) Art Objects
- (c) Show case
- (d) Flower arrangement
- (e) Floral art
- (f) Furniture

**V Types of Design .**

- 1 Structural and Decorative Design .
- 2 Aims of Design : Beauty , Functionalism expressiveness.

## VI Colour in Interiors.

- 1 Effect of colour in Interior Decoration .
- 2 Various colour Theory.
- 3 The colour wheel of pigment Theory.
- 4 Classification of colour in pigment Theory.
- 5 Classification of colour
  - (i) Hue
  - (ii) Value
  - (iii) Scale
- 6 Colour Harmonies .
  - (i) Related Harmonies
  - (ii) Unrelated Harmonies
  - (iii) Effect of various types of light on colour Harmonies.
- 7 Colour names and colourants.
- 8 The emotional effect of colour .
- 9 Factors affecting colour Harmonies for rooms.
  - (i) The room – size , shape
  - (ii) The mood
  - (iii) The style
  - (iv) Current Fashion
  - (v) Personal Preference.
- 10 Suggested various colour harmonies for various rooms like living ,Bed , Dinning, Bathroom , Game room ,Children – Guest room etc.

## VII Lighting.

- (i) Types of lighting – General and Decorative , Direct and Indirect.
- (ii) Effect of Lighting on colour and decoration .
- (iii) Various decorative Ideas of Lighting you can adopt.

## VIII Floor Coverings :-

1. Types.
2. Selection of floor coverings – Value , warmth , comfort, safety, ease of care . quality , fibres.
3. Carpets and Rugs,
  - Steps in Carpet production,
  - The tufting process.
- 4 planning for carpets,
  - Size of the room .Estimating cost, cleaning and care, spot and stain removal.
- 5 Resilient Floor Coverings,
  - Asphalt rubber, cork. Lenolium etc.

- IX Furniture and Accessories :-
2. History, need and furniture styles today.
  3. Furniture arrangement and art principles in various rooms.
  4. Construction of Furniture .
  5. Wall Accessories :-
    - pictures, wall mirrors, Sculpture, wall shelves lamps and other accessories.
- X Walls and Windows :-
- 1 Importance of walls and windows in decoration.
  - 2 Plaster walls and wall boards, painting walls, wall paper, scenic wall paper, Estimation of wall paper needed, application, wood paneling, Tile walls, Folding doors as walls, Glass walls.
  - 3 Ceilings.
  - 4 Kinds of windows :-
    - Window treatments, curtains and Draperies, Calculating the amount materials needed , methods of Finishing draperies at the top with various types of tucks or pleats. Use of drapery rods, hooks, taper , rings,
- XI Professional Practice :-
- Trends of different types, responsibilities of Interior designer with client and contractor.
- XII Landscape Gardening.
- 1 Signs and Symbols used for landscaping.
  - 2 Garden – Selection of plants.
    - (a) Lawn – Advantages, essential requirements, Methods for growing lawn , Care, Grass used for making lawn.
    - (b) Ground cover – Meaning, Types.
    - (c) Trees – selection, Common trees used in home garden, Care .
    - (d) Flower – plants – Shrubs, Monsoon flowers, Winter flowers , summer flowers.
    - (e) Hedge – common plants used for making Hedge.
    - (f) Decorative plants.
    - (g) Indoor plants – potting, care for indoor plants- , sunlight, water, compost, Repotting , common indoor plants.

## **Practicals :-**

### **I Good Taste.**

- 1 clip two pictures from a magazine or use a photograph of any room Which may show attractive furniture. Stick it on plain paper .Describe its good and bad points . Improve the room and remove bad points according to good taste.
- 2 Draw the plinth area of your house on plain paper or graph sheet, using scale.

### **II Application of Elements and principles of Design in ,**

- 1 Flower arrangement.
- 2 show case.
- 3 Floral art.
- 4 Furniture arrangement.
- 5 Clip 5 pictures and analyze it for Art principles.

### **III Design.**

- 1 Collect pictures or articles showing types of Design. Evaluate good requirement of structural and Decorative Designs.

### **IV Colour in Interiors :-**

- 1 Make a pigment colour wheel using poster paint, crayon or coloured paper.
- 2 Paint a value scale from light to dark, using your favourite colour .
- 3 Paint Tints and Shades of a colour wheel on separate drawing sheets.
- 4 Make a chart of various rooms of home ,. Describe colour shemes you have in your rooms, and make a plan for each room if you have to redecorate it using colour harmonies.

### **V Lighting :-**

- 1 Select a picture from magazine, observe it and give heading of lighting to it.
- 2 Cut a picture of well lighted room and describe in detail the effect of lighting on decoration.

### **VI Floor Coverings. :-**

- 1 Stick two pictures of well decorated floor of any interior . Describe its type and good and bad points.

### **VII Furniture :-**

- 1 Draw one easy chair, one sofa, one center table , wall unit and room divider.  
( Chart of clippings or tracings )
- 2 Stick two pictures of well furnished rooms.,
  - (i) Describe its placement and compare with art principles which you have learnt.

- (ii) Describe Good and bad points of construction of furniture.
- 3 Layout of furniture drawings and furniture arrangements in various room of your house. Improve and rearrange it according to art principles.

#### **VIII. Walls and Windows. :-**

- 1 Stick two pictures of well decorated walls and windows. describe its type and good and bad points.
- 2 Make Fabric chart for Furnishings and draperies give them good and bad points with their prices.
- 3 Make a small sample of slip cover for a sofa or a side chair  
or
- 4 Make a samples of sofa backs with Fabric painting or Embroidery techniques.

#### **References :-**

- 1 Halse, Albert O  
- The use of colour in interiors.
- 2 Anna Hong Rutt  
- Home Furnishing.
3. Falukner & Falukner  
- Inside Today Home.
- 4 Goldstein and Goldstein  
- Art in everyday Life.
- 5 Faulkner R., Ziogefeld S., and Hill.  
- Art Today.
- 6 Kaufmann, Edgar J.  
- what is Modern Interior Design ?
- 7 Seiberling, Frank  
- Looking in to Art.
- 8 Ford & Ford  
- Design of Modern Interiors.
- 9 A colour Notation ,  
- Albert Munsell H.

#### **Magazines :-**

- 1 Inside Outside.
- 2 Interiors.

## **Marking Scheme for Practical**

- |   |  |         |
|---|--|---------|
| 1 | Journal  | 05 mark |
| 2 | Good Taste / Design / elements of art/ Art principles    | 05 mark |
| 3 | Colour and colour schemes                                | 05 mark |
| 4 | Lighting / floor covering / Furniture. wall and windows. | 05 mark |
| 5 | Sofa back / Slip cover.                                  | 05 mark |

**VEER NARMAD SOUTH GUJARAT UNIVERSITY**

**M. A. - II**

**Home Science Paper – VIII**

**Applied & Community Nutrition**

(Effect From June –July 2003)

Theory- 4 periods / week  
20 Practical –2 period /week

External Theory 45 Internal  
External Practical 25 Internal 10

**Objectives :-**

- (1) To Sensitive Student to the concept & community nutrition as a course with an applied interdisciplinary orientation and to the relevance & community nutrition to developing countries & especially India.
- (2) To orient students to the basic principles & nutritional anthropology and assessment as applied to the study & community nutrition .
- (3) To impart – knowledge & develop skills in students regarding qualitative & qualitative field methods to assessment & nutrition status & conducting diet survey

**Unit – 1**

- (a) Definition of the community
- (b) Characteristics of the community.
- (c) Vital statistics morbidity & Mortality patterns.

**Unit - II**

Socio cultural Determinants affecting food choice & Nutritional status .

- (a) Sensory characteristics affecting food selection.
- (b) Cultural classification of food hot – cold foods : age & gender based factors
- (c) Health and Lillners belief effecting food chice.
- (d) cultural interpretation & malnutrition .
- (e) Implications of the above determinates for implementing nutrition Programmes.

**Unit – III**

Direct parameters for Assessing Nutritional status.

- (1) Introduction to nutritional status arssessment : Objective & techniques
- (2) Anthropometry.
- (3) Doet survey .

- (4) Clinical assessment
- (5) Biochemical assessment
- (6) Immunological parameter .

#### **Unit - IV**

Indirect parameters for Assessing Nutrition status .

- (1) Assessing socio economic status of the community.
- (2) Qualitative assessment of perceptions & behaviour & specific groups in community influencing nutrition status.
- (3) Measurement of morbidity & mortality ratios IMR MMRTMR.
- (4) Collection analysis & use & assessment data i.e. objectives, sampling method & analytical procedures.

#### **Unit – V**

- (1) Meaning of Nutritional health education .
- (2) Objectives & Principles of health education .
- (3) Approach to public health educational proulice of health education.
- (4) Communication in health education policy of health education.
- (5) National health policy
- (6) Health planning in India.
- (7) Integrated rural development programme (IRDP) – Primary Health case .Health agencies in India & world health organization .

#### **Unit – VI**

Importante Nutritional deficiency disorders in India Epidomology , Funtional effects , prevention & control.

- (1) Protein energy malnutrition .
- (2) Iron deficiency anemia.
- (3) Vitamin A deficiency .
- (4) Iodine deficiency.
- (5) Vitamin B1 & Niacin
- (6) Vitamin C .
- (7) Calcium & Phosphorous
- (8) Other deficiencies Flourine & Zinc .
- (9) Gender difference in prevation & etiilaogy & nutritional disordes .
- (10) Urban & Rural differences .

#### **Unit - VII**

(A) National Nutritional Programmes.

- (1) ICDS
- (2) MDM programme
- (3) NNAPP & VAPP
- (4) Goitre control
- (5) ANP (Applied Nutrition programme )
- (6) SNP ( Supplementary Nutrition programme)

- (B) National agencies
  - (1) NIN
  - (2) VHAI
  - (3) CFTRI
  - (4) FAD
- (C) International agencies
  - (1) UNICEF
  - (2) UNDP
  - (3) UN
  - (4) ILO
  - (5) World Bank
  - (6) USAID
  - (7) UNESCO
- (D) Non Government & Other agencies
  - (1) CARE
  - (2) Red cross
  - (3) Ford foundation
  - (4) Roche filler foundation

**Unit - VIII.**

- (1) Nutrition related health problems of pregnant women.
- (2) Identifying problems in the community .
- (3) Physiological change ,in pregnancy.
- (4) Nutritional needs of pregnancy women.
- (5) Weight gain during pregnancy.
- (6) Risk factors during pregnancy
- (7) Nutritional counseling for pregnant women.
- (8) Nutrition women Guide line for lactating women.

**Unit - IX**

- (1) Nutritional Guide line for Intants & Children.
- (2) Nutrition related health problems in the community.

**Unit – X**

Nutrition programme management

- (1) Definition objectives & components
  - (i) Planing
  - (ii) Implementation
  - (iii) Evalnaies
- (2) Community participaties concepts & approaches.
- (3) An inter disiplinary prospective to nutrition programme management.

## **References :-**

- (1) Food & Nutrition 1992  
National plan Action on Nutrition New Delhi.  
Department of women & child development , Ministry of Human Resource development Government of India.
- (2) Gibbson RS (1992)  
Principles of Nutrition Assessment New York Oxford University press.
- (3) Gapalari (1992)  
Nutrition in development in south Asia. New Delhi ; regional office for south Asia Regional paper No 21.
- (4) Nutrition in the community  
Queen & frandle , times mirror/ mostly college publishing.
- (5) Test book of Preventive & social medicine.  
J.E. Park & parbb. Banardidan Barrot Jabalपुरa 1989.
- (6) Nutrition & the community  
Mclarnm S, John wiley & Sons 1984.
- (7) Nutrition Society of India Proceedings 1970 & 1984.
- (8) Gopalan & Seshadri S.  
" Natrition Monitoring & Assessment"
- (9) King M. King A Morles D  
Nutrition for Developing countries Oxford University .press.
- (10) Periodical.  
Health for millions by VHAI New Delhi.

## **Practicals**

- (1) Conducting dietary survey , food habit survey in any community.
- (2) Practical will be in the form of field experience in the community.  
Group of students will go in the Voluntary or government sector and they will plan a small project implement and evaluate project than write a project – report .
- (3) Anthropometrics Survey  
Technique of measurements Height, weight , etc.
- (4) Planning low cost nutrition recipes -  
Demonstration in the community or Non government Organization.
- (5) Preparation and use of visual aids for Health & Nutrition education .

<b>Marking Schemes For Practical Examination Mark.</b>	<b>25</b>
1 Prepare a Question for conducting a dietary Survey.	05
2 Plan and prepare low cost nutrition recipes – write a proper Plan for demonstration .	05
3 Prepare a visual aid for health and nutrition & education	05
4 Journal & report	05
5 Visual aids	05