BHARATHIDASAN UNIVERSITY, TIRUCHIRAPPALLI – 620 024.

B.Sc. Home Science – Course Structure under CBCS

(For the candidates admitted from the academic year 2010-2011 onwards)

Semester	Part	Course	Title	Instr Hours/ Week	Credit	Exam Hours	Marks		Total
							Int.	Extn.	
I	I	Language Course – I (LC) – Tamil*/Other Languages ** #		6	3	3	25	75	100
	II	English Language Course - I (ELC)		6	3	3	25	75	100
	III	Core Course – I (CC)	Food Science - Theory	6	5	3	25	75	100
		Core Course – II (CC)	Food Science - Practical	4	3	3	40	60	100
		First Allied Course –I (AC)	Chemistry I- Theory	5	3	3	25	75	100
		First Allied Course – II (AC)	Chemistry - Practical	3	-	***	-	-	-
				30	17				500
II	I	Language Course – II (LC) - Tamil*/Other Languages ** #		6	3	3	25	75	100
	II	English Language Course – II (ELC)		6	3	3	25	75	100
	III	Core Course – III (CC)	Microbiology - Theory	6	5	3	25	75	100
		First Allied Course – II (AC)	Chemistry - Practical	3	3	3	40	60	100
		First Allied Course – III (AC)	Chemistry II - Theory	5	4	3	25	75	100
	IV	Environmental Studies		2	2	3	25	75	100
	IV	Value Education		2	2	3	25	75	100
				30	22				700
III	I	Language Course – III (LC) – Tamil*/Other Languages ** #		6	3	3	25	75	100
	II	English Language Course - III (ELC)		6	3	3	25	75	100
	III	Core Course – IV (CC)	Physiology	6	5	3	25	75	100
		Second Allied Course – I (AC)	Computer Science I	**6**	3	3	25	75	100
		Second Allied Course– II (AC)	Computer Science Practical	**4**	-	***	-	-	-
	IV	Non Major Elective I - for those who studied Tamil under Part I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	Basic Nutrition	2	2	3	25	75	100
				30	16				500
IV	I	Language Course –IV (LC) - Tamil*/Other Languages ** #		6	3	3	25	75	100
	II	English Language Course – IV (ELC)		6	3	3	25	75	100
	III	Core Course – V (CC)	Housing and Interior Decoration - Theory	4	4	3	25	75	100

		Core Course – VI (CC)	Housing and Interior Decoration - Practical	4	4	3	40	60	100
		Second Allied Course - II	Computer Science Practical	2	3	3	40	60	100
		Second Allied Course – III	Computer Science II - Theory	4	4	3	25	75	100
	IV	Non Major Elective II - for those who studied Tamil under Part I I a) Basic Tamil for other language students b) Special Tamil for those who studied Tamil upto +2 but opt for other languages in degree programme	Nutrition Through Life Cycle	2	2	3	25	75	100
		Skill Based Elective I		2	**4**	3	25	75	100
				30	**27**				800
V	III	Core Course – VII (CC)	Textiles and Clothing - Theory	5	5	3	25	75	100
		Core Course – VIII (CC)	Fashion Designing - Theory	5	5	3	25	75	100
		Core Course – IX (CC)	Textiles and Clothing & Fashion Designing Practical	5	4	3	40	60	100
		Core Course – X (CC)	Clinical Nutrition	6	5	3	25	75	100
		Major based Elective – I	Human Development	5	5	3	25	75	100
	IV	Skill based Elective –II		2	**4**	3	25	75	100
		Skill based Elective – III		2	**4**	3	25	75	100
				30	**32**				700
VI	III	Core Course – XI (CC)	Normal and Theradeutic Nutrition	**6**	5	3	25	75	100
		Core Course – XII (CC)	Nutrition in Health and Diseases - Practicals	**6**	5	3	40	60	100
		Core Course – XIII (CC)	Family Resource Management	6	5	3	25	75	100
		Major based Elective II	Family Relationships	**6**	5	3	25	75	100
		Major based Elective III	Extension Education	**5**	4	3	25	75	100
	IV	Extension activities		-	1	-	-	-	-
		Gender Studies		1	1	3	25	75	100
				30	26				600
			Total	180	140				3800

Note:

	Internal Marks	**External Marks**
1. Theory	25	75
2. Practical	40	60

3. Separate passing minimum is prescribed for Internal and External marks

The passing minimum for CIA shall be 40% out of 25 marks [i.e. 10 marks]

The passing minimum for University Examinations shall be 40% out of 75 marks [i.e. 30 marks]

* for those who studied Tamil upto +2 (Regular Stream)

** Syllabus for other Languages should be on par with Tamil at Degree level

those who studied Tamil upto 10th or +2, but opt for other languages in degree level under Part I should study special Tamil in Part IV

*** Examination at the end of the next semester.

Extension activities shall be out side the instruction hours.

கற்பிக்கும் கால அளவு

மோழிப் பாடங்கள் - 1 மதிப்பீடு = 2 மணிநேரம் கற்பித்தல் வகுப்பு

கலை மற்றும் அறிவியல் பாடங்கள் :1 மதிப்பீடு = 1 மணிநேரம் கற்பித்தல் வகுப்பு
[Lecture]

= 2 மணிநேரம் பயிற்சி வகுப்பு
[Tutorial]

= 2-3 மணிநேரம் செய்முறை வகுப்பு
[Practical]

****

CORE COURSE – I (CC) – FOOD SCIENCE

UNIT – I: Food groups and cooking methods.

UNIT – II: a. Cereals – Composition, Nutritive value of Rice, Wheat and Locally available millets, Milling and Par-boiling, Enrichment and Fortiffication.

b. Pulses and Nuts – Composition and Nutritive value and germination of wholegrams.

UNIT – III. a. Vegetables – Composition and Nutritive value.
b. Fruits – Composition and Nutritive value.

UNIT – IV. a. Milk and Milk products – Composition and Nutritive value, Contribution, different types of milk Products and uses in cookey.

b. Fleshy Food – Composition, Nutritive value of Meat, Fish, Poultry, Selection, Storage, effects of cooking On colour, texture and flavour.

c. Egg – Structure, Composition, Nutritive value and selection.

UNIT – V. a. Beverages – Classification, Nutritive value and role in the diet.
b. Fats and Oils – Composition, Nutritive value of common fats and oils, smoking Temperature.
c. Spices and condiments – Different types and uses in Indian Cookery.

REFERENCES:

1.M.Swaminathan, Food science, Chemistry and Experimental Foods, the Bangalore printing and publishing company Ltd.,

2.M.Swaminathan, Hand book of food science and Experimental Foods, the Bangalore printing and publishing company Ltd.,

3.W.C.Frazier / D.C. Westhoff, Food Microbiology, Tata McGraw-Hill Publishing Company Limited, New Delhi.

4.M.Swaminathan, Essentials of Food and Nutrition Vol. I & II, Ganesh and Company, Madras.

5. Srilakshmi. B (1999), Food Science, New Age International Pvt. Ltd. Publishers, Chennai

****

CORE COURSE - II (CC) – FOOD SCIENCE PRACTICALS

FOOD SCIENCE PRACTICALS:

Preparations and evaluations of

(a) Cereals and Cereal products. – Preparation of rice by steaming, absorption, Straining, Hay box and pressure cooking, Batters & doughs, Chapatuies

(b) Pulses, grams and Nuts. – grams & Dhals – Soaked and unsoaked cooking in hard and soft water and with baking soda and vinegar
Preparation of Sundal, Sprouted green gram pachidi, Sambar, dhal masal and Kootu.

(c) Fruits and Vegetables. – Selecting, cleaning, cooking and Serving vegetables and fruits for various preparations
Vegetables – effects of cutting, terep: Cooking time, acid, alkali on colour, texture and flavour of vegetables.
Preparation of pugatu, curry, porriyal and salad
Fruits – Methods of preservations of colour, texture and flavour

(d) Milk and eggs. – coagulation of milk proteins, Preparation of pudding, payasam, thair vadai, cheeps curry, ice cream
Eggs.: Cooking eggs in the shell – poaching, custard observation of coagulation, preparation of Egg masala, poached egg, omelete, scrambled egg, fried egg, custard

(e) Beverages. – Preparation of Coffee, tea, cocoa and other milk hared beverages, panagam, ginger drink, fruit juices & fruit punch

Application of the principles of cookery – the experimental study of foods- use fo score cards for evaluation of cooked products

****

CORE COURSE – III - (CC) MICROBIOLOGY

OBJECTIVES:

To enable students

a. understand the role of microorganisms in health and disease.
b. Microorganisms in relation to food spoilage, food borne diseases and food preservation.

UNIT – I.

a. Bacteria: General characteristics of Bacteria. Bacterial Morphology, Cell structure. Motility, Nutrition, Reproduction and respiration. Bacterial diseases-air, Water and Food-borne-diseases.

b. Viruses: General characteristics of viruses. Viral diseases – symptoms. Characteristics and Control of viral diseases – (Chickenpox, Dengue, Aids Measles, Poliomyelitis, Influenza, Commoncold)

c. Yeasts: General characteristics of Yeast. Economic importance of yeasts.

UNIT – II.

a. Molds: General characteristics of moulds. Economic Importance of moulds.

b. Protozoa: General characteristics of protoza, Morphology and life history of entamoeba histolytica, plasmodium, protozoal diseases-Dysentery, Malaria.

c. Soil Microbiology: Role of Microorganisms in Nitrogen cycle.

UNIT – III.

a. Microorganisms in water: Bacteriological examination of water, Test for E.coli, Water borne diseases qnd their control.

b. Microorganisms in air : Droplet infection and air borne disease and their control.

c. Microorganisms in Milk: Spoilage of Milk, Prevention and control of spoilage. Pasteurisation – Methods, Principles and advantages.

UNIT – IV.

a. Micro-organisms in food: Microbial food spoilage, food-borne-Diseases – food poisoning and food infection and their control, food preservation.

b. Micro-organisms in Sewage: Microbial role in sewage. Biological treatment of sewage – Principles and methods.

c. Hygiene education : Meaning, need, content-personal hygiene and environmental hygiene.

UNIT – V.

a. Sterilization and disinfection - Principles and methods of Sterilization, Physical and chemical disinfectants – advantages.

b. Immunity: Immunization programme , its relevance to communicable diseases.

c. Infection, resistance in immunity, phagocytosis, antigen and antibody reaction.

PRACTICALS:

1. Examination of yeast, mold, protozon, and pathogenic bacteria.

2. Examination of unstained organisms – Hanging drop preparation method.

3. Examination of stained organisms – simple – staining and grams method of staining.

4. Study of sterilizing equipments.

RELATED EXPERIENCE:

Visit to: Water Works, Dairy Farm, Sewage Farm, Public Health Laboratories.

REFERENCE BOOKS:

1. Joshus, A.K. 1972	Microbiology Published by the Author First Edition.
2. Frazier. W.C.1972	Food Microbiology Tata-Mc. Graw – Hill Book Company, New Delhi.
3. Pelzar and Reid 1965	Microbiology Mc. Graw Hill Book Company, London.
4. Philip L. Carpenter 1961	Microbiology, W.D.Sunders Company, Philadelphia and London.
5. A.J.Salle. 1961	Principles of Bacteriology Mc.Graw Hill Book Company,
6. Kenneth, L.Burdon 1958	Microbiology, The Mac Millan Co., New York.

****

CORE COURSE – IV - (CC) - PHYSOLOGY

OBJECTIVES:

To enable students:

1. Understand the structure and physiology of various organs of the body.
2. Obtain a better understanding of nutrition and Dietetics through the study of Physiology.

THEORY:

UNIT - I

1.Blood – Composition.

RBC- Structure, functions, erythropoiesis, Haemoglobin.
WBC- Classification, functions.

2.Heart and Circulation.

Heart – Anatomy and Physiology.

Blood vessels – structure of artery, vein, capillaries, cardiac output. Arterial Blood Pressure – clinical measurement of B.P., Variation, temporary and permanent factors Responsible for maintenance of normal B.P.

Origin and conduction of heart beat.
Cardiac Cycle.

UNIT - II

3.Respiratory System:

Structure of respiratory organs.
Mechanism of respiration.
Chemistry of respiration.

4.Excretory system:

Physiology of kidney- nephron, formation of urine, voiding of urine. Skin-structure and functions, Regulation of body temperature.

UNIT - III

5.Digestive System:

General anatomy of the digestive system. Digestion in the mouth, Stomach and intestine, Movements of small intestine, Liver-structure and functions.

6.Endocrinology:

Structure and functions of thyroid, pituitary, parathyroid, adrenals islets of langerhans of pancreas, sex glands.

UNIT - IV

7. Reproductive System:

- General anatomy – female and male reproductive system. Spermatogenesis, Oogenesis.
- Menstrual Cycle - phases and endocrine control.
- Fertilisation, development of embryo, pregnancy, parturition.
- Mammary glands – Structure, physiclogy of lactation.
- Family planning methods (only the physiological aspects)

8.Special Senses:

Physiology of vision, structure of Eye, Dark and Light adaptation, accommodation of the Eye, visual fields, common defects due to abnormalities, presbyopia, cataract, astigmatism.

UNIT - V

9. Nervous Systems:

a. Spinal cord – Structure and functions, ascending and decending tracts.
b. Brain – Structure and functions of cerebrum, cerebellum.
c. Autonomic Nervous system – Sympathetic and parasympathetic divisions.

PRACTICALS:

1. Histology of tissues.
2. Estimation of Hemoglobin, RBC, WBC count, Demonstration.
3. Identification of different types of WBC of WBC-Demonstration.
4. Determination of blood groups.
5. Arterial blood presaure and pulse-rate effect of exercise – Demonstration.
6. Histology of Artery, Vein, trachea, Lungs, Ovary, Testis, Skin, Kidney, digestive system.

Related Experience :

1. Visit to Blood Banks.
2. Discussion of blood donation.
3. Interpreting the results of blood tests with reference to WBC, RBC, ESR.
4. Visit to Family Planning Clinics.
5. Measurements of blood pressure and interpretation of the results.

REFERENCE:

1.Charles, Herbert, Best and Norman Burke Taylor, 1975 - The living Body, A test in Human Physiology, Asia Publishing House, Bombay.

2.Wright – Samson, 1971 - Applied Physiology, Oxford University press, Madras.

3.Thrence, A.Rogers, 1961 - Elementary to Human Physiology. A text book of under graduate. Johnwiley Sons, New

4.Sharada Subramaniam and Madhavan Kutty, 1971 - Text book of Human Physiology, Orient Longman, New Delhi.

NON MAJOR ELECTIVE – I – BASIC NUTRITION

Objectives:

1. Understanding the meaning of Nutrition
2. Understanding the role of nutrients in human life
3. Increasing the ability to overcome deficiency disorders

Unit I
Introduction to nutrition – Definition, RDA, factors affecting RDA, Basic five food groups

Unit II

a) carbohydrates – classification, functions, sources digestion & absorption, deficiency diseases
b) Energy – units, energy yielding food factors

Unit III
Protein – Classification, function, digestion & absorption, sources and deficiency disorders

Unit IV
Lipids – classification, function, digestion and absorption, sources excess and deficiency disorders]

Unit V

a) Vitamins – Fal soluble vitamins A, D, E & K function, sources, requirements & deficiency diseases
b) Water soluble Vitamins: B complex – Thianine, Riboflavin, Niacin, folic acid & vit B12 and Vitamin C – Function, sources, requirements & deficiency diseases
c) Minerals: Calcium, phosphorus, sodium, potassium, Iodine, Iron – Function, sources, Requirements & deficiency diseases

References:

1. Srilakshmi. B. (2008), Nutrition science III edition, New Age International publishers, New Delhi
2. Chintapalli Vidya (2004): A text book of Nutrition, New Delhi: Discovery publishing house
3. Gopalan C. Ramasastry B.V. Nutritive value & Indian foods, Hyderabad NIN
4. Swaminathan. M. Essentials of Food and Nutrition
5. Begum. R. (1999), Text book of Food Science, Nutrition and Dietetics

****

CORE COURSE – V (CC) – HOUSING AND INTERIOR DECORATION

OBJECTIVES:

1.To help students (1) to select comfortable and convenient house for a family.
2.To understand and apply the principles of art in home and living environment.

UNIT – I

(a) House- functions, factors influencing selection of a house – sits, cost, adequacy ocal bylaws, ownership and renting.
(b) Features to be considered in house construction – orientation grouping, roominess, lighting, ventilation, circulation, storage facilities, privacy, flexibility, safety, economy and safety, economy and sanitation.
(c) Organisations assisting housing development – HUDCO, NBO and LIC.

UNIT – II

Applied Arts
(a) Art in everyday life.
(b) Elements of design – line and direction, size and shape, colour and texture.
(c) Design – types, structural and decorative characteristics of a good functional design.
(d) Colour – Prosperties – hye value and intensity, colour harmonies.

UNIT – III

Flower arrangement – type of arrangement, selection of vases, flowers and accessories for flower arrangement. Display of flower arrangement.

UNIT – IV

Home furnishing.

Selection, arrangement and care of furniture in different room selection, use and care of furnishing material – draperies and curtains, floor coverings, accessories in the house – types, selection and use.

UNIT – V

Landscape gardening.

Type of gardens, elements of gardening.

REFERENCES:

1. Deshpande, R.S.Build your own home. Poona United Book corporation, 1985.
2. Deshpands, R.s Cheap and Healthy homes for middle classes.
3. Goldstein, H and Goldstein, V.Art in everyday Life, New York Macmillan Company, 1958.
4. Gross, I.H and Grandall, E.N. and Knoll M.M.Management in modern familes, Sterling, Publishers, New Delhi, 1980.
5. Man Home Management for Indian families, Kalyani Publishers, New Delhi, 1976.

CORE COURSE - VI (CC) – HOUSING AND INTERIOR DECORATION PRACTICALS

(a) Evaluation of objects for good and bad design and other accessories
(b) Applications of art principles in room arrangement.
(c) Trying out various colour hormonies in designs (painting) Rangoli and costumes.
(d) Display of various types of flower arrangement.
(e) Understanding the principles of design with simple displays and arrangements including table laying.
(f) Reading of house plans for different income groups.
(g) Evaluations of a house design.
(h) Cottage Stay
(i) Drawing house plans (floor plans), indicating furniture arrangement in different rooms by means of paper cut outs

****

NON MAJOR ELECTIVE II – NUTRITION THROUGH LIFE CYCLE

Objectives:

1. Understand the role of Nutrition in different stages of life cycle
2. Gain experience in planning menu for different stages

Unit I

Principles of Meal planning and recommended Dietary allowances – Nutrition in pregnancy – Menu planning and diet in pregnancy for low, middles and high income groups

Unit II

Nutrition in Lactation: Menu planning and diet for Nursing mother of low, middle and high income groups
Nutrition in Infancy: Nutritional requirement of the infant, composition of Breast milk of cows milk, Advantages of Breast milk

Unit III

Nutrition in pre School age: Food habits and diet for the pre school children and importance of supplementary foods
Nutrition during School Age: Food habits and diet for the school child

Unit IV:

Nutrition In Adolescence: Physical and Physiological changes, dietary pattern and Nutritional allowance, for the adolescent and Dietary problems

Unit V

Nutrition for the Adult: Food and nutritional allowances for the adult. Nutrition for the Aged: Socio economic and psychological factors influencing the diet of an old person

Reference Books:

1. Srilakshmi B. M.Sc. M.Ed. M.Phil. (2004) Dietetics, New age international Publishers New Delhi
2. Gopalan. C. & Ramasastri B.V. (1998) – The Nutritive value of Indian Foods, ICMR, New Delhi
3. Dr. Swaminathan M.: Hand book of Food and Nutrition the Bangalore printing and Publishing company Ltd. Bangalore
4. Guthrie H.A. Introductory Nutrition, Times Mirror, Moshy College Publication 1989, Whitney E. N. Hamilton M.N. & Rofles S.R. understanding Nutrition 5th edition, West pub. Co. New York 1990
5. Andeson L. Nutrition in Health and Diseases 17th edition. JB LIpion Cott Co. Philadelphia, 1982

****

CORE COURSE VII (CC)- TEXTILES AND CLOTHING.

OBJECTIVES:

To enable the students.

1. Understand Textiles on related to selection and use.
2. Understand Textiles as related to recent trends in consumer goods.
3. To gain knowledge on various Textiles.

THEORY:

UNIT – 1: Classification of fibres Natural and synthetic, cellulose protein, mineral and thermo under each group-Manufacture, processing, properties, and care. Blends and mixtures.

UNIT – 2 : (a) Yarn constructing – Process of spinning, Classification of yarns, simple and complex yarns, crope yarns and crops fabrics.

(b) Fabric constructions – Weaving, Knitting, felting and branding Basic weaves – Plain, Twill, satin and their variations, figure weaves.

UNIT – 3: (a) Fabric finishes – Mechanical and chemical finishes Texturing, Flocking, Crepe finishes, and special purpose finishes.

(b) Colour in fabrics – Dyeing-Classification of dyes – Natural and synthetic Dyes- Method of dyeing.

(c) Design in fabrics – Printing – Hand printing and machine printing.

UNIT – 4: Family Clothing

(a) Selection of fabrics. Factors affecting family clothing budget.
(b) Factors affecting selection of clothing
(c) Planning a wardrope for a family.
(d) Family clothing for infant school going, Adolescents, Adults and oldage, based on the budget, personality factors and the quality of fabrics.
(e) Clothing for different occasion.

UNIT – 5 : Care of clothes

(a) Study of water, soaps, blue, starches, bleaches soapless detergents.
(b) Washing of different fabrics stain removal and dry cleaning.
(c) Laundry equipment, Ironing and dryers.
(d) Storage.

REFERENCES:

1. Clothing for Moderns : Erwin M.D., The Macmillan Co. Ltd., London 1964.
2. Practical Dress Design: Erwin M.D., The Macmillan Co. Ltd., New York 1954.
3. Modern Textiles : Lyle Dorothy, John-Wiley & Sons, Inc.1968.
4. Manmade Fibres: Non-Criff, R.L. Heywod books London 1970.
5. Introduction to Textiles: Stoint,
6. Norma Holton & Jane, Ladder Textiles. The Macmillan Company, New York 1970.
7. Wiggate Isbel: Textile fabrics and their selection prentice Hall. Inc. New York 1970.
8. Dantyage sush-ella-fundamentals of Textiles and their care.

CORE COURSE – VIII (CC) – FASHION DESIGNING

1. To enable the students
   Study clothing as related to health comfort and economy.
2. Understand cloth as related to personality.
3. Gark aesthetic values for personal and family development.

UNIT – 1: (a) Importance of clothing construction – economy comfort and beauty.

(b) Use and care of sewing machines.

UNIT – 2: (a) Basic construction techniques – Basic stitches temporary and permanent stitches – Decorative stitches. Seams and Seamfinishes, plackets, fasteners, fullness finishing necklines-Mending-darning and patching.

(b) Body measurements – Taking body measurements for various age groups Knowledge of standard measurements for children, women and Men's garments.

UNIT – 3: (a) Fitting – Basic principles for fitting - Causes for poor fit, Hints on solving fitting problems.

(b) Study on patterns – Different methods of preparing patterns, Drafting method, Flat pattern designing and dress form.

UNIT – 4: (a) Pattern alterations Alterations 'n' the basic block Licence block, and skill block for good fit and comfort.

(b) Introducing fullness in various garments. Method and types of fullness.

UNIT – 5: (a) A study of various types of collars and pockets.

(b) Method of construction of different types of skirts and sleeves.

(c) Fashion – Definition, sources of fashion, current fashions and fashion trends for various age groups.

(d)Study on trimming and decorations – Methods of making the trimmings. Type of trimmings and application in various dresses.

REFERENCE:

1. Hepmarth M, 1960 — Dress Designing the English Universities Press Ltd., London
2. Mary Mathews, 1974 — Practical Clothing construction Thompson Press, Madras.
3. Drwin M.D., 1969 & Kunchem L.A. — Clothing for Moderns.
4. Lewis Dorras Bowers Mabel to Marieta Kettunan 1957 — Clothing construction and mardrophe planning The Macmillan co., Newyork.
5. Virginia stlpe lewis 1984 — Comparative clothing construction Techniques Surjeeth Publications, Y.K.Kolhapur Road,

Kamala Nagar, New Delhi.

6. Mary Jo Kallal 1985 — Clothing construction Mac millan publishing Company, New York.

7. Geni Stephens Frings 1982 — Fashion from concept to consumer prentice Hall Inc. Englewood cliffs. New Jersoy.

****

CORE COURSE–IX (CC)
TEXTILES AND FASHION DESIGNING PRACTICALS

TEXTILES PRACTICALS

(a) Basic constructions Techniques – stitches – seams plackets, Fullness, Fastness and mending.

(b) Fibre Identification.

(c) Understanding fabric labels.

FASHION DESIGNING PRACTICALS:

(a) Basic construction techniques - stitches – Temporary, permanent and decorative stitches fullness, Necklines and Mending.

(b) Construction of skirt, House coat, frock, Bell pant and Blouse and Chudithar

(c) Visit to textile mills, processing units and garment factories

****

CORE COURSE – X (CC) – CLINICAL NUTRITION

OBJECTIVES:
To enable students

1.Understand the principles and application of nutrition
2.Become aware of the nutritional problems existing in the rural and Urban communities and measures taken to alleviate them.
3.Know the methods of assessing nutritional status of communities and suggesting appropriate measures for solving the problems.

UNIT – 1: (a) Definition of nutrition, over nutrition, undernutrition and malnutrition. Signs of good and poor nutrition – Relation of good nutrition to health.

(b) Energy – Definition of calorie and Joule. Energy value of foods – Bomb calorimeter. Direct and indirect calorimeter. Basal metabolism, definition, methods of determining basal metabolism rate (BMR), factors influencing BMR calculation of total energy requirement. Factors affecting total energy requirements, food sources.

(c) Carbohydrates – classification, functions, source and requirements. Digestion and metabolism.

UNIT – 2: (a) Proteins – Classification, properties, functions, sources and requirement. Digestion, absorption and metabolism. Essential amino acids. Measurement of protein quality – Biological value (BV), Protein Efficiency Ratio (PER) Nitrogen Balance, Net Protein Utilization (NPU).

(b) Lipids – classification, chemistry, properties, poly unsaturated fathy acids and saturated fatty acids, functions, sources and requirements. Essential fatty acids, effects of deficiency.

UNIT – 3: (a) Vitamins – Definition, Classification – Fat soluble Vitamins – ADK and E.. Water soluble vitamins – As corbic acid, thiamine, Riboflanin, Niacin and other other B Complex vitamins – Pyridoxin, Cyanocobalamin (B12) folic acid, pantothenic acid and biotin – History, functions, effects Of deficiency, food sources and requirements.

(b) Minerals – Macro and micro minerals, Calcim, Phosphorus and iron. Sodium, potassium, magnesium, Copper, Iodine Chromium – Distribution In the body, functions, absorption and utilization, food sources, requirement, effects of deficiency and Zinc, Cobalt, Chloride, Fluorine.

UNIT – 4 : (a) Role of dietary fibre in health and disease.
(b) Water – Distribution, functions, sources, daily loss, requirements.

UNIT – 5: (a) Assessing the food and nutritional problems in the community methods available for the assessment of the nutritional status of an individual and the community. Assessment methods – clinically signs – nutritional anthropometry - Biochemical tests – Diet surveys.

(b) Measures to overcome malnutrition. Role of nutrition education and Nutrition intervention programmes. Role of ICMR, ICAR, CFTRI, ICDS, Nutritious Noon Meal Programme, Constribution of international Crganisations – WHO, UNICEF, FAO.

REFERENCES:

1. Antra, F.P. Clinical nutrition and Dietetics, Oxford University Press, New York (1988).
2. Davidson, S. Passmore, R.Brock, J.F. and Truswell, A.S.Human Nutrition and Dietetics (1984) the English language Book society.
3. Robinson, C.H.Normal and Therapeutic Nutrition. The Mac Millan Company, New York (1988).
4. Swamin athan, M.Essentials of Nutrition vol. I and II the Ganesh and Co., Madras (1974).
5. Gopalan.C. Ramasastri, B.V. and Balasubramanian, S.C.(1989) Nutritive value of Indian Foods, NIN, Hyderabad.
6. Gopalan, C. and Vijay araghavan, K.Nutrition Atlas of India, ICMR, New Delhi (1971).
7. Gopalan, C. Balasubramaniam, S.C. and Visveswara Rao, Diet Atlas of India, ICMR, New Delhi (1971).

JOURNALS:

1. Nutrition NIN, ICMR, Hydra bad.
2. The Indian Journal of Nutrition and Dietetics Avinashilingam Institute of Home Science and Higher Education for women, Coimbatore – 43.
3. NIN News letter.

****

MAJOR BASED ELECTIVE I – HUMAN DEVELOPMENT

Objectives:

To develop in students

1. An understanding of the Physical, Psychological and Social development of the individual from infancy to adulthood so that they can be guided effectively
2. Skills in achieving positive human relationships
3. A positive attitude towards understanding and applying scientific aspects behind human development

Theory:

UNIT – 1: (a) How life begins – Conception, stages of pregnancy, prental developmental care of the expectant women, Discomforts during their implications.

(b) Growth and development of Children – Principles of development. Factors that influence development.

UNIT – 2: (a) Infancy – Physical, motor, social and emotional development. Vocalisation activities. Care of infrant, immunization.

(b) Early Childhood – Physical, motor intellectual, social and emotional development.

(c) Late childhood – Physical, Motor, intellectual, social and emotional development. Minor ailments.

UNIT-3: Adolescence-Physical, emotional, social and intellectual development – Problems of adolescence.

UNIT – 4: (a) Play-Definition, types, theories and values.

(b) Learning-Definition, Types-trial and error, insight, conditions, imitation. Factors affecting learning. Matutation and learning.

(c) Discipline-Meaning, Disciplinary techniques, guidelines for inculcating Discipline in children.

UNIT – 5: (a) Methods of child study-case study, observation, experimental methods, Projective techniques, and clinical approach.

(b) Behavior problems-meaning, causes and prevention-Hurts other children, Destroy things, uses languages, thumb sucking, bedwetting, masturbation, refusal to eat, lying and stealing.

(c) Exceptional children – Physical and mental handicaps. Crippled, mental retardation, gifted children.

PRACTICALS:

1. Preparation of Resource album.
2. Collecting suitable stories and Rhymes for children.
3. Developing creative activities for preschool children
4. Preparation of soft toys and low cost equipment.

REFERENCES:

1. Hurlock, E.B, Child Development Mc Graw Hill, New York 1988.
2. Hurlock E.B. (1989) Developmental Psychology, A life span approach, New Delhi: Tata Mc Graw Hill Publishing Company
3. Devadas, R.P. and Jaya. N. Text Book of child development Mc Mullan and Co., 1981.
4. Harris J.R. & Liebut, R.M. (1987), the Child, New Jessey: Prentice Hall
5. Jaya N. (2003), Low cost play equipment for children, Saradalaya press, Sri Avinashilingam education Trust, Coimbatore

****

CORE COURSE – XI (CC)
NORMAL AND THERAPEUTIC NUTRITION

OBJECTIVES:

To enable students.

8. Understand the basic principles of meal planning and preparation of meals for various age groups and physiologic stresses at different income levels based on Nutritional needs.

2. Gain knowledge on planning the therapeutic diets and their preparation.

3. Gain knowledge in the selection, planning and preparation of foods in nutritional deficiency conditions.

THEORY:

UNIT – I : 1. Principles of meal planning and balanced diet for pregnancy and lactation, Infancy, preschool age, school age, adolescence, Adult hood, and old age.

UNIT – II: Nutritional deficiency diseases-Anaemia, Protein. Calorie malnutrition Vitamin-A deficiency, Aetiology, Symptoms, Prevention and treatment.

UNIT-III: Purpose and Principles of therapeutic diets, Hospital diets- atiology and dictary modifications.

(a) Obesity-definition, aetiology treatment.

(b) Underweight-definition, aetiology, treatment

(c) Diet in febrile conditions-typhoid, Tuberculosis.

UNIT- IV: (a) Diet in dieses of the gastro-intestinal tract, peptic ulcer and duodenal ulcer, acute and chronic diarrhoea, constipation.

(b) Diet in diseases of liver-cirrhosis and Hepatitis.

(c) Diabetes mellitus-definition, predisposing factors, factors that maintain blood glucose level, symptoms, diagnosis, biochemical changes in the metabolism of carbohydrates, fats, protein, food exchange list and treatments.

UNIT-V: (a) Diet in disease of the cardiovascular systems – Atherosclerosis and Hypertension.

(b) Diet in diseases of the kidney and urinary tract-Acute and chronic Nephrotis and nephrotic syndrome.

REFERENCES:

1. Antia, K.F.P.Clinical Nutritior and Dietetics, Oxford University Fress.

2. Krause, M.V. And Nahan, L.K.foods nutrition and diets the Delhi (1988) H.B.saunders Co., (1984).
3. Robinson, C.H. and Lawler, M.R.Normal and therpentic Nutrition Mac Millan Pub. Co. INC New York, 17th Edition (1988).
4. Gopalan, C.Balasubramnian, S.C. and Ramasastri, B.V. the Nutritive value of Indian foods, KMR, New Delhi (1989).

JOURNALS:

1. Nutition, NTN, Hyderabad.
2. The Indian Journal of Nutrition and Dietetics, Avinashillingam Institute for Home Science & Higher Education for Women, CBE.
3. NIN, News letter.

****

CORE COURSE – XII (CC)
NUTRITION IN HEALTH AND DISEASES PRACTICAL.

CLINICAL NUTRITION PRACTICAL:

(a) A study by each student of her own status of health and evaluation in relation to the signs of good nutrition.

(b) Qualitative test for sugars – Mono saccharides and disaccharides.

(c) Qualitative test for proteins.

(d) Qualitative test for minerals.

(e) Quantitative estimation of Glucose, calcium, and vitamin C.

(f) Demonstration Experiments – Quantitative estimation of Iron and Phosphorus.

NUTRITION IN HEALTH AND DISEASES PRACTICALS

(a) Planning, preparations and service of meals for pre school and school Going children, adolescent, adult, old age, expectant and Lactating woman.

(b) Planning, preparing and evaluating the diet for the following conditions.

- Iron deficiency anemia
- Vitamin A deficiency
- Protein calorie malnutrition
- Obesity and Underweight
- Heart disease (Athero Sclerosis)
- Liver disease (cirrhosis)
- Diabetes mellitus
- Kidney disease (Nephritis)

****

CORE COURSE XIII – FAMILY RESOURCE MANAGEMENT

OBJECTIVES:

To help students.

1. Understand the managerial principles and apply this in the personal and family situations.
2. Recognize the value of resources and their usage.

UNIT – 1: (a) Management-Meaning, scope, managerial concepts-values, goals standards.

(b) Resources – classification of family resources.

(c) Decision making-individual and group, habitual and conscious decisions, steps in decision making, methods of resolving conflicts in daily management.

(d) Management process – planning, controlling and evaluation.

(e) Family Resource Management-meaning, scope its relevance to other disciplines in home science.

UNIT – 2: TIME AND ENERGY MANAGEMENT :

(a) Time: Importance of time guidelines in planning time schedule.

(b) Energy: Its importance, fatigue – types and ways of overcoming fatigue.

(c) Work amplification-techniques. Household equipment selection-factors to be considered, Labour saving devices – meaning.

UNIT – 3: MONEY.

(a) Family income-types, sources

(b) Family budget-meaning, steps in planning a family budget, advantages of budgeting, factors influencing family budgets.

(c) Financial records-meaning purpose.

(d) Savings-Meaning, advantages, types of saving schemes, Institutions assisting in savings scheme.

UNIT-4:

(a) Home Maker-Qualities of home maker

(b) Home maker as a consumer-consumerism-meaning, laws related to Consumption-law of marginal utility, law of substitution and blemand Engel's law of consumption.

(c)Concept of cost of living, standard of living, their impact on family budget.

UNIT-5: Consumer aids-Elements of consumer education.

PRACTICALS:

1. Preparation of a time schedule for oneself.
2. Recording of personal expenditure.
3. Preparation of a budget for one's own family.
4. A group decision making exercise.
5. Care and use of any two household equipment-pressure cooker, electric iron.
6. Examination of labels and advertisement.

REFERENCE:

1. Dewett etal, Elements of economics, New Delhi chand and Co. Ltd., 1987.
2. Educational planning group, Home Management New Delhi, Arya Publishing House, 1987.
3. Mariamme varghuse and nation ogale, Home Management.
4. Gross IH, grandall EW and Knoll Management for modern Filics Bentice Hall, Inc, London 1980.
5. Mann, M. Home Management for Indian Families, New Delhi: Kalyani Publishers, 1976.

****

MAJOR BASED ELECTIVE II – FAMILY RELATIONSHIPS

OBJECTIVES:

1. To develop a scientific attitude towards behavioral patterns in individual family - and community life.
2. To Promote adjustments in Marital life.

UNIT-1: (a) Marriage – Meaning and function, Motives for Marriage.
(b)Personal development in relation to marriage – physical and mental health, Emotional maturity, Personality development, Age of marriage.

UNIT-2: (a) Types of marriage
(b) Adjustments in marriage – Early period, child bearing period, Sexual Adjustments, In-Law adjustments, Adjustment to parenthood, Marriage Counseling.

UNIT-3: (a) Family – Types and functions, Roles of different members in the family.
(b)Family crisis – Meaning, types, Alcoholism and Drug abuse, Divorce- the effect on children.

UNIT-4: OLD AGE:
(a) Meaning, Characteristics.
(b) Family attitudes towards the aged.
(c) Status of the Aged in the Indian Society
(d) Provisions for the aged.

UNIT-5: SEX EDUCATION:

(a) Meaning, Need
(b) Sex Education at pre school age, school age and adolescence
(c) Methods of Imparting sex education.
(d) Consequences of STD and HIV

PRACTICALS:

1. Continuation of observation from previous year.
2. Participation in pre-school.

REFERENCE:

1. Duvall, E.M. Family, The Macmillan Company, New York 1961.
2. Landis, F.R. and Landis, M.O.Personal adjustments in marriage and family living, prentice Hall Inc. New York 1955.
3. Davadas, Pand Jaya, N. Text book on child development Macmillan & Co., 1981.
4. Renkel, F. the Family in perspective. Appleton century, crofts, Inc. New Delhi. 1960.

****

MAJOR BASED ELECTIVE III - EXTENSION EDUCATION

UNIT – I: Concept and types of education, Meaning, Need, Types of education formal, Non formal, Adult, Continuing and Extension education.

UNIT – II: (a) Extension education – Concept, aim, Physilosophy and Principles of Extension education.

(b) Extension education and its relationship with other social sciences – Home sciences extension-Meaning, Objectives and role of Home science extension in national development.

UNIT – III: (a) Communication and Extension. Approaches for development. Advantages, Individual, Group and mass approaches, Motivation, Methods of extension teaching, Teaching tools, Difference in methods of extension and formal education, Direct contact, demonstration method.

(b) Audio visual aids-visual aids, audio aids and other teaching Aids. Communication through written words and satellite.

UNIT – IV: PROGRAMME PLANNING:

Programme planning, Meaning, principles, Developing a plan of work-Definition, Analysis of the concept, Importance and scope in Extension. Steps in Programming evaluation-Criteria for judging the plan of the work.

UNIT-V: (a) Community development programme meaning, objectives types and Principles of community development – Programme in India-Socio-Economic programmer – IRDP, TRYSEM , DWACRA, ICDS, Social forestory

(b) Community organisation meaning, scope, role and character tics of community organisation- womens club, youth club.

(c) Extension Training Institution – Meaning Need and importance principles of training institutions KVK , RETC, NYK.

RELATED EXERCISES: I

1. Visit to a Block to understand its set up and importancy in rural development.
2. Visit to DRBA and discussion with officials on the current programme.
3. Visit to K.V.K / RETC.
4. Visit to a Mahila Mandal.

REFERENCE:

1. Devadas, R.P.Facts of Home science education, Rural Institute, 1988.
2. Devadas, R.P.Introduction to Home Science Coimbator, Avinashilingam Home science college for women, 1988.
3. Supe, S.V. An Interoduction to Extension Education New Delhi, Oxford AD IBH Publishing company 1983.

4.Adivi reddy A. Extension Education, Andhra Pradesh, Sree

Lakshmi Press, 1987.
5.Dahama OP and Bhatnagar O.P. Education and communication for development, New Delhi, Oxford IBH publishing company 1985.

JOURNALS:

Gramin Vikas.
Home Science.
Journal of Rural Development.
Social Welfare
Yojana.

****