

PERIYAR UNIVERSITY

SALEM – 636 011. Tamil Nadu.



Periyar Institute of Distance Education
(PRIDE)

**B.Sc. Home Science (PRIDE)
Regulations**

For the students admitted from the academic year 2007 – 2008
onwards

Periyar University, Salem-11 (PRIDE)

B.Sc. Home Science

Regulations

1. Eligibility

Candidates seeking admission to first year of the Bachelor of Science (Home Science) shall be required to have passed the Higher secondary examination with Biology, Physics and Chemistry conducted by the Government of Tamilnadu or an examination accepted as equivalent thereto by the Syndicate subject to the conditions as may be prescribed thereto are permitted to appear and qualify for B.Sc.,(Home-Science) degree examination of this University after a course of study of three academic years.

2. Duration of the Course

The course for the degree of Bachelor of Science (Home Science) shall consist of three academic years.

3. Course of Study

The course of study shall comprise instruction in the following subjects according to the syllabus and books prescribed from time to time.

I YEAR

1. Language-1(Tamil etc.)
2. English-I
3. Major I
4. Major-II
5. Allied - I
6. Major Practical-I
7. Allied practical-I

II YEAR

1. Language –II (Tamil etc.)
2. English – II
3. Major – III
4. Major-IV
5. Allied - II
6. Major Practical-II
7. Allied practical-II

III YEAR

1. Major V
2. Major VI
3. Major VII
4. Major VIII
5. Major Practical III
6. Major Practical IV

4. Examinations

The theory examination shall be three hours duration to each paper at the end of each year. The candidates failing in any subject (s) will be permitted to appear for each failed subject(s) in the subsequent examination.

The practical examination for UG course should be conducted at the end of year.

5. Scheme of Examinations

The scheme of Examinations of different semester shall be as follows:

Scheme of Examination

FIRST YEAR	TITLE OF THE PAPER	DURATION OF EXAM HOURS	MAXIMUM MARKS
Language – I	Tamil : Paper - I	3	100
English - I	English: Paper – I	3	100
Major paper – I	Food Science	3	100
Major paper – II	Human Physiology	3	100
Allied paper – I	Chemistry	3	100
Major practical – I	Food Science	3	100
Allied practical – I	Chemistry	3	100
SECOND YEAR			
Language – II	Tamil : Paper - II	3	100
English - I I	English: Paper – II	3	100
Major – III	Family Resource Management and Interior design	3	100
Major – IV	Human Development	3	100
Allied – II	Introduction to Information Technology	3	100
Major practical – II	Family Resource Management and interior design	3	100

Allied practical – II	Introduction to Information Technology	3	100
THIRD YEAR			
Major V	Textile science and Garment construction	3	100
Major VI	Nutrition and Dietetics	3	100
Major VII	Family Finance and Housing	3	100
Major VIII	Home Science Extension Education	3	100
Major practical III	Family clothing and Garment construction	3	100
Major practical IV	Meal management and Dietetics	3	100
		Total	2000

Note:- Practical marks include attendance and record submission which carries 25 marks

6. Question Paper Pattern:

Time: 3 Hours

Max Marks=100

Part A: 10x2=20
(Answer all questions)
(Two questions from each unit)

Part B: 5x4=20
(Answer all questions)
(One question from each unit with internal choice)

Part C: 5x12=60
(Answer all questions)
(One question from each unit with internal choice)

(One model question paper is enclosed)

7. Passing Minimum

The candidate shall be declared to have passed the examination, if the candidate secures not less than 40 marks in the University examination in each theory paper. For the practical paper a minimum of 40 marks out of 100 marks in the University examination and the record notebook and attendance to practical classes (75%) taken together is required to pass the examination. There is no passing minimum for record notebook. However submission of record notebook is a must.

8. Classification of Successful candidates

Candidates who secure not less than 60% of the aggregate marks in the whole examination shall be declared to have passed in First Class, all other successful candidates shall be declared to have passed in Second Class. Candidates who obtain 75% of the marks in the aggregate shall be deemed to have passed in First Class with Distinction provide they pass all the examinations prescribed for the course at first appearance. Candidates who pass all examinations prescribed for the course in the first attempt and within a period of three academic years from the year of admission to the course alone are eligible for University Ranking.

9. Maximum duration for the completion of UG Program

The maximum duration for the completion of UG Program shall not exceed six years.

10. Commencement of this Regulation

These regulations shall take effect from the academic year 2007-08 and thereafter.

11. Question Paper pattern for Practical Examinations

Duration: 3 Hours	Total marks: 100
1. Practical attendance (75%)	10 marks
2. Record	15 marks
3. External Practical	
Written test	20 marks
Experiment	30 marks
Valuation/Results	15 marks
Viva	10 marks

(Conduct of practicals and submission of record are compulsory to complete the practical session)

MAJOR PAPER – I FOOD SCIENCE

THEORY

UNIT –I

Functional classification of foods, Basic food groups -4,5,7 & 9, Cooking methods –water, oil and air as medium.

Cereals – Structure composition, nutritive value of rice, wheat, ragi, maize, Cereal cookery- cooking methods, effect of moist heat and dry heat, factors affecting gelatinization; Fermentation – definition, advantages, products – Idli and bread.

UNIT-II

Pulses – Composition and Nutritive value of pulses and oilseeds; Toxic constituents in pulses; Pulse cookery – methods, effect of cooking, factors affecting cooking quality; Germination – definition, advantages

Fruits and Vegetables – Classification composition selection and nutritive value of some common vegetables and fruits; Pigments in fruits and vegetables; Fruit and vegetable cookery – methods, effect of cooking on nutrients and pigments.

UNIT III

Fleshy Foods – Structure, composition nutritive value and selection of fleshy foods, post-mortem changes, tenderization of meat; Meat cookery – methods and changes during cooking; Egg – structure, composition, nutritive value, selection and functions of egg in cookery; factors affecting foam formation; Fish – Classification, composition, nutritive value, selection, curing and smoking of fish.

UNIT IV

Milk – composition, nutritive value; Effect of heat, acid and enzymes on milk proteins; Milk products – pasteurized milk, whole milk powder and cheese; Fats and oils-composition, nutritive value; types of fatty acids in groundnut, sunflower, sesame, coconut and soyabean; Hydrogenation process; types and prevention of rancidity; changes in fat on cooking. Sugar – types of sugar and stages of sugar cookery; artificial sweeteners – cyclamate and saccharin.

UNIT V

Beverages – classification; coffee and tea – processing and preparation; Cocoa – Use of cocoa in chocolate preparation; spices – Uses of spices in cookery

Food adulteration – definition, common adulterants and methods to detect adulterants

Food standards – BIS, AGMARK, FPO

Fortification and Enrichment – definition, objectives, fortification of cereal, cereal products and salt.

References:

1. Srilakshmi B. Food Science, New Age International (P) Ltd. Publishers, third edition, 2005.
2. Swaminathan M., Food Science and Experimental Foods, Ganesh and Co., Madras, Reprint 1979.
3. Swaminathan M., Essentials of food and nutrition, Vol. I & II Bappco Publications, 1996.
4. Manay Shakunthala, N and Shadaksharaswamy M. Food facts and principles, New Age International (P) Ltd. Publishers, Reprint 2005.

MAJOR PRACTICAL –I Food Science

1. Weights and measures – solid and liquid foods
2. Experimental cookery of cereals
 - a. Steaming, boiling and pressure cooking of rice
 - b. Determination of gluten content in wheat and evaluation.
 - c. Preparation and evaluation of mixed rice, ragi leaf cake and biscuit.
3. Experimental cookery of pulses
 - a. Boiling, steaming and pressure cooking of pulses using hard and soft water with and without baking soda.
 - b. Preparation of sprouted /germinated pulse flour.
 - c. Preparation and evaluation of sundal, sambar, bajji and pulse flour substituted chapathi.
4. Experimental cookery of fruits and vegetables
 - a. Effect of acid and alkali on color, texture and flavor.
 - b. Enzymatic and non-enzymatic browning and its prevention.
 - c. Preparation and evaluation of vegetables/fruit salad, avial, fruit juice and vegetable pickle.
5. Experimental cookery on milk and milk products.
 - a. Effect of acid on milk.
 - b. Preparation and evaluation of ice-cream and kheer.
6. Experimental cookery on Egg
 - a. Effect of sugar and salt on egg foam formation.
 - b. Preparation and evaluation of poach, scrambled egg and egg custard.

7. Experimental cookery on sugar
 - a. Stages of sugar cookery
 - b. Preparation and evaluation of mysore pak and Gulabjamun.
8. Experimental cookery on fats and oils
 - a. Smoking point of oils
 - b. Preparation and evaluation of puri and potato chips.
9. Experimental cookery on beverages and spices.
 - a. preparation and evaluation of
 - (i) coffee and tea
 - (ii) spiced tea
10. Formulation of Health foods
 - a. Preparation and evaluation of
 - (i) Ragi malt
 - (ii) Kulandai Amudhu

MAJOR PAPER – II - Human Physiology

Theory

UNIT I

Blood- Function, composition, coagulation, factors affecting coagulation; Development and functions of RBC, WBC and platelets; Haemoglobin –functions and synthesis; Blood groups.

UNIT II

Cardiovascular system – Structure of heart, special junctional tissues of heart, origin and conduction of heart beat, cardiac cycle, cardiac output; Blood pressure – Measurement and factors affecting blood pressure.

UNIT III

Respiratory system – Definition, process of respiration, structure & functions of respiratory tract, mechanism of breathing, lung volumes, lung capacities, oxygen and CO₂ transport; Definitions of diffusion, perfusion, anoxia, dysbarism, asphyxia, hyperpnoea, orthopnoea and cyanosis;

Special senses - Taste- primary taste sensations, histology of tastebuds, factors influencing taste sensations; Smell – Classification of odour, physiology of olfaction.

UNIT IV

Digestive system – Structure and functions of digestive system; digestive juices-composition and function, digestion and absorption of foodstuffs – carbohydrate, protein and lipids; Urinary system – structure and functions of kidney, formation of urine, factors affecting formation of urine, Definition – micturition, nocturia, oliguria and anuria.

UNIT V

Reproductive system – Structure and functions of male and female reproductive system, menstrual cycle; Endocrine system – Functions of hormones secreted by pituitary, thyroid, parathyroid, adrenal and reproductive glands.

References

1. Chatterjee. C.C., Human physiology, Vol-I & Vol-II, Medical Allied Agency, Reprint – 2004
2. Sarada Subramaniam and Madhawan Kutty. K., The text Books of human Physiology 5th edition, S.Chand and Company limited, 1996.
3. Guyton, A.c., Text book of medical physiology, 4th edition W.S. Saunders Co. Philadelphia, 1996.

MAJOR PAPER – III - FAMILY RESOURCE MANAGEMENT AND INTERIOR DESIGN

Theory

UNIT I

Definition and meaning of management – Characteristics of a good manager, Management process – planning, controlling and evaluating; Values, goals and standard; Decision making – concepts, types of decision, steps in making decision.

UNIT II

Resources – Classification and characteristics of resources, factors affecting the use of resources; Management process applied to the use of time and energy; Work simplification in the home – techniques, Mendel's laws of changes; Money management – types of family income, managerial process, savings – need, institutions for saving.

UNIT III

Importance of good taste; Elements of design – Types of design and characteristics of good design; Principles of design – Harmony, proportion, balance, emphasis and rhythm.

UNIT IV

Colour – Qualities of colour – hue, value and intensity; Colour harmonies, prang colour system, Advancing and Receding colours principles in the use of colour in interiors; Floor finishes – mud, Stones, tiles, wood, cement, mosai and others. Wall finishes – muds plaster, cement, paints, wall papers, tiles etc.

UNIT V

Furniture – selection and arrangement of furniture in various rooms; Accessories – Types, selection, use and care of accessories, Picture mounting & window treatment; Flower arrang

References

1. Varghese, M.A., N.N. Ogale, and Srinivasan, K., Home Management; Wiley Eastern Ltd., 1992.
2. Deshpande, R.S., 'Modern Ideal Homes for India', United Book Corporation, Pune, 1983 .

3. Nickel and Dorsey,' Management in family' living, John Willy and Sones, 1975.
4. Goldsten, M and Goldstein, V., 'Art in Everyday Life', Macmillan Co., New York, 1960.

Major Practical – II Interior Design

1. Visit to various houses, parks, hotels, gardens etc.,to observe the application of principles of design and report preparation.
2. Preparation of colour chart and colour schemes for different rooms.
3. Application of design principles in preparation of greeting card, menu card and poster making.
4. Making different types of flower arrangement, making furniture arrangement for various rooms.
5. Planning family Budget – Low, Middle and High income groups.

MAJOR PAPER-IV - HUMAN DEVELOPMENT

THEORY

UNIT I

Methods of Child Study: Longitudinal and cross-sectional approaches, observation, Case study, Interview, Questionnaire, projective technique, experimental study and sociometry.

Prenatal development: Signs of Pregnancy, time table of prenatal period ; Management of normal pregnancy – Hygiene, diet and medical supervision ; scanning- sex determination ; Factors influencing prenatal development ; Complications during pregnancy ; Types of deliveries-Types of birth – Normal, Breech and Caeserian; Normal birth, still birth, premature birth, post maturity, twins, triplets.

UNIT II

New born Baby (Period of infancy:: Characteristics of new born baby ; Adjustment to life – Feeding – Breast feeding and bottle feeding.

Babyhood: Developments – Physical, Social, Emotional, Intellectual and Language during Infancy (Birth to 2 years); Feeding- weaning, supplementary feeding ; Toilet training, bathing, clothing and sleeping;

Minor ailments and their prevention, Immunization , oral rehydration therapy, Common accidents at home.

UNIT III

Pre–school years (Early Childhood): Physical and motor development, social, emotional, intellectual and language development. Behavior problems- causes and treatment of temper tantrums, thumb sucking, bed wetting, nail-biting, masturbation, telling lies and stealing.

Pre-School: Objectives of the Pre-school education, Requirements of an Ideal Pre-school education – Qualifications of a Pre-school teacher, Home school relationship, Parent education programme.

Play: Definition, types, characteristics and values of play; Criteria for the selection of play equipment for the pre-school children.

UNIT IV

School-going children: Physical, social, emotional and intellectual developments, interests and hobbies.

Adolescence: Definition, Developments – Physical, Social, Emotional and Intellectual; Problems of adolescents; Role of parents and teachers in guiding adolescents; Delinquency – causes, prevention and rehabilitation; Drug addiction – Rehabilitation measures for the victims.

UNIT V

Sex Education: Definition, need for imparting sex education to adolescents.

Adult: Developmental task – Physiological and Psychosocial; Crisis of early and middle adulthood.

Old Age: Characteristics, needs and problems; Place of the aged in Indian society.

REFERENCES

1. Hurlock, E.B. “Child Development” Mc.Graw Hill Publishing Co.,Ltd., New Delhi.
2. Hurlock, E.B. “Growth and Development” Tata McGraw Hill Publishing Co., New Delhi.
3. Arya & Subash, C. “Infant and child care for the mother” Vikas, New Delhi, 1972.
4. R.P.Devadas & Jaya “Text book on child development” Madras Macmillan India Ltd., 1984.
5. Newman and Newman, “ Development through Life – A Psychosocial Approach”, 6th edition Books – cole Publishing company, 1995.

ALLIED – II INTRODUCTION TO INFORMATION TECHNOLOGY

THEORY

Unit I

Introduction to computer, types of computers – Digital and Analog, Generation of computer, computer organization – Input/output device – CPU, memory devices, processors, Keyboard and functions of keys, printers and its type, MS-DOS – Dir, creating dir, changing dir, Rename, copy and delete files.

Unit II

Introduction to windows, windows Graphical User, Interface(GUI), multitasking, using startmenu, using windows explorer, adding and removing programs, starting and quitting a program, managing files and folders, customizing the desktop via control panel, customizing screen display, setting date and time, adjusting the mouse, quitting windows, Recycle bin.

UNIT III

MS-Word – Starting word, parts of word window, creating, editing and saving a word document, previewing and printing a document, creating table and working with graphics.

Unit IV

MS- Excel – Introduction, starting excel, parts of excel window, working spreadsheets; working with formulas, functions, graphs and charts;

MS Powerpoint – creating slides, slide show presentation, slide transition, and animation effects.

Unit V

Internet and email – Introduction, web browsers, web servers, search engines, online and offline web browsing, HTTP, WWW, Internet explorer, Browsing important internet sites, individual account creation, creating a mail-ID, sending and receiving mails, sending attachments.

ALLIED PRACTICAL – II INTRODUCTION TO INFORMATION TECHNOLOGY

MS-OFFICE LIST

I. MS-WORD:

1. a. Starting MS-WORD, Creating, Saving, Printing (with options) Closing
And Existing.
- b. Study of Word-Menu/Toolbars.
2. a. Create a document, Save it and edit the document as follows:
 - i) Find and Replace options.
 - ii) Cut, Copy and Paste options and
 - iii) Undo and Redo options.
- b. Format the document:
 - i) Using Bold, Underline and Italic.
 - ii) Chang Character size using the font dialog box.
 - iii) Formatting paragraph: Center, Left aligns & Right aligns.
 - iv) Changing paragraph and line spacing,Using Bullets and Numbering
in paragraphs and
 - v) Creating Hanging paragraphs.
3. Using tab settings enhancing the documents (Header, Footer, Page setup
Order, opening and closing Toolbars, print Preview).
4. Creating Tables in a document, Selecting Rows & Columns sort the
record by using tables, format painter and Auto format.
5. Drawing flow chart using drawing toolbar, inserting picture and setting
frames.

6. Mail Merge in word (Creating main document, data source, inserting merge fields and viewing merge data, viewing and printing merged letter, using mail merge to print envelope creating mailing labels).

II MS-EXCEL:

- 1.a. Create a work sheet, moving/copying/inserting/deleting rows and columns. (usage of cut, paste commands, copying a single cell, Copying a range of data, filling up a cell, Undo command, Inserting a row, column, Deleting rows and columns.)
 - b. Formatting work sheets
 1. Bold style
 2. Italic style
 3. Font size changing
 4. Formatting numbers (Auto fill, Selection command, currency format, currency syllabus)
 5. Specifying percentage (%) scientific notations.
 6. Drawing border around cells.
 7. Printing a work sheet (Print preview, Margin setting, Header, Footer)
- 2 .a. Data base concept: Data base, Record field and field name creating and sorting a data base and maintaining a data base (data form)
 - b. Using auto filter, advanced filter.
 - c. Creating subtotals and grand totals – Using database functions.
3. Creating charts

- i) Using chart wizard (five steps)
- ii) Changing the chart type (Pie, Bar, Line)
- iii) Inserting titles for the Axes x, y
- iv) changing colors
- v) Printing charts.

4. a. Using date, time and math functions:

- i) Entering current date
- ii) Using date arithmetic(adding and subtracting dates)
- iii) Date functions(day, month, year)
- iv) Using time functions(hour, minute, second)

b. Math functions

- i) SUM, COUNT, AVERAGE
- ii) MAX, MIN
- iii) STDEV, VAR
- iv) ABS, EXP, INT
- v) LOG 10 and LOG
- vi) MOD, ROUND, SORT
- vii) Using Auto Sum

c. Logical and financial functions

- i) Logical (IF/AND/OR/NOT)
- ii) Financial (PMT, FV, NPER, RATE)

5 i) Creating and running a Macro

ii) Assigning button to a defined Macro

iii) Editing a Macro

III.MS-POWER-POINT:

1. Creating a presentation using auto content wizard.
2. Different views in power point presentation.
3. Setting animation effects/grouping/ungrouping/cropping power/power objects.
4. Printing a presentation/Importing-Exporting files.
5. Creating an organization chart in Power Point.

Major paper - V - Textile Science and Garment Construction

THEORY

UNIT I

Fibre Definition, classification of textile fibres; General properties common to Protein, Cellulose, Mineral and Thermoplastic fibres; Manufacture, uses and properties of cotton, linen, rayon, silk, nylon, terylene and acrylic.

Yarn: spinning - mechanical, chemical, wet or dry solvent and melt spinning; Properties of yarn twist and yarn number; Classification of Yarns – simple, complex, novelty and texturised yarns.

UNIT II

Fabric Construction

Weaving, parts of simple loom and weaving operation; Types of weaves – basic and figure weaves; Other methods of fabric construction - knitting, braiding, felt, lace and non-woven fabrics.

Fabric Finishes

Basic finishes or general finishes; Chemical finishes; Special purpose finishes- Calendering, Napping, Flocking, Shrinking (sanforization), Water Repellency and Wrinkle resistance.

UNIT III

Textile Dyes and Printing

Classification of dyes and their suitability to different fibres; Methods of dyeing – stock, top, yarn and piece dyeing; Printing methods – Block, Roller, Hand Printing, Stencil, Bathik, Machine Printing, Screen resist and discharge.

UNIT IV

Clothing for different age groups:

Factors to be considered in the choice of styles in clothing for different age group-infant, toddlers, preschoolers, school boys and girls, teenagers and adults; Selection of readymade garments, Comparison of home made, tailor made and readymade garments, Judging the quality of readymade by examining the types of fabrics, stitches, combinations, decorations and cost.

UNIT V

Techniques of clothing constructions:

Principles of preparing paper pattern based on body measurements, Steps involved in preparing a fabric for cutting, laying the pattern of fabric, transferring the pattern makings on to the fabric; Study of seam, seam finishes, fasteners, facings, bindings, hems and fullness applicable to garments.

REFERENCE:

Erwin M.D. and Kinchen L.A. – “Clothing for Moderns”. Macmillan Co., New York, 1970.

Louis S.D., Bowers G.M. & Jellum – “Clothing construction and Wardrobe planning” Macmillan Co. New York, 1960.

Thomson H.M. and Rea L. “Clothing for children” – John Wiley & Sons, New York, 1949.

Hollen N.Saddler. “Textile” Mac.Millan., New York, 1977.

Wingate L. Textile Fibres and their selection – Brentile Hall, 1976.

Narjory L.Joseph”Introductory Textile Science”Holt Rhine Heart, 1966.

Torfera P.G.”Understanding Textiles Carrier”Macmillan and Co., London, 1982.

Dantagi S.”Fundamental of Textiles and their Care” Orient Longmen Ltd., New Delhi, 1983.

Major Practical – III

FAMILY CLOTHING AND GARMENT CONSTRUCTION

I Preparation of samples for the following

- i) Hand stitches
- ii) Seams and seam finishes
- iii) Neck finishes-facing, shape and bias binding
- iv) Fasteners – buttons, button holes, press buttons, hooks and eyes.
- v) Plackets and opening – continuous placket, bound and faced plackets, zipper plackets.
- vi) Fullness – darts, tucks, gathers, pleats.
- vii) Decorative (embroidery) stitches – Any Ten

II Drafting basic blocks for the following garments and constructing the same.

- i) Baby's dress – Jabla (one year old)
- ii) Babasuit (shirt with nicker 3 years old)
- iii) Girl's frock with collar and sleeve (3 years old)
- iv) Saree petticoat (six gore)
- v) Choli (saree blouse)

MAJOR PAPER – VI – NUTRITION AND DIETETICS

Theory

Unit I

Definition – Food, nutrients, nutrition, malnutrition, undernutrition, overnutrition, ICMR Recommended Dietary Allowance for various age groups; carbohydrate and protein – definition, classification, function, sources; role of dietary fiber in human nutrition; evaluation of protein quality – PER and BV.

Unit II

Lipids – Definition, classification, sources, functions; Essential Fatty Acids – sources, function and deficiency; Energy – Definition, Determination of energy value of foods using Bomb calorimeter; Basal Metabolic Rate – definition, factors influencing BMR, calculation of energy requirements by factorial method; Water-importance, distribution and maintenance of water balance.

Unit III

Vitamins - Sources, functions, and deficiency of vitamin A, D, E, K, thiamin, riboflavin, folic acid and ascorbic acid, Minerals – sources functions and deficiency of iron, calcium, phosphorus, iodine, sodium and potassium.

Unit IV

Role of dietitian, principles of diet therapy, types of feeding; Dietary management for obesity, underweight, PEM and anaemia,

Dietary management for fever, typhoid, tuberculosis, ulcer, diarrhea and constipation.

Unit V

Causes, symptoms, diagnosis and dietary management of type I and II diabetes, Atherosclerosis, hypertension, jaundice, cirrhosis, renal calculi, nephritis and renal failure.

References

1. Srilakshmi, B., Dietetics, New Age International Pvt. Ltd.. New Delhi.

2. Gopal, C. Kamal Krishnasamy, Nutrition in Major Metabolic Disease, Oxford India Paperbacks Publishers, First Edition, 2000.
3. Mahan, L.K., Stump, S.E. and Krause, S., 'Food Nutrition and Diet Therapy,' 11th edition, W.B. Saunders Co. 2004.
4. Mahtab, S. Prasad Rao, N. Vinodini Reddy, 'Textbook of Human Nutrition, Oxford and IBH Publishing Co., Pvt. Ltd. Second edition, 2003.

MAJOR–VII - FAMILY FINANCE AND HOUSING

THEORY

Unit I

Introduction to Home Economics: Indian standard of living – ways to improve the standard of living in India.

Human wants: Nature and classification, the concept of marginal utility, principles of equi-marginal utility, law of diminishing marginal utility.

Unit II

Family income and expenditure: Types of Income, Methods of handling family income, Family budget, Engle’s laws of consumption, Home account maintenance, Institutions for family saving.

Household purchases: Functions of money, Rise in prices and methods used to curb it in India, When and how to purchase.

Unit III

Consumer Protection: Consumerism – Need for consumer protection, Right of a consumer, Methods adopted to provide consumer protections.

The main Indian Taxes: The influence of taxes on willingness to work and save.

Unit IV

House Planning: Selection of a site, Principles involved in planning a good house, Plans for different income groups namely low, middle and high. Housing finance – Financial consideration in housing, Sources of finance Government and other agencies – Co-operative Banks, Nationalised Banks, Housing Board and NGO.

UNIT V

House and its services : Lighting in home, importance, types of lights, lighting requirements for various rooms, selection of lamp shades.

Major Labour Saving devices: Selection, use and care of washing machines – Vacuum cleaner, refrigerator and mixer.

REFERENCE :

1. Deshpande K.S. – “Modern Ideal Homes for India” United Book Corporation, Pune, 1983.
2. Nickell P and Dorsey, J.M.”Management in Family Living” John Wiley and sons, 1978.
3. Deshpande; R.S. – “Build your own home” – United Book Corporation, Pune, 1983.
4. Agan, J. “The house and its plan and use” J.P.Lippin Cott and Co., New York, 1970.
5. Mitra K.J.”Economics Micro-Macro” the Work Press Private Ltd.,Calcutta, 1975.
6. Dutt R and Sundaram K.P.M. “Indian Economy” S.Chand and Co.Ltd., New Delhi, 1976.
7. Sundaram K.P. and Vaish M.L.”Principles of Economics” Prakasham Mandir, Agra -3,1975.
8. Devadas R.P.”Text Book of Home Science”- Directorate of Extension, Ministry of Food and Agriculture, New Delhi, 1969.

JOURNALS

- 1.Kurushetra
- 2.Journal of Indian Economics
- 3.Yojana.

MAJOR PAPER – VIII - MAIN - HOME SCIENCE EXTENSION EDUCATION

THEORY

UNIT I

Socio economic conditions in the village: Analysis of the rural problems – illiteracy, poverty, poor health and malnutrition; Role of women in home and farm; Role of voluntary agencies in rural upliftments – BGMS, KGNMI, AIWC, CSWB.

UNIT II

Home Science Extension Education: Meaning, definition, objectives and principles of Extension Education. Need for Extension Education – Origin, Concept, Objectives and Characteristics of Home Science Extension; Steps in Home Science Extension teaching; Role of Home Science Extension in rural development.

UNIT III

Extension administration and functionaries: Administrative set-up for Rural Development – Central, State, District, Block and Village level; Extension personnel working at block level; Role and functions of women extension workers, qualities of an Extension Worker, Training women extension workers.

UNIT IV

Communication methods and teaching aids used in Extension:

Meaning, key elements, types, problems, importance of communication in extension; Approaches - individual, groups and mass teaching. Audio-Visual Aids – Classifications according to form and use, their advantages and disadvantages, Factors limiting their selection and use; Audio aids – Radio and Recorded talks; Visual aids – Flannel graphs, Flash cards, Posters and Charts; Audio visual Aids – Films, Television and Video Cassettes; Recent trends in communication – Meaning and use of website, e-mail, multimedia and e-learning.

UNIT V

Extension Programme Building: Meaning and importance of programme planning, principles of programme planning, execution and evaluation, Programme Development Process. Welfare Programmes for women and

children: Programmes for women and children – ICDS, WCD, CWS Development Programmes –TRYSEM, SGSY, NAEP.

Reference:

1. Reddy, A.A:”Extension Education” Sree Lakshmi Press, Andhra Pradesh, 1987.
2. Dahama O.P. and Bhat Nagar O.P., Extension and communication for development, New Delhi, Oxford and IBH Publishing Company, 1985.
3. Aravinda Chandra, Anupama Shah and Uma Joshi, ”Fundamentals of Teaching Home Science,” Sterling Publishers Private Ltd., New Delhi-16.
4. ‘Extension Education in Community Development” by Diredctorate of Extension, Government of India, New Delhi.
5. Devadas R.P.”Introduction to Home Science,” Saradhalaya Press, Coimbatore – 43.

Journals

- 1.Social welfare
- 2.Yojana
- 3.Kurushetra
- 4.Indian Journal of Extension Education
- 5.Tamil Nadu Journal of Extension Education.

MAJOR PRACTICAL - IV – MEAL MANAGEMENT AND DIETETICS

A. Planning and preparation of a day's menu,

Calculating the nutrient content of the menu and compare with ICMR recommendation

1. Pregnant and lactating woman
2. Preschool and school going children
- 3 .Adolescents and adult.

B. Planning and preparation of a day's diet and calculating the nutrient content of the diet for the following conditions

1. Protein calorie Malnutrition of anaemia
2. Fever & typhoid
3. Underweight & obesity
4. Ulcer, Constipation and Diarrohea
5. Diabetes mellitus
6. Hypertension and Atherosclerosis
7. Jaundice, cirrhosis and Renal calculi.

Theory Examination
Question paper pattern

Time: 3 hrs

Total Marks 100

Part A (10 x 2 = 20 marks)

Answer All Questions

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Part B (5x4 = 20 marks)

Answer All Questions

11. a
or
b
12. a
or
b.

13. a.
or
b

14 a
or
b

15. a
or
b

Part C (5x12 = 60 marks)
Answer all questions

16 a
or
b

17. a
or
b

18. a
or
b

19. a
or
b

20. a
Or
b

B.Sc., HOME SCIENCE (MODEL QUESTION PAPER)

FOOD SCIENCE

Time: Three hours

Maximum: 100 marks

PART-A(10 * 2 = 20 marks)

Answer ALL questions.

All questions carry equal marks.

1. Define Food Science.
2. List out any four cooking methods.
3. what is meant by body building foods?
4. Mention any four millets frequently used in our diet.
5. What is known as enzymatic browning?
6. Point out any four types of milk.
7. What is meant by Rigor Mortis?
8. Mention any two abuses of spices and condiments.
9. Expand a) PFA b) FPO.
10. Define fortification.

PART B-(5 * 4 = 20 marks)

Answer ALL questions.

All questions carry equal marks

- 11 . a) Classify the foods based on nutrients with example.
(or)
b) Explain the importance of parboiling in Rice.
12. a) Enumerate the changes during the boiling with vinegar and cooking soda in green leafy vegetable cookery.
(or)
b) Write short notes on skimmed milk and whole milk.

13. a) Explain briefly about the factors affecting tenderness of meat.

(or)

b) How will you select a good egg using house hold method?

14. a) Write short notes on hydrogenation.

(or)

b) Enumerate the uses of species and condiments in Indian cookery.

15. a) List any four common food items and their adulterants.

(or)

b) Write any two procedures to identify the common adulterant in food items.

PART C – (5 * 12 = 60 marks)

Answer ALL questions.

All questions carry equal marks.

16. a) Describe in detail about “Basic Seven Food Groups” and justify

The seven food groups suitability to our Indian condition.

(or)

b) Pulses are referred to “Poor man’s meat”.

Comment on this statement with example.

17. a) What are the preliminary treatments given to vegetables and root crops prior to cooking?

(or)

b) Elaborate i) Homogenised milk and ii) Khoa preparation.

18. a) Discuss in detail about the changes in meat during any four methods of cooking.

(or)

b) Discuss the effect of heat on egg proteins with emphasis on the factors affecting coagulation of egg proteins.

19. a) Write short notes on i) shortening and ii) Factors affecting absorption of fats.

(or)

b) List out eight spices and condiments usually utilized by Indians and explain the reason for the same.

20. a) What is meant by food adulteration? List out Any four adulterants with food items and their effect in human beings after consumption.

(or)

b) How do you evaluate the food quality? Prepare one score card for any food item you have prepared in your practical class?.