

✓ 28. HOME SCIENCE

Title	Periods/ Week	Exam- Duration	Max. Marks	Int. Ass.
Paper-I Resource Management & interior decoration	4	2 hrs.	27	03
Paper-II Hygiene	4	2 hrs.	27	03
Paper-III Practical	6	3 hrs.	40	—
		Total 94+6 =	100	

Instructions for Paper I & II (Theory)

Instructions for the examiner : The examiner will set six questions in all, selecting two questions from each unit.

Instruction for the candidates : The candidates will attempt three questions in all, selecting one question from each unit.

Special Note : The question-paper should be set and evaluated by the teachers who are teaching Home Science to B. A. Students.

Paper-I : Resource Management and Interior Decoration

Unit-I

- (a) Concept of Home Science : Definition, meaning and scope of Home Science.
- (b) Areas of Home Science : Different branches of Home Science-- Brief introduction to all the areas of Home Science viz. Foods & Nutrition, Family Resource Management, Human Development, Textile & Clothing, Extension Education.
- (c) Job opportunities in different areas of Home Science.
- (d) Consumer Education : Definition of consumer choice, buying problems of consumers, frauds and faulty weights and measures, adulteration and consumer protection.

Unit-II

- (a) Functions of Home.
- (b) Housing : Selection of site for constructing a house.
- (c) Interior Decoration : elements of art, i.e., line, form, texture, size and shape in relation to flower arrangement and furniture arrangement.
- (d) Colour : Characteristics, colour schemes and its use in interior decoration.
- (e) Principles of Art : Harmony, balance, rhythm, proportion & Emphasis in relation to interior decoration.
- (f) Selection and arrangement of furniture in different rooms of the house.

Unit-III

Management of Family Resources :

- (a) Meaning of Home Management : steps in the process of Home Management.

- (b) Classification of Resources : Human and Material Resources, similarities of different resources.
- (c) Money Management : meaning and types of income, process of money management (1) Budgeting (2) Controlling, Keeping of records and (3) Evaluation.
- (d) Time Management : Process, steps in making time plans, tools in time plan, peak loads and rest periods.
- (e) Energy Management : Energy requirements in different stages of family life cycle; classification of household work as light and heavy according to their energy costs; Fatigue; types and effects of fatigue, role of rest periods; Process of energy management; role of rest periods; Process of energy management (1) Planning (2) Controlling (3) Evaluation.
- (f) Work-simplification; Meaning and methods of work-simplification.

References :

1. Ruth, E. Deacon, Francille M. Firebaugh (1975) : Family Resource Management - Principle and Application, Roy Houghton Mifflin Company, (Unit-I, II, IV-VI)
2. Irma, H. Gross, Elizabeth Crandall, Marjoris M. Knoll (1973) : Management for Modern Families, Prentice Hall, Inc., Englewood Cliffs, New Jersey, (Unit-I-VIII)
3. Devdas, Rajamal, P. : The Meaning of Home Science, Sri Avinashlingam Home Science College, Coimbatore.
4. P. Kaipana, R. "What is Home Science?", Evira Publications, Vadodra
5. A H. Raut, "Home Furnishing " Wiley Eastern Ltd. New Delhi.
6. Home Management for Indian Families : M.K. Mana.
7. Modern Ideal Homes for India : R. Deshpande.
8. संपूर्ण गृहकला—संतोष, मोरार ग्रंथ अकादमी, नई दिल्ली ।
9. गृह विज्ञान एवं स्वास्थ्य रक्षा --- एस.पी. सुविद्या, डी.पी.सी. शैरी ।
10. गृह प्रबंधन --- डॉ. (श्रीमती) कान्हो पाडेय-विश्वर ग्रंथ अकादमी ।

Paper-II : Hygiene**Unit-I**

- (a) Hygiene and Health; Personal hygiene -- Definition of health and hygiene, factors relating to health with special emphasis on food habit, cleanliness, exercise, rest and sleep.
- (b) Water--Importance of water, impurities present in water, sources of contamination of water and water purification (Household and Natural methods).
- (c) Ventilation--Definition, importance of ventilation, sources of air pollution, principles of Natural Ventilation. Methods of artificial and natural ventilation suitable in India.

Unit-II

- (a) Infection--Definition of infection, infective agents, period of infectivity, infectious diseases, communicable diseases, incubation period and isolation. Modes and channels of transmission of infection.
- (b) Disinfectants - (1) Definition and need, (2) Methods of disinfection, (3) Different types of disinfectants and their uses.
- (c) Immunity --(1) Definition and types of immunity, (2) Immunization Schedule.

Unit-III

Infectious diseases : Causes, incubation period, mode of spread, symptoms, prevention and control of the following diseases :

- (a) Diseases spread by insects--Malaria, Dengue fever.
- (b) Diseases spread by ingestion--Dysentery, Cholera & Typhoid.
- (c) Diseases spread by droplet infection--Chicken-pox, Measles, Mumps, Influenza, TB.
- (d) Diseases spread by contact-- Leprosy, AIDS.

Books :

1. Yas Pal Bedi (1976) : Hygiene & Public Health, Anand Publishing Co., Gali No. 1, Nawan Kot, Amritsar.

2. V.N. Bhawe (1961) : You and Your Health, National Book Trust.
3. Bihari Lal Bhatia (1961) : Elementary Hygiene, Orient Longmans Ltd, Calcutta.
4. J.E. Park (1983) : Preventive and Social Medicine, Jabalpur : Messrs Banarsidas Bhanot.
5. Birender Nath Ghosh (1969) : Hygiene & Public Health : Calcutta Scientific Publishing Co.
6. गृह विज्ञान एवं स्वास्थ्य रक्षा - एल०पी० सुखिया, जी०पी० शैरी ।
7. गृह व्यवस्था एवं स्वास्थ्य विज्ञान --सवीरा रत्नन, दिनेश प्रकाशन ।

Paper-III : Practical

1. Cleaning & polishing of household metals: Brass, Copper, Silver, Stainless Steel and Aluminium.
2. Cleaning of Glass and looking mirror.
3. Flower Management--dry and fresh for different rooms and occasions.
4. Rangoli and Alpana.
5. Pot Decoration and painting (one pot each).
6. Table Setting & Table manners.
7. Repair of fuse and plug.
8. Preparation of four articles for interior decoration using various methods (collage, fabric/glass painting, paper cutting, papier mache, stuffed toys, candle decoration etc.)

References : (Practical)

1. Ruti Anna Hong (1961) : Home Furnishing, Wiley Eastern Pvt. Ltd.
2. Bhat, Pranav and Goenka, Shantia (1990) : The Foundation of Art and Design, Bombay : Lakhani Book Depot.
3. Goldstein, H. and Goldstein, V. (1967) : Art in Everyday Life, New Delhi : Oxford and IBH Publishing Company.

BA II

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Kannur University
28. HOME SCIENCE

Subject	Scheme No. of Periods	Duration of Exam.	Max. Marks	
			Ext.	Int. Ass.
Paper-I Clothing & Textiles	2 Hrs.	27	3	
Paper-II Physiology	2 Hrs.	27	3	
Paper-III Practical	3 Hrs.	40		
Total :			100	

Instructions for Paper-I & II (Theory)

Instructions for the Examiners :
The examiner will set six questions in all; selecting two questions from each unit.

Instructions for the Candidate :
The candidate will attempt three questions in all; selecting one question from each Unit.

Special Note : The question paper should be set and evaluated by the teachers who are teaching Home Science to B.A. students.

Paper-I : Clothing & Textiles

Unit-I

- Introduction to traditional textiles of India with names and origin.
- Definition and classification of fibre.
- Manufacture and properties of different fibres: Cotton, Silk, Polyester, Rayon.
- Factors affecting selection of fabrics, garments and household linen.

Unit-II

- Finishing processes in fabrics :
- Meaning and objectives of application of finishes.
 - Different types of finishes calendaring, bleaching, sizing, mercerizing, per-shrinking, creases-resistant, Dyeing and printing.
 - Basic weaves-plain, twill, satin and their variations.

Unit-III

Supplies necessary for laundry :

- Soaps & detergents, starches, blues and bleaches.
- Laundry reagents : acids, alkalies, solvents and absorbents.
- Different methods of laundry.
- Stain removal-classification of stains, methods of removing different types of stains.

References :

- Anna Jacob (1993) : Art of Sewing-UBS PD, New Delhi.
- New Bane, A. (1974) : Tailoring, McGraw Hill Publication, New York.
- Readers Digest (1982) : Complete guide to Sewing, Association Inc., New York.
- Saviri Pandit (1967) : Manual of Children's Clothing, Orient Longman.
- Corbman, B.P. (1985) : Textile Fibre to Fabric, McGraw Hill, New York.
- Hollen, N. and Saddler, J. : Textile Latest Edition; MacMillan and Co., New York.
- Joseph, M.L. (1976) : Essentials of Textile, Holt, Ripenhardt of Winston, New York.
- Joseph, M.L. (1972) : Introductory Textile Science, Holt, Ripenhardt and Winston, New York.
- Tortora, P.G. (1978) : Understanding Textile, New York, MacMillan Publishing Inc.
- Wingate, L.B. (1976) : Textile fabrics and their selection, Englewood Cliffs, New Jersey, Prentice Hall, Inc.
- Alexander, R.R. (1977) : Textile Product Selection, Use and Care, Boston, Houghton Mifflin Co.
- Duelkar Durga (1976) : Household Textile and Laundry Work, Delhi, Atma Ram and Sons.
- Joseph Marjory, L. (1981) : Introductory Textile Science, New

14. D'Souza, N.: Fabric Care.
15. Doongaji (1975) : Basic Process and Clothing Construction, New Delhi, Raj Book Depot.
16. Tate and Grissom : Family Clothing.
17. Cockett, B.R. (1964) : Dyeing and Printing, London, Sir Issac Pitman and Sons Ltd.
18. Story Joyce (1979) : Manual of Dyes and Fabrics, London, Thames and Hudson Ltd.
19. Creative Embroidery Designs, Ondorisha Publications.
20. वस्त्र कला एवं शारीरिक विज्ञान : सवीरा रत्न, दिनेश प्रकाशन ।

Paper-II : Physiology

Unit-I

- a) Animal cell--Structure, composition and division in brief, (Mitosis & Meiosis).
- b) Skeletal System -- Functions of Skeletal system. Names of the bones and joints.
- c) Digestive System-- Digestion & Absorption of food.

Unit-II

- a) Circulatory System :
Blood : Composition and functions and Coagulation.
1. Heart : Structure and working
2. Blood Pressure--factors.
3. Normal levels of haemoglobin, cholesterol, urea, uric acid and glucose in blood.

- b) Excretory System : Structure and functions of Kidney, Skin and Lungs.

Unit-III

- a) Reproductive System : Organs and functioning of male and female sex glands, menstruation and fertilization.
- b) Endocrine Glands : Functions of different glands, the pituitary, the thyroid and parathyroid, and adrenal, islets of Langerhans in pancreas.
- c) Nervous System : Parts (brain & spinal cord)--functions and reflex action.

References :

1. Evelyn Pearce : Anatomy and Physiology for Nurses.
2. Saweera Ralhan : Introduction to Textile and Physiology.
3. गृह व्यवस्था एवं स्वास्थ्यविज्ञान, सवीरा रत्न, दिनेश प्रकाशन ।
4. गृह व्यवस्था एवं स्वास्थ्य रक्षा, एस०पी०. सुखिया, जी०पी० बैरी ।

Paper-III : (Practical)

- (a) Study of different parts of sewing machine, its care, defect and remedies.
- (b) Preparations of samples (Minimum 12-15 samples) :
Basic stitches--Tucking, running stitches, hemming, button hole stitch.
Seams--Plain seam, run and fell seam.
Processes--gathers into a band.
Darts (Knife and box)
Placket opening (continuous warp & two piece placket opening)
Pin-tucks and cross tucks.
- (c) Taking body measurements.
- (d) Drafting of the following :
(1) Child's bodice-block and its adaptation to a gathered frock.
(2) Adult's bodice-block and its adaptation to their choice garment.
- (e) Drafting and stitching of following garments (Total Three) :
Frock-- Gathered with sleeves (3 to 8 years old).
Salwar or Petticoat. (any one).
Blouse or Kamiz or nighty (any one).
- (f) Embroidery-one article of fancy embroidery using at least four stitches.
- (g) Knitting : following of knitting instructions, preparation of two samples of knitting with different designs (6" x 6").
- (h) Stain removal : Curry, tea or coffee, blood, lipstick, nail polish, paint, grease, blue ink, rust and ball pen.
- (i) Tie and Dye (one article).
- (j) Soap preparations : hot and cold method.

✓ 26. Home Science

Subject	Scheme No. of Periods	Duration of Exam.	M.M. Ext.	M.M. Int.
Paper-I Food and Nutrition		2 Hours	27	3
Paper-II Human Development		2 Hours	27	3
Paper-III Practical		3 Hours	40	
Total		=	94	6 = 100

50

Instruction for Paper-II and II (Theory)

Instructions for the Examination : The examiner will set six questions in all, selecting two questions from each unit.

Instructions for the Candidates : The candidates will attempt three questions.

Special Note : The question paper should be set & evaluated by the teachers who are teaching Home Science B.A. Students.

Paper-I : Foods and Nutrition

UNIT-I

- (a) Food-functions of food and classification.
- (b) Essential food constituents : carbohydrates, proteins, fats.
- (c) Food source, functions, daily allowances, deficiencies and excess intake of followings :
 1. Vitamins - A, D, E, K, B₁, B₂, B₃, C, B₆, Folic Acid
 2. Minerals- Calcium, Phosphorus, Iron, Iodine, Fluorine, Sodium Potassium.
- (d) Water : functions in the body.
- (e) Role of Dietary fiber in human nutrition.

UNIT-II

- (a) Principles and methods of cooking-advantages and cooking of the food, effect of cooking on different nutrients, method of cooking, their advantages and disadvantages.
 1. Moist Heat Boiling, stewing, steaming
 2. Dry Heat Roasting, grilling, baking.
 3. Frying Shallow and deep.
 4. Radiation Solar and microwave.
- (b) Methods of enhancing nutritive value of food stuffs :
 1. Importance of enhancing nutritive value of foodstuffs.
 2. Method of enhancing nutritive value of food stuffs, sprouting, fermentation, combination and supplementation.

- (c) Food Preservation :
 1. Importance of food preservation.
 2. Causes of food spoilage.
 3. Principles of food preservation.
 4. Methods of food preservation with special emphasis on household methods.

UNIT-III

- (a) Meal Planning.
- (b) Concept of balanced diet.
- (c) Principles of meal planning, factors affecting it.
- (d) Principles of meal planning for children 3 to 5 years old, school going child, adolescents, adults.
- (e) Pregnant women and lactating mother.
- (f) Introduction to Therapeutic Nutrition
- (g) Therapeutic adaptation of the normal diet-soft and fluid diet.
 1. Typhoid fever.
 2. Diarrhea.
 3. Constipation
 4. Diabetes.
 5. High Blood Pressure.

REFERENCES :

1. B. Sri Lakshmi : Dietetics, New Age Publishers.
2. Joshi, Subhagini : Foods and Nutrition.
3. Swaminathan, M.S. (1985) : Essentials of Foods and Nutrition VI : Fundamentals Aspects VII : Applied Aspects.
4. Huges, O., Bennion, M. (1970) : Introductory Foods, 5th Edu., Macmillan Company.
5. गोपाल एवं आचार्य विज्ञान, डॉ. (श्रीमती) जी.पी. शैरी, विनोद पुस्तक मन्दिर, मेरठ ।

6. आहार एवं पोषण विज्ञान श्रीमती उषा मिश्रा, प्रकाशन, अगारा ।
7. आहार एवं पोषण, बाल विज्ञान एवं मातृकला, सवीरा दिनेश प्रकाशन ।

Paper – II : Human Development

UNIT-I

- (a) Child Psychology : Definition, aims, subject matter, objective of studying.
- (b) Learning : Meaning, Importance, Method of learning, Factor affecting learning.
- (c) Intelligence : Definition, Measurement of intelligence.

UNIT-II

- Personality Development : Definitions, types and factors affecting the development of personality.
- Play : Definition, features and types of play, Difference between work and play, Importance of play in childhood.
- Stages of the development of the child, characteristics of
1. Infancy
 2. Childhood
 3. Adolescent – problem of an adolescent child, role of parents and teacher in solving them.

UNIT-III

- The Expectant Mother :
- Sign of pregnancy.
 - Discomforts of pregnancy.
 - Care of the expectant mother in brief.
 - All effects of an early marriage.

Care of newborn infants : bathing, clothing and hygiene during infancy.

Feeding of an infant : breast feeding verses artificial feeding.

Weaning-meaning and importance, method of weaning C.

Common ailments of childhood :

1. Cold, cough, fever.
2. Digestive disturbances-Diarrhoea, constipation and vomiting, skin infection, prickly heat, allergy convulsions.

REFERENCES :

1. Gordon, I.J. (1975) : Human Development, New York : Harper and Row.
2. Harris, A.C. (1986) : Child Development, St. Paul : West Publishers.
3. Saraswati, T.S. and Kaur, B. (1993) : Human Development and Family Studies in India, New Delhi, Sage Publication.
4. बाल मनोविज्ञान, भाई योगेन्द्रजीत ।
5. पारिवारिक सम्बन्ध एवं बाल-विकास, विमला शर्मा, लायल बुक डिपो, मेरठ ।
6. बाल विकास और बाल मनोविज्ञान, सुरेश भटनागर, लायल बुक डिपो, मेरठ ।
7. आहार पोषण, बाल विज्ञान एवं मातृकला, सवीरा दिनेश प्रकाशन ।

Paper-III : Practical

Preparation of various dishes under following heads using different methods of cooking :

- (a) Beverages - hot and cold (2 hot and cold)
 - (b) Soups - Clear, thick and heavy (each)
 - (c) Desserts - minimum 5
 - (d) Snacks - using the method of baking, frying, grilling (3 min. each)
 - (e) Salads & dressing - Indian and continental.
 - (f) Breakfast dishes
 - (g) Main meal dishes
 - (h) Packed Lunch for child, office going person and picnic lunch.
 - (i) Soft and Fluid diets.
2. Food preservation- pickle, chutney, jam, squash, morchba (at least two each)
 3. Planning and preparation of meals for :
 - (a) Pre-school and school going child.
 - (b) Adolescents - boys and girls.
 - (c) Adult-belonging to low, middle and high income groups.
 - (d) Pregnant and lactating mother.
 4. Planning and preparation of invalid diets for the patients suffering from :
 - (a) Typhoid fever
 - (b) Diarrhea
 - (c) Constipation
 - (d) Diabetes
 - (e) High Blood Pressure

4. Special Dishes – Dosa, Idli, Sambar, Vada, Momo, Dokhla, Vegetables Rolls.