

**B.Sc. (Home Science) PART- II
MARKING SCHEME**

S.No.	Paper No.	Subject	Theory M. Mark	Practical M. Mark	Total	Theory M. Mark	Practical M.Mark
Group I	(A)	Foundation Course Hindi Language-I English Language-II	75		75	26	
	(B)		75		75	26	
Group II	(A)	Clinical Nutrition & Dietetics Textiles and Fiber Science	50	25	75	33	09
	(B)		50	25	75		09
Group III	(A)	Human Physiology & Community Nutrition Communication Process	50	25	75	33	09
	(B)		50	25	75		09
Group IV	(A)	Life Span Development Consumer Economics	50	25	75	33	09
	(B)		50	25	75		09

DISTRIBUTION OF MARKS IN VARIOUS PRACTICALS

No.	Name of the Practical	Total Marks	Distribution			Marks
			Session	Viva	Practical	
Group – II A	Clinical Nutrition & Dietetics	25	05	05	Planning	08
					Cooking + Presentation	07
Group – II B	Textiles and Fiber Science	25	05	05	Stain Removal	05
					Tie & Dye	05
					Printing	05
Group – III A	Human Physiology &Community Nutrition	25	05	05	Spotting	10
					Blood Practicals	05
Group – III B	Communication Process	25	05	05	Preparation of Audio Visual Aids - 2	15
Group – IV A	Life Span Development	25	05	05	Practical	15
Group – IV B	Consumer Economics	25	05	05	Practical	15

B.Sc. (HOME-SCIENCE) PART II
Group –II
Paper - A
CLINICAL NUTRITION & DIETETICS

M. Marks: 50

Focus : The course encompasses the various stages of the life cycle and how nutrition is critical at various stages. It briefly familiarizes students with the role of nutrition in common elements.

Objectives: This course will enable to students to -

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

THEORY

UNIT-I Definition of Health & Nutrition

Dimensions of Health (Physical, Psychological emotional & Spiritual)

Energy Requirements - Factors affecting energy requirements-BMR, Activity, age, climate, diet - induced thermogenesis (SDA physiological conditions.

Concept of nutritionally adequate diet and meal planning

- (a) Importance of meal planning
- (b) Factors affecting meal planning-Nutritional, Socio-cultural, Religious, Geographic, Economic Availability of time.

UNIT-II

Nutrition through the life cycle –

(At different activity and Social economic levels) requirements, nutritional problems, food selection.

- (a) Adulthood
- (b) Pregnancy
- (c) Lactation
- (d) Infancy
- (e) Pre-School . -
- (f) Adolescence
- (g) Old age

UNIT-III Principles of diet therapy

- (A) Modification of normal diet for therapeutic purposes, full diet, soft diet, Fluid diet, Bland diet.
- (B) Energy modification and Nutrition for weight management- Identifying the overweight and obese etiological factors contributing to. Obesity Prevention & treatment, low energy diets.
- (C) Under weight - etiology and assessment.
- (D) High energy diet, Diet for febrile (fever) conditions & surgical condition. Nutritional Anemia
- (E) Fevers – Typhoid

UNIT-IV

Etiology, Symptoms & diet management of the following -Diarrhea, Constipation, Peptic ulcer, Jaundice, Viral Hepatitis, Cirrhosis, musculoskeletal disease ,Arthritis, Gout.

UNIT-V

Diet in disease of the endocrine –

Pancreas - Diabetes mellitus - classification, symptoms, diagnosis, Dietary care & Nutritional, management of diabetes mellitus. Insulin therapy, Oral Hypoglycemic agents, special dietetic food, sweeteners & sugar substitutes, Diabetic coma, Juvenile Diabetes.

Diseases of the Cardio Vascular system –

Atherosclerosis Etiology & Risk Factors.

Hypertension - Etiology, prevalence Nutritional management & prevention.

Renal diseases - Etiology, characteristic, Symptoms & Dietary management of Glomerulonephritis- Acute & Chronic

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1. Krause, M.V. and Mohan, L.K. 1986 : Food, Nutrition and Diet Therapy, Alan R. Liss, Saunders Co., London.
2. Passmore, R. and Davidson, S. 1986 : Human Nutrition and Dietetics, Livingstone Publishers.
3. Robinson, OH., Laer, M.R. Chenoweth, W.L. Ganwick, A.E. 1986 : Normal and Therapeutic Nutrition, MacMillan publishing Company, New York.
4. Williams, S.R. 1989 : Nutrition and Diet Therapy, 4th Ed., C.V. Mosby Co.
5. Shils, M.E. Olson, J. A. Shike, M. Eds. 1994 : Modern Nutrition in Health and Disease, 8th edn., Lea and Febiger a Waverly Company.

Group-II, Practical-A

1. **Planning- Preparation of Normal and Therapeutic diet in relation to special and nutrient requirements (Any 15)**
 - 1 Adult
 - 2 Pregnancy
 - 3 Lactation
 - 4 Constipation
 - 5 Diarrhea
 - 6 Obesity
 - 7 Underweight
 - 8 Peptic Ulcer
 - 9 Jaundice
 - 10 Viral Hepatitis
 - 11 Cirrhosis
 - 12 Acute glomerulonephritis
 - 13 Chronic glomerule nephritis
 - 14 Diabetes mellitus (**using food exchange list**)
 - (i) With Insulin
 - (ii) Without insulin
 - 15 Hypertension(Atherosclerosis)
 - 16 Anemia
2. **Standardization of recipes**

B.Sc. (HOME-SCIENCE) PART II
Group –II
Paper - B
TEXTILE AND FIBRE SCIENCE

M. Marks : 50

THEORY

Unit – I

1. Principles of laundry and its methods
2. Equipment for washing :
 - Washing equipment
 - Drying equipment
 - Finishing equipment
 - Storage equipment
3. Cleaning materials and Detergents :
 - Soap and detergent
 - Other cleaning agents
4. Water : Composition, Classification, Hardness of water, Methods of removal of hardness

Unit – II

1. Useful suggestions for laundering
2. Washing of different kinds of fabrics : Cotton ,wool ,silk & synthetic
3. Bleach agents and other reagents used in laundry
4. Starch : types and uses
5. Blue : types and uses

Unit – III

1. Dry Cleaning
2. Stain removal : classification and technique of stain removal
3. Disinfection of cloths
4. Care and Storage of fabrics
5. Consumer problems and protections

Unit – IV

1. Equipment and supplies used in clothing construction :
 - Measuring equipment
 - Cutting equipment
 - Stitching equipment
 - Finishing equipment
2. Sewing machine: its parts & function, maintenance of machine , problems faced and remedies.
3. Selection of fabric for dress according to Climate, Age, Occupation, Personality, Occasion, Figure Type, Fashion etc.
4. Wardrobe Planning

Unit – V

1. Tailoring
 - General Principles of clothing construction
 - Taking body measurement for different type of garments

- Interrelationship Of Needles, Thread, Stitch Length, & Fabric
 - Cloth Estimation For Different Garments
 - Drafting & Draping
2. Pattern Making
 - General Instructions For Pattern Making
 - Method
 - Types & Layout
 3. Fitting
 - Fundamentals Of Fitting
 - Problems Area In Fitting
 - Factors Affecting Good Fit

Group-II, Practical-B

Printing - Block, screen, tie & die, stencil printing. -.

1. Stain Removal
2. Laundering of cotton, rayon silk wool & synthetics etc.
3. Bleaching & whitening
4. Starching
5. Care of household linen
6. Simple dyeing of different fabric.
7. Tie and Dye techniques
8. Batik
9. Finishing of fabric before dyeing & printing, Scoring, bleaching, Desizing.

REFERENCES:

Course: Introduction to Fashion Illustration

1. Tate, S.L., Edwards, M.S. 1987 : The complete Book of Fashion Illustration, New York, Harper & Row Publications, 2nd Edn.
2. Allen, Anne & Seaman, Julian : Fashion drawing : basic principles, B.T. Batsford, London, 1993, 108p.
3. Barnes Colin : Fashion Illustration, Macdonald, 1988.
4. Chowdhry, Sonia : A Unique phenomenon : understanding the dynamics of fashion, Clothesline 11 (11) Nov. 1998 p. 75-77
5. Ewing, Elizabeth : History of twentieth century fashion, Elizabeth Ewing, London, 1974, XI, 300P.
6. Ireland John Patrick 1976 : Drawing and Designing Men's Wear, London B.T. Brandford Ltd.

B.Sc. (HOME -SCIENCE) PART -II
Group –III
Paper - A
HUMAN PHYSIOLOGY & COMMUNITY NUTRITION

M. Marks: 50

THEORY

- Unit – I** An introduction of Physiology and Anatomy
1. Cell – Structure and functions of human cell.
 2. Tissues – Classification and structure
 3. Cardiovascular System –
 - (a) Blood – Composition & Functions
 - (b) Heart – Structure and Functions
 - (c) Vessles – Structure and Functions of Artery, Veins and Capillaries.
- Unit – II** Gastrointestinal System :
1. Structure and Functions of various organs of the gastrointestinal tract.
 2. Digestion and absorption of food.
- Nervous System :
- (a) Elementary Anatomy of Nervous System
 - (b) Functions of different part of the brain and spinal card.
 - (c) Autonomic, sympathenic & parasympathetic nervous system.
- Unit – III** Excretory System :
1. Structure and functions of kidney, bladder, formation of urine.
 2. Structure and functions of spin.
 3. Regulation of temperature of the body.
- Respiratory System :
1. Structure of Lungs.
 2. Mechanism of respiration and its regulation.
 3. Transportation of Gases
- Special Sense Organs :
1. Structure and functions of eye, Ear, Nose, Skin & tongue.
- Unit – IV** Musculo Skeletal System
1. Types of Muscles and its functions.
 2. Skeletal System – Types of Bones.
- Reproductive System –
Structure and functions of male & female reproductive organs.
- Unit – V** Concept and Scope of Community Nutrition :
1. Nutritional problems of the community & implications for public health.
Common Problems in India – Causes (Nutritional and Non Nutritional Problems)
Incidence of Nutritional problems, sigh, symptoms & Treatment.
Protein-Energy Malnutrition (PEM)
 2. Prophylaxis Programmes to Combat Nutritional Problems in India.

3. Food born disease-

- Food Poisoning
- Food Infections

REFERENCES:

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2. Winwood 1988 : Sear's Anatomy and Physiology for nurses, London, Edward Arnold.
3. Wilson 1989 : Anatomy and Physiology in Health and Illness, Edinburgh, Churchill Livingstone.
4. Chatterjee Chandi Charan 1988 : Text book of Medical physiology, London, W.B.
5. Saunder's Co. Verma, V. 1986 : A text book of Practical Botany, Vc;. I to IV, Rastogy Publication.
6. Anderson, D.B. and Mayer, B.S. 1970 : Plant physiology, Van Nostrand Reinhold Company', East West Press Edition.
7. Kochhar, P.L. 1994 : A text book of plant physiology, Atma Ram & Sons, Delhi..
8. Dhama, P.S. 1987 : A text book of Zoology, S. Nagin & Company, Julundhar.
9. K.S. Gopaldaswamy iyengar 1991 : Complete Gardening in India, Bangalore, Gapaldaswamy Parthasarthy.
10. Kochar, S.L. 1981 : Economic. Botany in tropics, Macmillan, India.
11. Hartmann, H. and Kester, D.E. 1993 : Plant Propagation principles and Practice, New Delhi, Prentice Hall of India (Pvt.) Ltd.

Group-III, Practical-A

1. Recording pulse rate.
2. Measurement of Blood Pressure.
3. Preparation of temperature chart.
4. Study of Histological slides of different organs.
5. Visit to one Anaganwadi centre and record the activities conducted by Anaganwadi.
6. Testing of adulterants in common foods (any five).
7. Making report of midday meal programme running at nearby school.

B.Sc. (HOME-SCIENCE) PART- II
Group –III
Paper - B
COMMUNICATION PROCESS

M. Marks: 50

Focus:

The course focuses on the process of communication, especially in development work in rural and urban areas.

Objectives: To enable students to –

1. Understand the process of communication in development work ;
2. Develop skills in the use of methods and media ; and
3. Be sensitive to the interests and needs of the people and the power of the media and methods in catering to these needs and interests.

THEORY

- UNIT-I** Concept of development communication
- Meaning and importance of communication in development
 - The purpose of communication
 - Existing patterns of communication
 - Factors that help or hinder communication
- UNIT-II** Communication Process
- One-way and two-way or interactive communication
 - Gaps in communication or distortions in transmission of message and their causes
 - Importance of two way communication
 - Basis for effective, interactive communication.
 - Attitude of 'respect for others
- UNIT-III** Methods of communication in Development Methods to reach individuals
- Personal conference
 - Interviews
 - House visits
 - Exhibits
 - Methods to reach small groups
 - Illustrated lecture
 - Group discussions
 - Co-operation
- UNIT-IV** Role Plays
- Demonstrations
 - Workshop
 - Camps
 - Radio announcements/programs
 - Newspaper stories
 - Posters
 - Videos, films
 - Television programmes
 - Letters, folders or pamphlets
 - Public meetings

- UNIT-V** Media for development communication
- Folk media Songs Stories Street-theatre
 - Games Arts
 - Puppet play Print media
 - Posters Pamphlets, leaflets
 - Newspapers - articles, stories
 - Periodicals - articles, stories, songs
 - Books
 - Cartoons
 - Audio/Visuals, Audio-Visual Media
 - Audio-tapes, radio broadcasts
 - Slides, pictures, drawings, photographs etc.
 - Videos, telecasts
 - Films-documentary, feature

Group-III, Practical-B

(ANY SIX)

1. Organising group discussion.
2. Organising group demonstration.
3. Preparation & Presentation of Audio visual aids, i.e. Posters, Charts, Cartoons, Models
Puppets.
4. Problem/need identification "of a community.
5. Planning an educational programme.
6. Evaluation of the effectiveness of methods and media.
7. Visit to Radio Station/T.V. Centre/Printing Press.
8. Preparation of Drama based on Social Development

B.Sc. (HOME-SCIENCE) PART- II
Group –IV
Paper - A
LIFE SPON DEVELOPMENT

M. Marks: 50

Focus :

This course covers the entire life span and traces the various developmental stages. Its encompasses in scope development in utero, infancy up to senescence identifying critical concerns in Socio-cultural perspectives.

To develop understanding of various methods and materials, which can be used-while working with children. The emphasis is on promoting creativity and use of different materials *to* allow for optimum development.

Objectives :

To become acquainted with developmental stages from birth to old age.

1. To develop awareness of important aspects of development during the whole life span.
2. To know the reqDon Welers (1974): uirement of infants and foddors and develop skills to create play materials and designing learning experiences.
3. To understand the significance of various creative activities and teachers role in implementry them.

Note : For each of the following stages of development, the-influence and inter-actions of sociocultural and environmental factors needs to be discussed.

THEORY

UNIT-I

1. Life Span development and need to study development through the life cycle. Inter-relationship between the aspects of development.
2. Childhood period (2 to 12 years) - Definition, Characteristics and Developmental tasks. "Review (2-6 yrs to 6-12 yrs) of different developmental areas (Physical, motor, Social, emotional, intellectual.

UNIT-II

Adolescence (13 to 18 years)

1. Definition, Developmental tasks.
2. Physical Development - Puberty, growth, spurts, Primary and Secondary sex characteristics, early and late maturing adolescents.
3. Identity - Definition, body image, positive and negative outcomes (Role confusion, ego-identity)
4. Heightened emotionality- Meaning causes, expression characteristics of emotional maturity, conflict with, authority coping up strategies.
5. Problems - Drug and alcohol abuse, psychological breakdown (Behaviour) STD and AIDS.

UNIT-III

Adulthood (19 to 60 years) and ageing- (Early adulthood 19 to 40 years) Definition and characteristics Development tasks, significance of the period, reponsibilities and adjustment - New family, parenthood, independence, financial matters.

1. Middle Adulthood (41 to 60' years), Definition, physical changes (senses, diseases- Transitation Period.
2. Menopause- Health issues.

3. Stresses in middle age, coping with stress to family.
4. Preparation for retirement.

Late Adulthood and Ageing – Definition.

1. Physiological changes, and health problems.
2. Retirement-effect of retirement on self family, society financial problems faced.
3. Recreational interest of the aged.
4. Issues- Old age homes, loneliness, living in joint family, prolonged illness. (Plan visit to old age homes.)

UNIT-IV

Infancy and Toddlerhood (Emotional Aspect)

1. Importance and ways of meeting child psychological needs to promote feeling of security, trust and acceptance.
Activities according to developments for various age groups
- (A) 0-6 months - Activities for simulating and sessions motor experiences with emphasis on seen, hearing, touching, feeling sensation and movements.
- (B) 7 to 12 months - Integration of experiences involving more than one sense to deeper sensory motor experiences promotic manipulation, concept formation, communication and perceptual divtiminsyion.
- (C) 13 to 24 months - Promotion of co-ordination and control of body movements, gross and fine motor skills. Strengthening concept formation, imagination and communication through language promotion of problem solving, environment to explore and satisfy curiosity and develop confidence.
- (D) 25-36 months - Improvement in body movement and communication skills, social skills concept formation.

UNIT-V

Creativity

- Concept of creativity and highlights of the role of creative expressions in overall development of children.
- Creative expressions, Meaning and definition of creativity expressions.
- Role of teacher in planning and fostering creative expressions.
- Creative expressions.
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Art Activities

- Painting and graphics
 - (a) Painting with brush, drawing with crayons, chalk, rangoli on floor, finger painting. (Some special characteristics of this medium)
 - (b) Values, materials required, use of substituler from indeigenous materials.
 - (c) Teacher's role in conducting activities.
 - (d) Stages in child art.
- Tearing, cutting, pasting and collage, mural
 - (a) Values, materials requirred and Teacher's role in conducting activities.
 - (b) Development stages.
- Printing
 - (a) Types of printing i.e. block, vegetables, string, leaf, stencils, spray, crumpled paper, different textured surfaces.
 - (b) Values, materials required techniques.

BLOCKS :

- (a) Some special features of this medium.
- (b) Types of blocks : hollow large blocks, unit blocks and small blocks.
- (c) Stages in block play.
- (d) Values, materials and accessories for block play.
- (e) Teacher's role

Other materials

- Sand
 - (a) Characteristics of the medium.
 - (b) Values, materials required and teacher's role.
- Water.
 - (a) Characteristics of the medium.
 - (b) Values, materials required and teacher's role.

Group-IV, Practical-A (ANY TEN)

1. Infancy and Toddlerhood
 1. A file to be prepared to list activities appropriate for age groups - 0-6 months, 7-12 months, 13 to 20 months and 25 to 36 months.
 2. Students be encouraged to observe materials available in the locality, Different types of shops, tailor.
 3. Develop play materials suitable for each age group.
 4. List activities, which can be used for working with different age groups.
 - (a) 0 to 6 months.
 5. Prepare materials and design activities for seeing, hearing touching and feeling.
 6. Sensation and movement for soothing movements and exercises.
 - (b) 7 to 12 months.
 7. Prepare materials and design activities for touching and feeling sensation and movement, and manipulation.
 - (c) 13 to 14 months.
 8. Identify activities for gross motor development and prepare play materials available in the locality.
 9. Prepare play materials and list activities promote manipulation sensory experiences, concepts and language.
 10. Visit to old age homes.
- Art Activities**
 11. A few suggestions are given under each category as guideline students be encouraged to explore experiment with each media and understand the characteristics of each medium.
Samples of each be included in the resource file which each student is expected to maintain along with description of values materials and technique used.
 12. Difficulty level of each activity be considered and decide its suitability for different age groups.
 - Painting and graphics
 - Prepare a variety of brushes from different types of brooms, cotton, wool, strips of cloth, feather etc

Tearing cutting and pasting

13. 3-5 years
Tearing with all fingers, tearing with thumb and two fingers as used in holding pencil, tearing on straight line, curved line.
14. 6-8 years
Tearing circular rings starting from one corner of the page till centre of page, Making designs.
15. 3-5 cutting and pasting
Cutting a design, pasting, please of paper, cloth, sticks leaves collage, mosaic Printing

Printing

16. Printing with strings, leaf, vegetable blocks, stencil printing, thumb," finger, spray painting
17. Keeping coins, leaves with veins below paper and gently colouring with crayon.

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2. Craig, G. 1999 : Human Development, N.J. : Prentice Hall
3. Cole, M. & Cole, S. 1995 : The Development of Children, NY Freeman & Co., Gardiner,
H.W. Mutter, J.D. & Kosmitzki 1998 : Lives Across Cultures, Oston, Allyn & Bacon.
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MC Graw Hill
5. Rice, F.P. 1965 : Human Development : A life. Span Approach, NJ : Prentice Hall.
6. Santrock, J.W. 1997 : Life Span Development, NY Brown & Bench mark.

B.Sc. (HOME-SCIENCE) PART- II
Group –IV
Paper - B
Consumer Economics

M. Marks: 50

THEORY

- Unit – I** Consumer
- 1- Definition of consumer
 - 2- Consumer rights and responsibility
 - 3- Consumer buying habits convenience goods
 - 4- Factors affecting consumer decision
- Unit – II** Personal income
- (1) Types of income – real, money, psychic, national income, disposable income.
 - (2) Saving and investment
 - (3) Sources of investment
 - (4) Factors affecting savings
 - (5) Ways of selecting investment
- Unit – III** Consumer in the market
- (1) Market- Definition, types of market, functions, channels of distribution.
 - (2) Buying motives – Primary selective, rational emotional and totranages.
Types of Products
Advertisement, Sales, Promotion packing
 - (3) Consumer Buying Problems
 - (1) Adulteration- kinds and identification of adulteration.
 - (2) Faculty weights and measure
 - (3) Pricing
 - (4) Legal – guarantee and warrantee contracts, installment buying
 - (4) Buying process
- Unit – IV** Consumer Protection services
- (1) Organisations
 - (2) Legislation – import laws for consumer protection
 - (3) Consumer representation
Consumer and consumers problems- choice and buying problems of consumer
 - (4) Consumer protective services
 - (1) Indian Standard Institution
 - (2) Educational Institution
 - (3) Consumer Co-operatives
 - (4) Government Agencies Municipality
- Unit – V**
- (1) Consumer Decision making
 - (2) Factors effecting consumer decision in the market
 - (3) Good buy man ship
 - (4) Consumer aides for decision making

Group-IV, Practical- B

- 1- Test for adulteration
- 2- Filling of different types of form to protect consumer
- 3- Filling of form of investment services
- 4- Activity of educate consumer
- 5- Collection of samples of different symbols for helping consumer buying .
- 6- Project preparation in any relevant area.

References:

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- Seetha Raman P and Sethi M 2001 Consumerism, strength and tactics, New Delhi CBS publishers.
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- Sales Management, 5th Edu., Cunniff Boiling, (Unit II, IV)
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- Sarkar, A : Problems of Consumers in Modern India, Discovery Publishing House. (Unit VII-X)
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