

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART-II (3RD YEAR)

Note:- Students will be required to select one major area of specialization and one supporting elective supplementary paper of the same area.

Paper		Subject	Theory	Practical	Total	Credit hours	Page No.
I		Group A (FOOD & NUTRITION)					
	HE306	i. Physiological Aspects of Nutrition	75	25	100	05	95
	HE316	ii. Community Nutrition	75	25	100	05	97
		Group B (TEXTILE & CLOTHING)					
	HE307	iii. Advanced Textiles	70	30	100	05	98
	HE317	iv. Draping	50	50	100	05	99
		Group C (HUMAN DEVELOPMENT & FAMILY STUDIES)					
	HE318	v. Early Childhood Education & Administration	70	30	100	05	101
	HE328	vi. Educational Psychology & Measurement Techniques	70	30	100	05	103
		Group D (ART & DESIGN)					
	HE319	vii. Art & Design	60	40	100	05	104
	HE329	viii. Essentials of Interior Design	60	40	100	05	105
		Group E (HOUSING, HOME MANAGEMENT AND INTERIOR DESIGN)					
	HE310	ix. Environmental Management	75	25	100	05	107
	HE320	x. Designing the Interior	--	100	100	05	108
		Group F (INTER - DISCIPLINARY GROUP)					
		xi. Human Resource Management	100	--	100	05	109
		xii. Organizational Behavior	100	--	100	05	111
II		Elective Supplementary (any one)					
	HE339	a. Art Appreciation	100	--	100	05	113
	HE330	b. Applied Interior Design	60	40	100	05	114
	HE340	c. Fundamentals of Accounting	100	--	100	05	115
	HE338	d. Elementary Childhood Education	70	30	100	05	117
	HE348	e. Communication in Human and Family Relations	70	30	100	05	119
	HE327	f. Textile Marketing & Merchandizing	60	40	100	05	121
	HE337	g. Textile & Clothing Industrial Management	60	40	100	05	122
	HE347	h. Decorative Fabrics	50	50	100	05	123
	HE326	i. (i) Food Technology & (ii) Food Microbiology	50 50	--	100	05	124
	HE350	j. Interior Design Planning & Organization	75	25	100	05	126
III	HE302	Computer Studies	70	30	100	05	128
IV	HE303	Physics	75	25	100	05	131
V	HE308	Psychology	100	--	100	05	133
VI	HE305	Introduction to Research Methodology (i) Research (ii) Statistics	50+50	--	100	05	134
Total					700	35	

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group A)

PHYSIOLOGICAL ASPECTS OF NUTRITION

Paper: I (i)
HE306

Credit hours: 05
Total Marks: 100
Theory: 75
Practical: 25

- I. Cell Physiology
 - a) Structure of the cell
 - b) Function of the cell

- II. Composition of the Body
 - a) Chemical composition of the body
 - b) Methods of assessment
 - c) Compositional changes with growth and age.

- III. Enzymes – A Brief Study
 - a) Chemical nature and properties
 - b) Classification
 - c) The mechanism of enzyme reaction
 - d. Factors effecting enzyme activity

- IV. Digestion and Absorption
 - a) Structure of the alimentary tract
 - b) Process of digestion
 - c) Digestive secretion
 - d. Mechanism of absorption
 - e) Malabsorption syndrome

- V. Nutrient Exchange and Homeostatic Control
 - a) Mechanism of exchange
 - b) Renal-control. Water and electrolyte Balance

- VI. Review of Blood and Nutritional Anemias
 - a) Functions of blood
 - b) Composition of blood
 - c) Blood groups
 - d. Nutritional anemias

- VII. A Brief Study of Hormones
 - a) Mechanism of action of hormones
 - b) The hypothalamus
 - c) Hormones of anterior pituitary
 - d) Pancreatic hormones
 - e) Thyroid hormones
 - f) Parathyroid
 - g) Sex hormones

VIII. Inborn errors of metabolism. Disorders related to carbohydrate protein and lipid metabolism.

IX. Liver and its Functions:

- (a) Structure of Liver
- (b) Functions of Liver

Practical:

1. Blood Analysis-hemoglobin, cholesterol and glucose
2. Urine analysis (blood. protein. vitamins)
3. Assessment of nutritional status anthropometric dietary, clinical and biochemical assessment.

Recommended books:

1. Fox, S.T. (2008). *Human Physiology*. (10th ed.)
2. Sherwood, L. (2007). *From cells to systems*. (6th ed.)

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group A)

COMMUNITY NUTRITION

Paper: I (ii)
HE316

Credit hours: 05
Total Marks: 100
Theory: 75
Practical: 25

Objectives:

1. To understand nutrition problems and their prevalence in vulnerable groups.
 2. To plan nutrition education programme for institutions and community to prevent nutritional disorders.
- I. Primary nutritional diseases:
 - a. Protein energy malnutrition.
 - b. Rickets and Osteomalacia.
 - c. Scurvy.
 - d. Beriberi, Xerophthalmia and Keratomalacia.
 - e. Pellagra, Nutritional Anaemia.
 - II. Special problems and nutrition of different groups
 - a. Infancy
 - b. Young children
 - c. Pregnant and lactating women.
 - d. Adolescent
 - e. Elderly
 - III. Prevention of nutritional disorders
 - a. Nutrition Education.
 - i. Planning of Nutrition education programmes; nutrition education in schools and professional institutions, education of the mothers and the community; impact of nutrition on learning.
 - b. Community sanitation
 - c. Food enrichment and supplementation

Practical: Report Writing.

Recommended books:

1. Dhaar, G.M. (2006). *Foundations of community medicine*.
2. Edelsterin, S. (2006). *Nutrition in public health*. Handbook for developing progress and services.
3. Robert, K.L. (1996). *Moving to the future developing community based nutrition services*. Washington DC: Association of State and Territorial Public Health Nutrition Desereters:
4. Zia, M. (2007). *Nutrition for individual, family and community*. Pakistan, Najb. A. Ch.

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group B)

ADVANCED TEXTILES

Paper: I (iii)

HE307

Credit hours: 05

Total Marks: 100

Theory: 70

Practical: 30

Objectives:

1. To enable the students to identify fibers by microscope and chemical methods.
2. Production and performance characteristics of natural and manmade fibers.
3. Importance of fabric designing and finishes.
4. Yarn manufacturing and production

Contents:

- I. Fiber identification using technical methods:
 - a. Microscopic
 - b. Chemical
 - II. Production and performance characteristics of fibres both natural and man-made
 - III. Yarn classification and manufacturing.
 - a. Production of yarn
 - b. S and Z Twist in relation to the appearance of the fabric
 - c. Blend varieties
 - d. Effect of varying blend components in fabrics available in the market.
 - e. Novelty yarn:
 - IV. Fabric construction
 - a. Fabrics made without films and paper fabrics etc.
 - b. Fabrics made from fibre felts; banded fabrics, etc.
 - c. Fabrics made from yarn Braiding, netting, lacing knitting and weaving.
 - V. Fabric Designing:

Processes by which colour and design are applied to fabric

 - a. Printing hand and machine methods
 - b. Dyeing in raw material yarn and fabric
 - c. Weaving as a means of giving pattern and design
 - VI. Fabric finishes in relation to appearance and end use.
 - a. Pressing
 - b. Shrinking
 - c. Napping
 - d. Water proofing
 - e. Embossing
 - f. Flame resistance
 - g. Crease resistance
 - VII. Merchandizing:
 - a. Study of marketing function and institution.
 - b. Marketing policies and practices
 - c. Product development and promotion, pricing.
 - d. Marketing research and government regulations of market behaviour.
2. Latest developments in textiles.

Practical:

1. Hand knitting
2. Fiber Analysis
3. Files

Recommended books:

1. Boer, J.D. (1997). *Dyeing for Fibers and fabrics*. (Rev. ed.). Kangaroo Press.
2. Corbman, B.P. (1995). *Textiles: Fibers to fabric*. New York: McGraw Hill Book Co.
3. East European (Magazine subscription). *Textile and clothing directory*. Word Textile Publications Ltd.
4. Gohl, E.P.G., & Vilensky, L.D. (1990). *Textiles science*. GBS. Publishers, India.

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B.S. HOME ECONOMICS PART II (3RD YEAR) Elective Major (Group B)

DRAPING

Paper: I (iv)
HE317

Credit hours: 05
Total Marks: 100
Theory: 50
Practical: 50

- I. The Dress Form.
 - a) Padding the dress cover.
 - b) Padding the dress form.

- II. Basic Blouse.

Draping basic blouse on the dress form.

 - 1 Draping Qameez (or its variations) on the dress for.
 - 2 Sleeves.
 - a) Drafting and flat-pattern designing of basic set in sleeves.
 - b) Designing set- in sleeves from the master pattern. One- piece sleeves block.
 - c) Sleeves cut in one with the Bodies or a part of the bodice.
 - 3 Fitting.
 - a) General pricaiples of fitting.
 - b) Preparation of the Master pattern for Fitting.
 - c) Fitting problems of the blouse or Qameez.
 - d) Fitting problems of the sleeve.
 - 4 Collars and Necklines- through draping.
 - 5 Sources of inspiration in Fabric.
 - a) Development line arrangement by sketching.
 - b) Studying the Fabric.
 - c) Draping for general effect.
 - d) Draping with muslin for details of design.
 - e) Interpreting silhouettes as complete design.
 - f) Molding the fabric to the from by seams and concealed darts.
 - g) Development design theme from variations of basic darts.
 - h) Carrying one piece of fabric as possible without cutting.
 - i) Deriving Usual effects from Asymmetric cuts.
 - j) Designing from a detail.

PRACTICAL :

- 1 Basic Blouse.
 - a) Fitted Blouse (Master Pattern, Stitched with a variation).
 - b) Ease pleat blouse(master pattern, stitched with lining).

- 2 Basic darts.
- 3 Yokes.
 - a) Yokes without gathers.
 - Straight yoke.
 - Curved yoke.
 - V- Yoke.

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- b) Yoke with gathers.
 - Straight yoke.
 - Crud yoke.
 - V- Yoke.
 - Collars.

- 4 Collars.
 - a) Peter Plan collar (master pattern, stitched).
 - b) Standing collar (master pattern stitched).
 - c) Convertible collar (master pattern stitched).
 - d) Shawl collar (master pattern stitched).

- 5 Skirt.
 - a) Circular skirt (master Pattern).

- 6 Straight Draped (master patten).
Any 3 master patterns (made from given 6 Diagrams)
Stitch any one from the given patterns.

- 7 Shirt / jacket with sleeves and collar.
 - a) Sketch.
 - b) Master Pattern.
 - c) Stitching.

- 8 Dress with a source of inspiration.
 - a) Source
 - b) Sketch
 - c) Plan of Garment
 - d) Master Pattern

- 9 Sleeves
 - a) Drafting
 - b) Flat Pattern(Paper work only)

- 10 Design Based on sourced of inspiration.
 - a) Mod board and research board.

- 11 Figure Drawing and fashion drawing.
 - a) Mood board and research board.

REFERENCE BOOK.

- 1 Mavain S. Still House, Enlyn A. Mansfield, Dress Design, Draping and flat pattern Making, Michigan state College.
- 2 practical Dress Design.
- 3 Brockman. The theory of fashion design. John Wiley and sons Inc. New York.
- 4 Still House and Mansfield. Dress Design. Houghton.
- 5 Sheldon Design through draping, Burgers publishing Co. Minneapolis.
- 6 Earnestine Kppp. Design apparel though the flat pattern. Fair childs publications Inc. New York.

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group C)

EARLY CHILDHOOD EDUCATION AND ADMINISTRATION

Paper: I (xi)
HE318

Credit hours: 05
Total Marks: 100
Theory: 70
Practical: 30

- I. Early Childhood Education and its key models
 - a. Needs, goals, principles and beliefs of early childhood education.
 - b. Brief overviews of the following models
 - i. Montessori education
 - ii. Nursery school education
 - iii. Kindergarten education
 - c. Review of latest research in the field

- II. Curriculum planning for Early Childhood Education
Planning experience for:
 - i. Language and communication skills
 - ii. Development of motor skills
 - iii. Pre – academic skills
 - iv. Social interaction

- III. Media and Techniques of Education
 - a. Play as a media of education in early childhood years.
 - b. Language and storytelling as a media of education
 - c. Creative media art / music
 - d. Techniques of education
 - i. Questioning
 - ii. Problem solving

- IV. Planning for Effective Teaching
 - a. Teaching to be related to objectives
 - b. Developing skills in class-room management
 - c. Time management
 - d. Managing, controlling and disciplining of children in class
 - e. Management of problem children
 - f. Teaching strategies

- V. Administration of Early Childhood Programmes
 - a. Understanding administrative functions
 - b. Managing personnel
 - c. Financing and budgeting
 - d. Care of equipment and materials
 - e. Parent – teacher meetings

- VI. Assessment in Early Childhood Education
 - a. Definition, significance, principles and issues of assessment and evaluation.
 - b. Standardized Tests
 - (i) Developing, selecting and using standardized tests
 - (ii) Reporting standardized test results.

VII. Class Room Assessment in Early Childhood Education

- a. Types of assessment
 - (i) Observation
 - (ii) Checklist, Rating Scales and Rubrics
 - (iii) Teacher designed strategies
 - (iv) Performance-Based strategies
- b. Using Assessment Systems
 - (i) Portfolio Assessment
 - (ii) Communicating with families

Practical:

- 1. Preparing and presenting 3 lessons for children in the following.
 - (i) Adapted and translated books for children
 - (ii) Preparation of interesting educational games
 - (iii) Pre-academic skills
- 2. Helping the department in the management and administration of nursery school
 - (i) Parent – teacher meetings
 - (ii) Assessment of children's pre-academic skills (portfolio)

Recommended books:

- 1. Johnson, R. (1997). *Approaches to early childhood education*. Mcrill Publishing Company, Columbus, Ohio.
- 2. Lange-back, M., Tcanna, N., Charles, E. (1997). *Day care curriculum considerations*. Mcrill Publishing Co.
- 3. Hamilton, N.K. (1995). *New technique for effective school administration*. New York: Parker Publishing.

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B.S. HOME ECONOMICS PART II (3RD YEAR) Elective Major (Group C)

EDUCATIONAL PSYCHOLOGY & MEASUREMENT TECHNIQUES

Paper: I (vi)
HE328

Credit hours: 05
Total Marks: 100
Theory: 70
Practical: 30

- I. Introduction:
 - a. Meaning of educational psychology
 - b. Research in educational psychology
 - c. Contribution of educational psychology
- II. Contribution of school of psychology in education:
 - a. Structuralism
 - b. Functionalism
 - c. Behaviorism
 - d. Psychoanalysis
 - e. Gestalt School of Psychology
- III. Educational implications of developmental theories:
 - a. Piaget
 - b. Erickson
 - c. Vygotsky and Kohlberg
- IV. Theories of learning:
 - a. Meaning of learning
 - b. Implication of learning for teachers
 - c. Types and Methods of learning
 - d. Classification of the theories
 - e. S-R theories without reinforcement
 - f. S-R theories with reinforcement
 - g. Cognitive field theory.
- V. Motivation and class room learning:
 - a. Definition and importance of motivation
 - b. Types/methods of motivation Function of motivation.
- VI. Intelligence and class room learning:
 - a. Definition and types of intelligence
 - b. Theories of Intelligence
 - c. Multifactor theory (two factor theory, Guyford's theory)
 - d. Measuring intelligence (Binet's intelligence scale, Waschler's intelligence scale).
- VII. Psychological testing in educational psychology:
 - a. Meaning and importance of psychological testing
 - b. Characteristics of psychological testing
 - d. Types of standardized test.

Practical:

- a. Learning to administer any two of the following
 - i. 16 PF
 - ii. S.P.M.
 - iii. Wechsler
 - iv. TAT
- b. Collecting evidences through audio visual aids to confirm the theories
- c. Planning Curriculum for various grades

Recommended books:

1. Anita, E. W. (1990). *Educational psychology*. (4th ed.). Prentice Hall, U.K.
2. Berryman, J.C. (2003). *Psychology and you*. (2nd ed.). Londer Blackwell Publishers.
3. Starwberg, R.J. (1998). *In search of the human mind*. (2nd ed.). McPack.

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group D)

ART AND DESIGN

Paper: I (vii)
HE319

Credit hours: 05
Total Marks: 100
Theory: 60
Practical: 40

Art History

- I. Islamic Art (Muslim Art)
 - a. Elements of Islamic Architecture and Architectural Decoration
 - b. Ummiyad
 - c. Abbasids
 - d. Islamic Art in Persia
 - i. Mongol
 - ii. Timurid
 - iii. Safavid
- II. Development of Islamic Calligraphy
 - a. Angular scripts
 - b. Cursive scripts
- III. Crafts of Pakistan
 - a. Brief History and Technique
- IV. Batik
 - a. History
 - b. Procedure
 - c. Various Effects

Practical:

1. Batik
 - a. 2 Batik Projects. Illustrating effects of color and use of different techniques
2. Drawings
 - a. 3 drawings made in each medium
 - Charcoal
 - Pen & Ink
 - Watercolor
 - Pastels
3. Design
 - a. One 3D project in Plaster of Paris
4. Portfolio of year's work

EXAMINATION: There will be a practical exam of three(3) hours for six(6) days.

Recommended books:

1. Blair, S.S. & Bloom, J. M. (1994). *The art and architecture of Islam*. Yale: University Press.
2. Blair, S. S. & Bloom, J. M. (2002). *Islamic arts*. New York: Phaidon Press Inc.
3. Hasan, I. (1996). *Painting in Pakistan*. (2nd ed.). Lahore: Feroze Sons Pvt. Ltd.
4. Hashmi, S. & Mirza, Q. (1997). *50 years of visual arts in Pakistan*. Lahore: Sang-E-Meel Publications.

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group D)

ESSENTIALS OF INTERIOR DESIGN

Paper: I (viii)
HE329

Credit hours: 05
Total Marks: 100
Theory: 60
Practical: 40

Objectives:

This is a basic program, which will facilitate the students in their future studies of art and in interior related careers.

- I. Elements and Principals of Art in relation to Interior Design
 - a). Form follows function and variety in unity; balance, rhythm, emphasis, harmony, proportion and scale

- II. Principles of House Planning
 - a). Size & Shape
 - b). Topography
 - c). Landscaping
 - d). Orientation

- III. 1) Types of House
 - a). Single story
 - b). One & a half story
 - c). Double story
 - d). Split level house
 - 2) Housing types
 - a). Row houses
 - b). Town houses
 - c). Semi detached houses
 - d). Singe family detached houses

- IV. Planning of the house
 - a). Storage space
 - b). Circulation
 - c). Ventilation

- V. Interior elements
 - a). Walls and Fireplaces:
 - i. Walls create character, designs of walls, wall construction and materials, wall finishes and surfaces, fireplace designs.
 - b). Windows and Doors
 - i. Types of windows, designs and location, window treatments, types of doors, design of doors.

- c). Floors and Ceilings
 - i. Hard and resilient floors, ceiling height, shape, materials, colour and texture.

- d). Accessories
 - i. Wall pictures, home furnishings, and flower arrangements.

Practical:

Design: Application of Elements and Principals of Design:

1. Two exercises in each category.
(i) Wall Paper (ii) Drapery (iii) Upholstery

2. Room planning of different shapes & sizes in different types of rooms.
Square Rooms
Rectangular Rooms
L-Shaped Rooms
Drawing Rooms
Dinning Rooms & Kitchens
Bed Rooms:
 - i. Master Bed Room
 - ii. Nursery Bed Room
 - iii. Teenager's Bed Room

Portfolio: Presented for final examination

EXAMINATION:

There will be a practical exam of three(3) hours for six(6) days.

Recommended books:

1. Chase, L. & Cerwinske, L. (1999). *In your own style*. London: Thames and Hudson Ltd.
2. Chiara, J.D., Julius, Z. M. (1991). *Time saver standards for interior design and space planning*. McGraw Hill, Inc.
3. Fiell, P. & Charlotte. (2001). *Modern furniture classics, postwar to post modernism*. London: Thames & Hudson.
4. Kilmer, W.O. & Kilmer, R. (2001). *Construction drawings and details for interiors*. Basic skills. Willey.
5. Pile, J. (2000). *A history of interior design*. London: Calmann A. Kind. Ltd.
6. Pile, J. F. (1995). *Interior design*. A times Mirror Company. New York: Harry N. Abrams Inc. Publications.

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group E)

ENVIRONMENTAL MANAGEMENT

Paper: I (ix)
HE310

Credit hours: 05
Total Marks: 100
Theory: 75
Practical: 25

Objectives:

1. The main objective of environmental management is to make students understand the importance of healthy environment and its impact on humanity.
 2. The student will also learn about the aesthetic qualities of environment and they will be able to create products, services, environments and buildings that are sustainable and environment friendly.
- I. An introduction to environmental management
 - a. Definition and scope
 - b. Relationship of environment and management
 - c. Responsibilities of public, private and social sectors
 - II. Population growth and urbanization
 - a. Man in his ecological settings
 - b. Growth in population and urbanization
 - c. Population growth and its effect on environment
 - d. Ecocide and its effect on environment
 - III. Environmental degradation
 - a. Concept of technology and environment
 - b. Land pollution: causes and remedies
 - c. Air and water pollution: causes and remedies
 - d. Destruction of forest and its effects on environment.
 - e. Waste Disposal
 - IV. Environmental aesthetics
 - a. Definition and scope
 - b. Aesthetic qualities of environment
 - c. Ways and means to work towards environmental aesthetics
 - V. Environment & Management
 - a. Scope of management in environment
 - b. Health and environment
 - c. Socio – Psychological effects of environment

Practical:

1. Scrap book / report on diversified environment issues.
2. Models / posters / presentations on environment.

Recommended books:

1. Hussain, M. (1998). *Environmental degradation*. Lahore: Feroze Sons, (Pvt.) Ltd.
2. Gifford, R. (2007). *Environmental psychology, principles and practices*. (4th ed.). Colville WA Optimal Books.
3. Porteous, D. J. (2000). *Environmental aesthetics ideas, politics and planning*. (1st ed.). Islamabad: Farhan Raza Printers.
4. Wright, R.T. & Nebel, B. J. (2002). *Environmental science toward a sustainable future*. (8th ed.). New Jersey: Pearson Education.
5. Witkin, J. B. (2002). *Environmental aspects of real estate and commercial transactions from brown field to green buildings*. American Bar Association.

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group E)

DESIGNING THE INTERIOR (PRACTICAL)

Paper: I (x)
HE320

Credit hours: 05
Practical Total Marks: 100

Objectives:

To train students in drawing techniques for effective representation of their ideas regarding current trends in interiors.

- i. Elementary Drafting:
- ii. Development and presentation of interior drawings (Residential Commercial)
(all areas of a house) to express
 - Colour and colour schemes
 - Furniture arrangement
 - Furnishing materials.
 - Storage.
- iii. Observation reports on furnishing trends of selected interiors and survey of markets for furniture and furnishing and finishing materials

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group F)

HUMAN RESOURCE MANAGEMENT

Paper: I (xi)

Credit hours: 05

Total Marks: 100

- I. The development of human resources management:
 - a. The concept of Human Resources Management
 - b. Early Stages in Development
 - c. Human Resources Management as a Profession

- II. The contemporary environment changes and challenges:
 - a. Elements of an Organization's Environment
 - b. Changes That Challenge Managers of Human Resources

- III. Organizational considerations in managing human resources
 - a. The Organization as a System & organizational structure
 - b. Responsibility and Authority Within the Organization
 - c. The Human Resources Department in an Organization

- IV. Job requirements:
 - a. Job Design
 - b. Job Analysis & Competency approach
 - c. Job Requirements
 - d. Job Description

- V. Human resource planning and requirement
 - a) Human Resource Planning
 - b) Determining Vacancies
 - c) Recruiting from within & outside the Organization
 - d) Preparing & publishing information
 - e) Processing & assessing application
 - f) Notifying the applicants
 - g) EEO/AA in Recruitment

- VI. Analyzing the qualifications of job candidates & selection of employees
 - a) Matching People and Jobs
 - b) Sources of Information About Job Candidates
 - c) Process & instruments of selection: Interview, & Tests

- VII. Making selection decisions
 - a) Validation and the Selection Process
 - b) Reaching a Selection Decision
 - c) Legal Requirements That Shape Selection Policies

- VIII. Training employees
 - a) Definition: The foundation for effective practice
 - b) Training Programs & policy
 - c) Identifying training needs & objectives
 - d) Psychological Principles of Learning

- e) Training managers & non-managerial Employees
- f) Training providers, methods & location
- IX. Career development
 - a) Phases of a Career Development Program
 - b) Career Development Program for Special Groups
 - c) Personal Career Development
- X. Performance appraisal
 - a) Purposes & uses of performance appraisal
 - b) Choosing appraisal criteria
 - c) Performance Evaluation Programs & Methods
 - d) Process & problems of performance appraisal
- XI. Motivating employees to work
 - a) Motivation: Definition & techniques of motivation
 - b) Need-want-satisfaction chain
 - c) Maslow's hierarchy of needs
 - d) Herberg's two-factor theory
 - e) Vroom's valiancy expectancy theory
 - f) Equity, & reinforcement theory
 - g) McClelland's needs theory
 - h) Job Enrichment & Job Satisfaction
- XII. The dynamic of labor relations
 - a) The Role of Labor Organizations
 - b) Comparison, Functions and Leadership of Labor Unions
 - c) Government Regulations of Labor Relations
 - d) Contemporary Challenges to Labor Organizations
- XIII. Safety and health
 - a) Legal Requirements for Safety and Health
 - b) Creating a Safe Work Environment
 - c) The Management of Stress
- XIV. Auditing the human resources management programme
 - a) The Human Resources Audit
 - b) Approaches to the Human Resources Audit
 - c) Indicators for Evaluating The Work Environment
 - d) Utilizing Audit Findings

Recommended books:

1. Shaun, T. & Alfred, Y. (2001). *Essentials of HRM*. (4th ed.). Delhi: Replika Press Pvt. Ltd., India.
2. William, B. W. & Keith, D. (1997). *Human resource & personnel*. McGraw Hill
3. Wayene, F. C. (1996). *Managing H.R.* (4th ed.)
4. Bernardin, & Russell. *Human resource management*. (2nd ed.). McGraw Hill
5. Robert, E. C. & C. P. F. (1990). *Managing human relations*. London: Merrill Publishing Company.
6. Judith, R. G. (1998). *Human resource management*. Allyn & Bacon, Inc.,

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B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Major (Group F)

ORGANIZATIONAL BEHAVIOUR

Paper: I (xii)

Credit hours: 05

Total Marks: 100

I. Introduction:

- a. What is organizational behavior?
- b. Application to organizational behavior
- c. Cognitive frame work; Behaviorist
- d. Social & Organizational framework.

II. Perception:

- a. The nature and importance of perception
- b. Sensation versus perception
- c. The senses
- d. Definition and sub processes of perception
- e. Perceptual Organization
- f. Figure-Group,
- g. Perceptual grouping
- h. Perceptual constancy
- i. Perceptual context
- j. Perceptual defense
- k. Social perception—characteristics of perceiver
- l. Attribution
- m. Stereotyping
- n. The Halo Effect.

III. Personality:

- a. The meaning of personality: The self-concept, self-esteem and self-efficiency.
- b. The development of personality: Adult life stages; Immaturity to maturity.
- c. Major determinants of personality: Biological cultural and situational contributions

IV. Motivation:

- a. Meaning (primary, secondary, general, motives).

V. Group dynamic:

- a. Nature and types of groups
- b. Committee organization:
 - i. Nature and Function of committee Positive and negative attributes of committee;
 - ii. Dynamics of informal groups:
- c. Norms and roles in informal groups;
 - i. Informal managerial roles and organization structure.

VI. Interactive behavior and conflicts:

- a. Intro –individual conflicts
- b. Interpersonal conflicts
- c. Inter group behavior and conflict
- d. Organizational Conflict

VII. Job stress:

- a. Meaning and background;
- b. Causes of stress
 - i. Organizational
 - ii. Extra-organizational
 - iii. Group and individual stresses
 - iv. Effects of Job stress
- c. Physical, Psychological and behavioral problems due to stress
- d. Coping strategies individual and organizational strategies.

VIII. Power and politics:

- a. Meaning and distraction of power and authority
- b. Classification of power
- c. Political implication of power
- d. Political perspective of power in organization
- e. Political strategies for power acquisition.

Recommended books:

1. Luthans, F. (1992). *Organizational behavior*. Singapore: McGraw Hill, Inc.
2. Richard, M.H. (1990). *Management theory, process and practice*. Hacourd Brace Jovanvich Publishers.
3. Koontz, H. *Management*. Singapore: McGraw Hill.

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Supplementary

ART APPRECIATION

Paper: II (a)
HE339

Credit hours: 05
Total Marks theory: 100

Objectives:

1. It is vital for the students to develop an insight into the history of ancient civilizations and their architecture in order to promote the creative abilities of the students.
2. The student will be able to understand of the human mind and show communities with art, tradition and heritage to hold them together.
3. To make the student aware of the concept of people as a nation is through art and it's movements in civilizations.

I. The Renaissance

II. Baroque/Rococo

III. The Modern World

- a. Neoclassicism/Romanticism
- b. Realism/Impressionism
- c. Post Impressionism
- d. Twentieth Century Painting

IV. Art in Pakistan

Recommended books:

1. Brend, B. (1991). *Islamic art*. British Museum Press.
2. Gardner, H. (2005). *Art through the ages*. (12th ed.). Wadworth/thomson Learning, USA.
3. Honour, H. & Fleming, J. (2005). *A world history of art*. (7th ed.). Laurence King Publishing Ltd.
4. Jonson, H.W. & Janson, A. F. (2001). *History of art*. (6th ed.) Thames & Hudson.

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Supplementary APPLIED INTERIOR DESIGN

Paper: II (b)
HE330

Credit hours: 05
Total Marks: 100
Theory: 60
Practical: 40

Objectives:

1. Developing problems – solving and designing communication skills among students.
2. Application of creative and aesthetic potentials of individuals in residential and commercial interior.
3. Experimentation with something truly new and original and provide opportunities to play with varied colour schemes textures and surface patterns.

I. History of Interior Design

- a. Definition, Importance and scope of Interior design
- b. Role of Interior designer

II. Design

- a. Design inspiration
- b. Sources of inspiration
- c. Consumer Demands and Needs regarding interior design
- d. changing trends and techniques regarding residential and commercial interiors.

III. Creativity and Design.

- a. Creativity – Definition
- b. Creativity & aesthetics
- c. Importance of creativity in design
- d. Adaptation of Design, Form & Materials.

IV. Application of Design Elements and Principles in Interiors.

- a. Defining Elements and Principles of design
- b. Application of Elements – Line, Shape, form, space texture, pattern, colour and light,
Principles – harmony, Balance, Rhythm, proportion and emphasis in creating balanced interiors.

V. Accessories

- a. Functional Accessories
- b. Decorative Accessories
 - i. Art
 - ii. Screens
 - iii. Lamps
 - iv. Books
 - v. Mirrors
 - vi. Clocks
 - vii. Flowers, Foliage & Plants
 - viii. Finishing Touches
- c. Selecting and placing Accessories

VI. Modern Architecture and Design

- a. Beginnings of Modernism
- b. Principal Modern Movements
- c. Current Trends
- d. The Energy Efficient House

Practical

1. Treatment of Colour & design
2. Experiment with Elements and Principles of design.
3. Creative design of accessories

Recommended books:

1. Ball, V. K. (2002). *Opportunities in interior design and decorating careers*. McGraw Hill.
2. Pile, J. (2005). *A history of interior design*. (2nd ed.). Laurence King Publishing Co.
3. Shekar, C.R. (2005). *Academic dictionary of architecture*. Isha Books India.
4. Valentine, J.M. (2006). *Beginning aesthetics: an introduction to the philosophy of art*. McGraw Hill.
5. Wright, R.T. & Nebel, B.J. (2002). *Environmental science toward a sustainable future*. (8th ed.). New Jersey: Pearson Education.

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR)

**Elective Supplementary
FUNDAMENTALS OF ACCOUNTING**

**Paper: II (c)
HE340**

Credit hours: 05

Total Marks theory: 100

- I. **Accounting: The Language of Business**
 - a. Bookkeeping
 - b. Accounting Mechanics
 - c. Classes of Accounts
 - d. Rules for debt & credit

- II. **Accounting Principles & Equations**
 - a. Define Accounting Principles
 - b. Essentials features of Accounting Principles
 - c. Accounting Concepts
 - d. Accounting Equations

- III. **Journal and Ledger**
 - a. Journal:
 - i. Definition & characteristics of journal
 - ii. Forms of journal
 - iii. Rules for journalizing
 - b. Ledger:
 - i. Definition & Features of Ledger
 - ii. Form of Ledger
 - iii. Method of posting

- IV. **Trial Balance**
 - a. Definition & Objectives of Trial Balance
 - b. How to prepare Trial Balance
 - c. Rules for balancing accounts

- V. **Banking Transactions**
 - a. Definition & Functions of Bank
 - b. Receipt of Deposit
 - c. How to open bank account
 - d. Cheques, Bank Drafts, Hundies, Postal Orders
 - e. Method of Recording Banking Transactions

- VI. **Bills of Exchange**
 - a. Inland & Foreign Bills
 - b. Parties of Bill
 - c. Advantages & Functions of Bill of Exchange
 - d. Tenor & Usance
 - e. Kinds of acceptance
 - f. Promissory Notes
 - g. Receivable & Payable Bills
 - h. Drawing, Acceptance, Payment & Discounting of Bills
 - i. Endorsement, Dishonor, Renewal & Retiring of Bills

- VII. Cash Book
 - a. Definition & kinds of Cash Book
 - b. Voucher & Form
 - c. Balancing Cash Book

- VIII. Final Accounts
 - a. Trading Accounts
 - i. Definition, Forms, & Items of Trading Accounts
 - b. Profit & Loss Accounts
 - i. Definition & Forms
 - ii. Preparation & Items of Profit & Loss Accounts
 - c. Balance Sheet
 - i. Definition, Grouping & Marshalling
 - ii. Object & Preparation of Balance Sheet
 - iii. Classification of Assets, Liabilities, & Capital

- IX. Preparation of Annual Reports
 - a. Preparing
 - b. Annual Reports
 - c. Adjusting Entries
 - d. Preparing Statements
 - e. Work Sheet

- X Depreciation
 - a. Definition
 - b. Causes
 - c. Need
 - d. Depreciation, Depletion and Amortization
 - e. Methods of providing Depreciation

Recommended books:

1. Baker, R.E., Lembke, V.C. & King, T.E. (1996). *Advanced financial accounting*. (3rd ed.) New York: McGraw Hill
2. Meigs, R.F., Williams, J.R., Haka, S.F. & Bettner, M.S. (1999). *Accounting: The basis for business decisions*. (11th ed.). New York: Irwin McGraw Hill.
3. Mukherjee, A. & Hanif, M. (1995). *Modern accountancy*. New Delhi: Tata McGraw Hill Publishing Company Limited.
4. Shukla, M.C. & Grewal, T.S. (1992). *Advanced accounts* (12th Rsd ed.). New Delhi: S. Chand and Company.

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Supplementary

ELEMENTARY CHILDHOOD EDUCATION

Paper: II (d)
HE338

Credit hours: 05
Total Marks: 100
Theory: 70
Practical: 30

- I. Introduction to elementary education:
 - a. Nature scope and current trends of Elementary Education.
 - b. Different Approaches to Elementary Education.
 - c. Developmental Characteristics of Elementary Education.
 - d. Developmental Characteristics of Elementary school child.
 - e. Linkage between Child development and Elementary Education.

- II. Instructional strategies:
 - a. Classroom management skills
 - b. Time Management
 - c. Motivation
 - d. Organizing Learning Experiences

- III. Planning for effective teaching:
 - a. Definition of teaching
 - b. Resource for Planning;
 - c. Lesson Planning
 - d. Construction a Lesson Plan,

- IV. Preparing instructional objectives:
 - a. Instructional objectives as learning outcomes;
 - b. Dimensions of instructional objectives;
 - c. Selection of instructional Objectives;
 - d. Methods of stating instructional objectives;
 - e. Relationships of instructional objectives to evaluation process.

- V. Measurement & evaluation in teaching:
 - a. The role of evaluation in teaching;
 - b. The meaning of evaluation;
 - c. The principals of evaluation;
 - d. Types of testing & evaluation procedures.

- VI. Teaching children with learning & behavior problems.
 - a. Definition & characteristics of children with behavior problems;
 - b. Dimensions of Learning Problems;
 - c. Principles of Behavior Management;
 - d. Prevention of Learning Problems;
 - e. Principals of Academic Remediation;
 - f. Curriculum of the Learning & Behavior Problem students.

Practical:

1. Plan and carry out five lessons
2. Planning and presentation of a lesson plan for the exam.

Recommended books:

1. Education Testing Service. (2004). *Elementary education: Curriculum, instruction, and assessment. (praxis study guides). (2nd ed.)*.
2. Education Testing Service. (2003). *Elementary education: Content knowledge study guide. (praxis study guides)*.
3. Lou, A. J. (2005). *Teaching outside the box: how to grab your students by their brains.*
4. Walter, P. (2008). *Social studies in elementary education (with my education lab.) (13th ed.)*.

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Supplementary

COMMUNICATION IN HUMAN & FAMILY RELATIONS

Paper: II (e)
HE348

Credit hours: 05
Total Marks: 100
Theory: 70
Practical: 30

- I. **An overview of communication:**
 - a. Definitions of components of communication
 - b. Types and functions of communication
 - c. Dimensions of communication patterns and variables
 - d. Communication and culture
 - e. Communication and technology
 - f. Ethics and responsibility in communication
 - g. Importance of communication in human and family development.

- II. **The process of communication:**
 - a. The communication process
 - b. Verbal and non-verbal communication
 - c. Perception and listening
 - d. Emotional messages and conversation messages
 - e. Ineffective communication
 - f. Improving communication skills.

- III. **Interpersonal and Intrapersonal Communication:**
 - a. Definition and functions
 - b. Stages of relationship development
 - c. Self disclosure within relationships
 - d. Conflict within relationships
 - e. Improving efforts to resolve conflicts
 - f. Building self-esteem and self concept.

- IV. **Framework for family communication:**
 - a. Communication in different types of families
 - b. Basic family processes and communication
 - c. Communication and family subsystems
 - d. Communication and family stress, developmental issues
 - e. Improving family communication.

- V. **Human communication and problem solving:**
 - a. Creating a positive communication climate
 - b. Solving problems as a group
 - c. Dyadic and small-group communication
 - d. Types and variables of small-group process
 - e. Participating in small group discussions
 - f. The process of problem-solving
 - g. Public-speaking
 - h. Leadership

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Practical:

- a) Collecting, compiling, analysis, synthesis and reporting of events regarding communication problems
- b) Seminar presentation of report
- c) Preparation of journal

Recommended books:

1. Dunn & Goodnight. (2003). *Communication: Embracing differences*. New York: Allyn & Bacon-Longman.
2. Deviot, & Joseph, A. (1999). *Messages: Building interpersonal skills*. (4th ed.). New York: Allyn & Bacon.
3. Galvin & Brommel. (2000). *Family communication cohesion and change*. (6th ed.). Allyn & Bacon-longman.
4. Knapp & Vangeteshi. (2000). *Interpersonal communication and human relationships*. Texas: Allyn & Bacon-Longman
5. Noller, Patricia & Fitzpatrick. (1992). *Communication in family relationships*. USA: Allyn & Bacon

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR) Elective Supplementary

TEXTILE MARKETING AND MERCHANDISING

Paper: II (f)
HE327

Credit hours: 05
Total Marks: 100
Theory: 60
Report Writing: 40

Objectives:

1. To make students to understand the importance of marketing and merchandizing policies with special reference to textile industry of Pakistan.
2. Role of advertisement in promotion of textile merchandizing.
3. To understand the problems faced by the manufactures regarding consumers demand.

Contents:

- I. Management
 - a. Scope of management
 - b. Management hierarchy
 - c. Management aids
 - d. Management Organization
- II. Merchandizing
 - a. Definition and importance of merchandizing
 - b. Concept of durability, style, attractiveness, comfort & general marketing.
- III. Problems faced by the manufacturers to meet specifications of consumers and vice versa.
- IV. Research and Development
 - a. Scope of research and Development
 - b. Research requirements of a company
 - c. Research associations.
- V. Marketing
 - a. Definition and scope
 - b. The societal marketing concepts
 - c. Functions and policies related to textile industry of Pakistan
- VI. Role of advertisements in promotion of textile merchandize.

Recommended books:

1. Dorothy, D. P. (1996). *Fashion merchandise to information*. Willey Publisher.
2. Jackson, T.& D. Shaw. (2006). *The fashion handbook*. Routledge, London.
3. Harold, K., & Hein, R. (1990). *Management*. McGraw Hill Book Co. Ltd.
4. Patrice, R., Jacqueline, P., Phyllis, G. P. (1994). *Introduction to fashion merchandising*. (1st ed.). Thomson Delmar Learning, USA.

B.S. HOME ECONOMICS PART II (3RD YEAR)
Elective Supplementary

TEXTILE AND CLOTHING INDUSTRIAL MANAGEMENT

Paper: II (g)
HE337

Credit hours: 05
Total Marks: 100
Theory: 60
Practical: 40

- 1 The staff of textile mills and clothing factories (with special reference to female workers).
 - The recruitment and training of juveniles.
 - Problems and possible solutions.
- 2 Regulations governing employment and wages.
 - Factories Acts.
 - Trade Unions.
- 3 Selection arrangement and adaptation of machinery for different types of products.
 - Material handling.
 - Maintenance routines.
 - Process of quality control.
- 4 Purchase and Sales.
 - International aspect of textile Import and Export.
- 5 textile and Readymade garment industry of Pakistan. Its structures and organizations.
- 6 Role of research for improving working conditions and efficient out-put.

PRACITICAL TRAINING

In addition to passing the theory examination in the subject a candidate will be required to undergo one and half month's training in any textile and clothing discipline approved by the Department of Clothing and Textiles. On completion of the training they will produce a certificate to that effect from the Organization concerned. The student will be responsible for making arrangement for the training but the Department may assist her in doing so. At the end of the training period she will be required to submit a report on any aspect of the training received.

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Supplementary DECORATIVE FABRICS

Paper: II (h)
HE347

Credit hours: 05
Total Marks: 100
Theory: 50
Practical: 50

Objectives:

1. Importance of cultural significance of clothing.
2. To familiarize the students with the dress of different eras.
3. Diversity of dress and latest trends in the modern civilization.

Contents:

- I. Introduction
 - a. Origin of clothing
 - b. Cultural significance of dress
 - c. Symbolical significance of clothes
 - d. Social significance of dress
- II. Ancient Dresses
 - a. Egyptian period
 - b. Greek period
 - c. Roman period
 - d. French period
 - e. Dresses of sub-continent (Indian period, Dresses of Pakistan)
- III. The Muslim Period
 - a. Dresses during the Mughal period
 - b. Mughal interest in crafts, silk weaving industry, the use of wool and cotton in manufacturing process.
 - c. Costumes in Kingdoms of the Muslim period
 - d. British period in India
- IV. Modern Dress of Sub-continent
 - a. Diversity of dress in modern era
 - b. Infiltration of Western influence
 - c. Latest trends in fashion
 - d. Reawakening of interest in sub-continent.
 - e. Development of new colour schemes in clothes.
- V. Selection of dress in contemporary clothing practices of Pakistan
- VI. Consumer awareness in selection of fabrics
 - a. Importance of consumer awareness
 - b. Factors influencing consumer satisfaction.
 - c. Consumer demands and requirements.

Recommended books:

1. Alon, W. (2003). *Roman dress accessories*. Shire Books.
2. Ann, B. (1991). *Historic french costumes paper doll book*. Hobby House Press.
3. Christine, H., Jane, T. (2001). *Cloths of the ancient world*. (Pre-history to 500Ad). Chryslis Books.
4. Lloyd, L., & Jones. (2002). *Women's dress in the ancient greek world*. Gerald Dockworth & Company.
5. Marry, G. H. (2002). *Ancient Egyptian, Mesopotamian & Persian costume*. Dover Publication.
6. Marry, G. H. (2003). *Ancient. Greek, Roman & Byzantine costume*. Dover Publication.

B.S. HOME ECONOMICS PART II (3RD YEAR)

Elective Supplementary

FOOD TECHNOLOGY & FOOD MICROBIOLOGY

Paper: II (i)
HE326

Credit hours: 05
Total Marks Theory: 100
(a) Food Technology 50
(b) Food Microbiology 50

Objectives:

1. To understand the concept of food technology and its scope
2. To develop an understanding of food products, their composition and processing techniques.
3. To understand importance of food safety and the role of food microbiology in the prevention of food spoilage.

(i) - FOOD TECHNOLOGY

- I. General
 - a) Food technology & its scope in developed and under developed countries.
 - b) Composition of food and effect of processing techniques in general, on food components.
- II. Wheat and rice technology
 - a) Composition of cereals
 - b) Suitability of wheat for chapati, bread, cake & biscuit making.
 - c) Effect of milling and extraction on quality of wheat & rice.
 - d) Enzymes present in wheat & their action on starch during processing.
- III. Meat, poultry and fish technology.
 - a) Composition of meat, poultry and fish.
 - b) Post-mortem changes
 - c) Inspection of fish.
 - d) Ideal storage & preservation of meat and fish.
- IV. Fruits & vegetable technology
 - a) Composition of fruits & vegetables
 - b) Post-harvest changes in fruit & vegetables
 - c) Methods of preservation of fruits and vegetables
- V. Dairy technology
 - a) Composition of milk
 - b) Chemical changes in milk
 - c) Changes on heating and processing.

(ii) FOOD MICROBIOLOGY

- I. Microbiology – definition brief history and importance.
- II. Classification of microorganism important in food e.g.
 - a. Bacteria
 - b. Mold
 - c. Yeast
 - d. Morphological, Biochemical and physiological characters; reproduction growth phases and growth rate. Doubling time or generation time.

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- III. Control of microorganisms
 - a. Physical conditions;
 - i) Dry heat
 - ii) Moist heat, steaming pasteurization, sterilization
 - iii) Membrane filters
 - iv) Desiccation,
 - v) Osmosis and osmotic pressure
 - vi) Radiation
 - vii) Air filtration.

- IV. Control and contamination
 - a. Water microbiology
 - b. Milk microbiology

- V. General Principles of microbiological spoilage fermented foods:
 - a. Yogurt
 - b. Pickles
 - c. Cheese
 - d. Bread.

Recommended books:

1. Adams, M.R. (2008). *Food microbiology*. (3rd ed.).
2. Dayle, M.P. (2007). *Food microbiology: Fundamentals and frontiers*. (3rd ed.)
3. Modi, H.A. (2007). *Introductory food microbiology*.
4. Meyer, L.H. (2002). *Food chemistry*. CBS Publishers.
5. Perker, R. (2003). *Introduction to food science*. Delmar, Thomson Learning, Inc.
6. Potter, N.N. & Hotchkiss, J.H. (2006). *Food science*. (5th ed.). CBS Publishers.
7. Rao, M.K. (2007). *Food and dairy microbiology*.

B.S. HOME ECONOMICS PART II (3RD YEAR)
Elective Supplementary

INTERIOR DESIGN PLANNING AND ORGANIZATION

Paper: II (j)
HE350

Credit hours: 05
Total Marks: 100
Theory: 75
Practical: 25

Objectives:

1. To enable students to realize the importance of appropriate planning and designing and understanding its impact on the psychology of individuals.
 2. Making students learn and analyze the issues which are central in design management and understanding the significance of appropriate furniture, accessories and elements of interior design and their role in transforming space.
- I.
 - 1). Interior design and planning
 - a. Importance
 - b. Interior Design as a career
 - c. Role and Responsibilities of an Interior Designer
 - 2). Space planning
 - a. Interior space planning
 - b. Aesthetics
 - c. Economic considerations
 - II. Analyzing basic floor plans
 - i. Rectangle plan
 - ii. Square plan
 - iii. Multi storied plan
 - iv. Atrium plan
 - v. Circular plan
 - vi. Attached & Multi family plans.
 - III. Elements of Interior Design.
 - a. Floors and Floor coverings
 - b. Hard & soft Floor coverings
 - c. Walls and wall Treatments
 - d. Ceilings
 - e. Windows, Doors, Stairways and Fireplaces
 - IV. Furniture & Furnishings
 - a. Basic Furniture Styles
 - b. Furniture arrangement and wall composition
 - c. Furniture selection
 - d. Textiles for Interiors
 - e. Decorative Textiles

SCHEME OF STUDIES

PRACTICAL:

V. Review Report

Recommended books:

1. Joseph, Dechiara, Julius, Panero & Martin Z. (2001). *Time saver interior design and space planning*. (2nd ed.). McGraw Hill Company.
2. Chaudhari, N.S. (2006). *Interior design*. Aavishkar Publishers, Jaipur, India.
3. Pile, J. (2005). *A history of interior design*. Laurence King Publishing Co.
4. Whiton, S., & Abercrombie, S. (2002). *Interior design & decoration*. (6th d.). New Jersey: Pearson Education.
5. Ivar, H. (2006). *Ideas and beliefs in architecture and industrial design, how attitudes, orientations and underlying assumptions shape the built environment*. Oslo School of Architecture and Design.
6. Hawkins, D. I., Best, J. K., Coney, A. (2001). *Consumer behavior building marketing strategy*. (8th ed.). N.Y: McGraw Hill Co.
7. Allen, S. P. (1994). *Beginnings of interior environment*. (7th ed.). Prentice Hall.
8. Illustrated, R. *Rendering of 20th century interior design*.
9. Whitten, S. *Elements of interior design and decoration*. New York: J.B. Lippincott Company.
10. Faulkner, Sarah & Ray. *Inside today's home hol*. Rinehart and Winston, Inc.

B.S. HOME ECONOMICS PART II (3RD YEAR)

COMPUTER STUDIES

Paper: III
HE302

Credit hours: 05
Total Marks: 100
Theory: 70
Practical: 30

- I. Introduction of computer
 - a. The evolution of computers
 - b. The computer generations
 - i. First generation
 - ii. Second generation
 - iii. Third generation
 - iv. Fourth generation
 - v. Fifth generation
- II. Basic computer organization
 - a. Computer architecture (CPU, registers, buses etc.)
 - b. Input and output devices, storage devices
 - c. Hardware and software.
- III. Computer software
 - a. Types of software (System software, application software)
 - b. Languages
- IV. Introduction to operating system
 - a. Definition and Functions
 - b. Evolution of Operating system
 - c. Types of Operating System
- V. Multimedia
 - a. Introduction to Multimedia and Multimedia Computer System.
 - b. Multimedia Components
 - Text
 - Images
 - Audio
 - Video
 - Animation
 - c. Multimedia Applications
- VI. Data communication and computer network
Basic elements of communication system.
 - a. Data transmission modes
 - b. Data transmission speed
 - c. Transmission media
 - d. Digital and analog transmission
- VII. Network topologies
 - a. Bus network, Star Network, Ring network, completely connected network.
 - b. Hybrid network and multipoint network
 - c. LAN, MAN and WAN
 - d. Communication protocols
 - e. Roles of protocol
 - f. OSI model
- VIII. Classification of Computers
 - a. Classification based on Operating Principles.
 - b. Classification based on area of applications
 - c. Classification digital computer based on size and capability

SCHEME OF STUDIES

- d. Classification based on number of microprocessors.
- e. Classification based on word-length
- IX. Types of Portable Computers
 - a. Laptop
 - b. Notebooks
 - c. Palmtop (hand held)
 - d. Wearable computers
- X. Introduction to E-Commerce
 - a. history of Internet
 - b. Use of internet in our daily life.
 - c. Drawbacks of internet.

Practical:

Note: Part A is compulsory a choice can be made between B-I and B-II

Part-A

- ### Microsoft Office
1. M S Word
 - a) Files, Folders, Paragraph, page for matting, Bullets and numbering
 - b) Header and footer
 - c) Tables and columns
 2. M S Excel
 - a) Layout, formatting and customizing data
 - b) Formulas, functions
 - c) Charts and Printing
 3. Internet
 - a) Internet
 - b) Search creating and checking E-mail
 - c) Downloading
 - d) Chatting

Part B-I

DESIGNING TOOL

Adobe Photoshop

1. Introduction to Adobe Photoshop
2. Concept of Vector and Raster Based Objects
3. Basic image manipulation
 - a) Bitmap images
 - b) Image size and resolution setting
 - c) creating new images
 - d) Placing files
4. Selection Tools
 - a) Using the Marquee Tools
 - b) Exploring the Lasso Tools
 - c) Creating selection using the magic wand tool
 - d) Using colour range to create selection
 - e) Creating selection using extractions
 - f) Transforming a selection
 - g) Copy, pasting and moving a selection.
5. Text
 - a) Text Basics
 - b) Entering Text
 - c) Selecting Text
 - d) Editing the Bounding Box
 - e) Creating a Type selection
 - f) Checking for Spelling Errors
6. Colour Modes
 - a) Colour modes and models

- b) Colour mode conversion
- c) Foreground and Background Colour
- d) Colour Management
- 7. Modification of Objects
 - a) painting Tools
 - b) Blending Modes
 - c) Brush Settings
- 8. Layers
 - a) Using Layers and layer set
 - b) Creating Layers and layer set
 - c) Moving Layer Content with move tool and Locking Layers.

OR

Part B-II

- 1. AutoCAD Software
 - 1) Introduction to AutoCAD Software
 - 2) Basic Drawing Tools
 - Lines, Circles, Rectangles
 - Polar Tracking
 - Erasing Objects
 - Creating a Simple Drawing
 - 3) Basic Image Manipulation
 - Move and Copy
 - Rotate and scale
 - Mirror
 - Grip Editing
 - 4) Text
 - Text Basics
 - Entering Text
 - Selecting Text
 - Modifying Text
 - Adding Leaders
 - Creating Tables
 - 5) Hatching
 - Creating Hatches
 - Modifying Hatches
 - 6) Blocks
 - Defining Blocks
 - Using Block
 - Reusing Blocks
 - 7) Dimensions
 - Linear Dimensions
 - Radial and Angular Dimensions
 - Editing Dimensions
 - 8) Printing
 - Printing Layouts
 - Printing from Model Space

Recommended books:

- 1. Aslam, M., Tauqeer, S. R. *Computer studies*. Aikman Series.
- 2. Steve, B., Nick, W. *Corel Draw 12 the official guide*. Lahore: Jahangir Book Depot Urdu Bazar.
- 3. Sinha, P.K. *Computer fundamentals*. (latest ed.). New Dehli: B.P.B. Publishers.
- 4. Waheed, A. *Computer studies*. Seneca Publishing Company, Urdu Bazar Lahore.

SCHEME OF STUDIES

B.S. HOME ECONOMICS PART II (3RD YEAR)

PHYSICS

Paper: IV
HE303

Credit hours: 05
Total Marks: 100
Theory: 75
Practical: 25

OBJECTIVES

- To introduce application and working of general house hold objects.
- To understand system of units for measurement and conversion of one system into other.
- To develop knowledge of working of various mechanical and electrical gadgets.
- To aware safety measures while handling and working with weights and machinery.
- To cope with advancement in new technologies in everyday life.

I. Mechanics

Introduction to physics and its importance in daily life. System of units (MKS, CGS, FPS & SI). Basic physical quantities. Force & Momentum, different types of forces, Centripetal & Centrifugal force and their applications.

Law of conservation of Momentum. Frictional Force, Mass, Weight and Weighing devices. Equal Arm balance, un-equal Arm balance, spring balance.

Newton's Laws of Motion, (1st , 2nd & 3rd) Law of Gravitation, Relation between G & g

Definition of Work, Power & Energy and their units with example. Principle of Machine as applied on Lever, Pulley, Wheel & Axle, Nut & Bolt, Inclined plane. (Input, Output, M.A , Efficiency)

Pressure and its Applications. Effect of pressure in Liquids , Barometer, (Atmospheric Pressure, Pressure of Gas & body. Pressure and their measurement), Vacuum Cleaner.

Density & Surface Tension of Liquids. Siphon.

II. Heat

Simple ideas about heat and temperature, Definition of temperature, Scale of temperature and their conversions. Six's Maximum and Minimum Thermometer, Clinical thermometer.

Modes of transmission of Heat, Conduction, Convection & Radiation and their application in daily life. Boiling and Evaporation (Definition, Explanation and Comparison). Thermo Flask, Pressure Cooker, Refrigerator, Electrical Refrigeration, cooking range.

III. Light

Dual Nature of Light (Theory of Wave Particle Duality). Rectilinear propagation of light, interference of light, Diffraction of light, Dispersion of Light, Reflection of Light and its laws. Refraction of light and its laws.

Intensity of illumination, Illuminating Power , Home Illumination (Artificial light source). Photometry, Photometer (Rumford Photometer)

SCHEME OF STUDIES

IV. Sound

Sound waves, Production of Sound, Audible Sound, Properties of Sound, (Intensity, loudness Pitch & Quality of Sound). Difference between Musical Sound and Noise.

V. Electricity and Magnetism.

Electric current and its measurements. Different type of circuit. Electric field, electric lines of force. Potential and Potential difference. Resistance and its units, Ohms Law, Definition of e.m.f. Difference between voltage and e.m.f.

Heating effects of current and its applications obeying law of Electromagnetic induction House hold wiring, fuse and bulb, Iron, Earthlings & Safety, Door Bell.

VI. Modern Physics

Ideas about atomic structure. Bohr's Postulates of atomic model. Cathode Rays, X-Rays, Lasers, Cosmic rays, Microwaves (Definition and Applications). P-type & N-type Semi conductor Diode as Rectifier, Solar Cell.

Practical:

1. Use of scale and physical balance.
2. Use of thermometer for finding out temperatures.
3. Experiment to demonstrate the centre of gravity.
4. Experiment showing use of principle of lever.
5. To study variation of photoelectric current with intensity of light.
6. To verify travel of sound waves in material medium.
7. Experiment measuring atmospheric pressure by Fortin's Barometer.
8. To demonstrate the effect of pressure and boiling point of a liquid.
9. To determine the specific gravity of a liquid.
10. To verify the laws of reflections.
11. Simple experiment showing mending of fuse.
12. Experiments measuring resistances with voltmeter and Ammeter.
13. Experiments with electro-magnetism as applied to door bell.
14. Simple experiment to show the use of transformer.
15. Repair of electric iron, toaster and cooking plate.

Recommended books:

1. Madalyn, A. (1995). *House Hold Physics*. New York: McMillan Company.
2. C. H. Brechner (2008). *House Hold Physics*. ISBN: 1443771708
3. John Lynde Carleton (1999). *Physics of the House Hold*. New York: McMillan.
4. Raymond A. Serway (2014). *College Physics*. ISBN: 1305142829

SCHEME OF STUDIES

BS. HOME ECONOMICS PART II (3rd YEAR)

PSYCHOLOGY

Paper: V
HE308

Credit hours: 05
Total Marks: 100

- I. Understanding Psychology
 - a. Defining Psychology
 - b. Scope of Psychology,
 - c. Current perspectives in Psychology
 - d. Relationship of Psychology with biological and social services
- II. The Brain and Behaviour
 - a. The nervous system
 - b. Major divisions of nervous system
 - The central nervous system
 - The peripheral nervous system
 - The endocrine system
- III. Sensation and Perception
 - a. Sensory adaptation
 - b. From sensation to perception
 - c. Basic perceptual organization
- IV. Learning
 - a. Learning and maturation
 - b. Methods of learning
 - c. Principles of classical conditioning
 - d. Operant / instrumental conditioning
 - e. Cognitive and spatial learning
 - f. Observational learning
 - g. Factors influencing learning
 - h. Laws of learning
- V. Memory
 - a. Memory and memory span
 - b. Stages of memory
 - c. Memory systems
 - d. Retention and forgetting
 - e. Modifying memory capabilities.
- VI. Cognition
 - a. Individual differences
 - b. Thinking and reasoning
 - c. Judgments and decision making
 - d. Use of heuristics in making judgments
 - e. Problem solving strategies
 - f. Creativity
- VII. Emotion and Motivation
 - a. Components and function of emotions
 - b. Origins of emotion: innate or learned
 - c. Psychological changes during emotions
 - d. Overview of motivational concepts
 - e. Basic biological motivation, acquired motivation and social motivation.

Recommended books:

- 1 Riaz, Mah Nazir (2011). Psychology: for intermediate classes.
Oxford University Press. Karachi

B.S. HOME ECONOMICS PART II (3RD YEAR)

INTRODUCTION TO RESEARCH METHODOLOGY

Paper: VI
HE305

Credit hours: 04
Total Marks Theory: 100
Part – I Research: 50
Part – II Statistics: 50

Part I: (i) EDUCATIONAL RESEARCH

- I. Introduction to Educational Research
 - a. Basic and applied research
 - b. Quantitative and Qualitative research
- II. Basics of Educational Research
 - a. Identifying a research problem
 - b. Ethics and research
 - c. Specifying purpose, research questions and hypotheses.
 - d. Reviewing the literature.
 - e. Instrument validity and reliability.
- III. Research Methodologies.
 - a. Experimental and Quasi Experimental Research
 - b. Co-relational research
 - c. Causal comparative research
 - d. Survey research.
 - e. Qualitative research.
 - f. Historical research
- IV. Preparing research proposals and reports.
 - a. General guidelines
 - b. The major sections of a research proposal or report. (Preliminary pages, main body).
 - c. Sections unique to research reports. (Results/findings, discussion, conclusions, recommendations.)

Part-II: (ii) STATISTICS

- I. Nature of Statistics
 - a. Meaning, definitions and characteristics of statistics.
 - b. Importance and application of statistics.
 - c. Scope and limitations.
 - d. Diagrams and graphs.
 - i. One-dimensional, simple, multiple and sub-divided bars.
 - ii. Two-dimensional, squares, circle, rectangles, histograms.
- II. Descriptive Statistics
 - a. Classifications, tabulation, frequency distribution
 - b. Measure of central tendency Mean, median, mode
 - c. Measures of dispersion: standard deviation, variance and co-efficient variation.
 - d. Correlation theory

SCHEME OF STUDIES

III. Sampling Methods.

- a. Objectives of sampling.
- b. Probability and non-probability sampling.
- c. Methods of selecting a sample.
- d. Errors and methods of reducing sampling errors.

IV. Statistical Tests and Decisions.

- a. T-Tests
 - i. General features of t-distribution.
 - ii. Testing significance of difference between means
- b. Chi-Square Test
 - i. General features of chi-square distribution
 - ii. Application of chi-square test.
 - Testing sample variance
 - Goodness of fit test
 - Association of attributes.

Recommended books:

1. Creswell, J. W. (2002). *Educational Research*. New Jersey: Merrill Prentice Hall.
2. Fraenkel, J. R. & Wallen, N.E. (1998). *How to design and evaluate research in education*. New York: McGraw Hill, Inc.
3. Gay, L.R. & Airasian, P. (2000). *Educational Research*. New Jersey: Prentice Hall.
4. Sher, M.C. (1998). *Introduction to statistical theory*. Lahore: Islamic Kutab Khana.