PANJAB UNIVERSITY, CHANDIGARH-160014 (INDIA)
(Estd. under the Panjab University Act VII of 1947—enacted by the Govt. of India)

FACULTY OF SCIENCE

SYLLABI

FOR

M.Sc. Home Science (Clothing & Textiles)

(Semester System)

Examinations, 2018 -19
PANJAB UNIVERSITY, CHANDIGARH

Outlines of tests, syllabi & courses of reading for M.Sc. Home Science (Clothing & Textile)
1st & 2nd Semester System Examinations, 2018-2019

SEMESTER-I

<table>
<thead>
<tr>
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* Marks will be awarded by the supervisor internally on the basis of synopsis/ continuous evaluation.
### M.Sc. (Clothing and Textiles), 2018-19
#### SEMESTER-III

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#  No university examination. Continuous evaluation done internally throughout the semester.
** Marks will be awarded by the supervisor internally on the basis of data collection/ continuous evaluation.

### SEMESTER-IV

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**GRAND TOTAL** 25  55  80  2000

*Note:* Industrial Training of Six weeks in an Export House/ Readymade Garment Industrial Unit/ Textile Industry.
SEMESTER I

PATTERN DEVELOPMENT (PRACTICAL)

Maximum Marks: 100
Paper: 80
Internal Assessment: 20

Credit Hours: 4/ week
Duration of Exam: 4 hours

Instructions to the Examiner:
1. The examiner is required to set 3 questions, internal choice may be given.
2. The paper should be balanced and cover the entire syllabus.

Objectives:
To impart the knowledge about-
1. Pattern development techniques
2. Pattern Development of Garments
3. Grading techniques of paper pattern

1. Measuring anthropometric parameters.

2. Manipulation of basic darts in the bodice into-
   • Multiple darts
   • Princeesline
   • Contouring Patterns:
     – Off shoulder
     – Wrap

3. Style reading of the given five designs.

4. Designing, style reading and pattern development of the following-
   • Skirts: Godet, Gore and Circular
   • One piece dress with halter neck

5. Grading of the basic patterns
   • Bodice block
   • Sleeve block
   • Skirt block

6. Draping of Upper garment-
   • Top with princess line
   • Top with cowl

7. Draping of Yokes-
   • Fitted Midriff
• Bodice Yoke

8. Draping of Lower garment
• Flared skirt

Recommended Readings:

FASHION ILLUSTRATION (PRACTICAL)

Maximum Marks: 75
Paper- 60
Internal Assessment- 15

Credit hours: 3 /week
Duration of Exam: 4 hours

Instructions to the Examiner:
1. Practical paper will be of 4 hours duration
2. Question paper should cover all the topics

Objectives:
To enable students to understand
1. Figure sketching.
2. Line planning on different themes
3. Drawing illustrations using different colour mediums

1. Understanding the Fashion figure
2. Figure Analysis (3 different postures- front, 3/4th profile, side profile)
3. Rendering of following fabric textures on different silhouettes using various colour schemes
• Silk
• Velvet
• Satin
• Lace
• Chiffon
• Leather
• Denim
• Corduroy

4. Line planning of the following themes for fall and spring season.
   a) Kids wear
      • Casual wear
      • Formal wear
   b) Women wear
      • Casual wear
      • Occasion wear
      • Club wear
      • Office wear

5. Illustration of any two designs of the line plan on fashion figure.

6. Developing a design Portfolio.

Recommended Readings:
1. Illustrating fashion by Kathryn Mckelvey & Janine Munslow-

FABRIC SCIENCE (THEORY)

Maximum Marks: 75
Paper- 60
Internal Assessment- 15

Credit hours: 3 /week
Duration of Exam: 3 hours

Instructions to the Examiner:
Question paper will have four sections. Examiner will set a total of nine questions comprising of two questions from each unit, and one compulsory question of short answer type covering the whole syllabus. Students will attempt one question from each unit and the compulsory question. All questions should carry equal marks.

Objectives:
To understand
• the chemistry of textile fibers
• properties and uses of technical textiles

UNIT-I
• Molecular structure of textile fibers: crystalline and amorphous
• Polymers and its types
• Polymerization – Addition and Condensation Polymerisation
• Intermolecular and Intramolecular forces in polymers
• Physical properties of fibers and their effect on fabric performance: tensile properties, frictional properties, moisture absorption properties, thermal properties, optical properties and electrical properties
• Innovation in fibers – Micro fibers, hollow fibers, nano fibers

UNIT-II

Chemistry of natural fibers - Chemical composition, Structure and groups, Chemical properties
• Cotton,
• Linen
• Jute, Silk
• Wool
Brief study of other natural fibers-
• Pineapple
• Banana
• Palm
• Bamboo
• Hemp
• Sisal

UNIT-III

Chemistry of man-made fibers - Chemical composition, manufacturing process and properties
• Regenerated Cellulosic Fibers
  – Rayon and its types,
• Modified Cellulosic Fibers
  – Acetate
  – Triacetate
• Synthetics
  – Polyester - Terylene.
  – Polyamide – Nylon 6 & 66
  – Acrylic and Modacrylic
  – Olefine - Polyethylene and polyprolene.
  – Spandex

UNIT-IV

Special Textiles - Properties and Use
• Technical textiles
  – Industrial textiles
  – Medical textiles
Recommended Readings:
3. Williams, B.J. Practical Textile Chemistry.

FABRIC SCIENCE (PRACTICAL)

Maximum Marks: 50
Paper- 40
Internal Assessment- 10

Credit hours: 2 /week
Duration of Exam: 4 hours

Instructions to the Examiner:
1. The examiner is required to set 2 questions, internal choice should be given.
2. The paper should be balanced and cover the entire syllabus.

Objectives: To understand
- the identification of various classes of textiles fibers
- the process of analysis of blends

1. Fiber identification
   - Visual Inspection
   - Microscopic Test
   - Burning Test
   - Solubility Test

2. Qualitative and quantitative analysis of blends/ mixture-
   - Terywool
3. Collection and identification of samples of technical textiles

Note: A visit to technical textiles industry

**Recommended Readings:**
1. Williams, B.J. Practical Textile Chemistry

**APPAREL DESIGNING AND CONSTRUCTION-I (PRACTICAL)**

Maximum Marks: 100
Paper- 80
Internal Assessment- 20

Credit hours: 4 /week
Duration of Exam: 4 hours

**Instructions to the Examiner:**
1. Examiner is required to set one question covering the designing, style reading, pattern development and construction of any one garment.
2. Paper will be of four hour duration.

**Objectives:**
To impart knowledge about-
1. Style reading
2. Pattern Development and material layout
3. Various construction details.

1. Designing and style reading of the following:
   - Party frock
   - Jump suit
   - Skirt and Top-(For Adults)

2. Pattern Development, material layout and Construction of the above garments. (one each)

**Recommended Readings:**
4. Dress Designing by Natale Bray-London Crosby, Lockwood
11. Kiddy design books

RESEARCH METHODOLOGY AND STATISTICS (Common to all streams) (THEORY)

Maximum Marks: 75
Paper - 65
Internal Assessment - 10

Credit Hours: 3/week
Duration of Exam: 3 hours

Instruction to the Examiner:
1. Each theory paper will be of three hours duration.
2. Questions paper will have four units.
3. A total of Nine questions comprising of two questions from each unit and one compulsory question of short answer type covering the whole syllabus will be set.
4. All questions may carry equal marks unless specified.
5. Students will be expected to attempt one question from each unit and the compulsory question

Objectives:
1. To know the significance of statistics and research methodology in Home Science research.
2. Types, tools, and methods of research and develop the ability to construct data gathering instruments appropriate to the research design.
3. To know about the appropriate statistical technique for based on the specific research design.

UNIT- I

1. Research- meaning, purpose and approaches
   • Exploration, Description, Explanation
   • Research designs- Experimental and Observational

2. Statistics- Scope and Significance in Home Science discipline
   • Descriptive and inferential statistics
   • Functions and limitations of statistics

UNIT-II

3. The Research Process
   • Defining the research problem, research questions, objectives, hypotheses
• Review of related literature
• Methodology and tools to be used
• Citation formats

4. **Sampling and Tools**
   • Universe and sample
   • Types of sampling

**UNIT-III**

5. **Understanding various statistical measures**
   • Simple Arithmetic Mean (direct method)
   • Median and Mode
   • Standard deviation (assumed mean method)
   • Variance

6. **Conceptual understanding of Correlation and Regression (Theoretical introduction)**
   • Karl Pearson co-efficient of correlation and its properties
   • Regression equation and regression lines

**UNIT-IV**

7. **Inferential Statistics**
   • Level of significance
   • Standard error and Confidence limits

8. **Large sample and small sample tests**
   • t-test: Significance of difference between means
   • F- test
   • Chi-square test of independence

**Recommended Readings:**

**RESEARCH METHODOLOGY AND STATISTICS (Common to all streams) (PRACTICAL)**

Maximum Marks: 50
Paper - 40
Internal Assessment - 10

Credit Hours: 2 /week
Duration of Exam: 3 hours

Objectives:
1. To provide hands on experience to students about data entry and analysis in Excel and SPSS
2. To familiarise the students with data handling in statistical software.

Contents

1. Basics of Excel- data entry, editing and saving, establishing and copying a formula.
2. Functions in excel, copy and paste and exporting to MS word document
4. SPSS, opening SPSS, layout, menu and icons analyzing the data using different statistical techniques.

Recommended Readings:

Semester II

TEXTILE TESTING (THEORY)

Maximum Marks: 75
Paper: 65
Internal Assessment: 10

Credit Hours: 3/ week
Duration of Exam: 3 hours

Instructions to the Examiner:
Question paper will have four sections. Examiner will set a total of nine questions comprising of two questions from each unit, and one compulsory question of short answer type covering the whole syllabus. Students will attempt one question from each unit and the compulsory question. All questions should carry equal marks.

Objectives:
To impart knowledge about
1. physical properties of textile fibers, yarns and fabrics
2. various testing equipments and methods
UNIT-I
1. Introduction to textile testing
   a) Objectives of textile testing
   b) Role of Textile Testing in Quality Control
   c) Sampling for testing
   d) Standard atmosphere for textile testing
2. Moisture relations and testing, measurement of moisture content of textiles.

UNIT-II
3. Physical testing of fibers:
   a) Fiber length and length distribution, density and specific gravity, fibers fineness and maturity.
4. Mechanical properties of fibers:
   Elongation, ductility, plasticity, tenacity, stiffness and resiliency.
5. Thermal, electrical and optical properties of fiber.

UNIT-III
6. Physical testing of yarns:
   a) Yarn types and structure,
   b) Twist and twist measurement
   c) Yarn count and diameter determination.
   d) Breaking strength of yarns

UNIT-IV
7. Fabric testing:
   a) Fabric construction analysis: thread count, weight, crimp, thickness.
   b) Porosity, air- permeability and thermal conductivity of fabric.
   d) Mechanical properties of fabrics: - breaking, bursting and tearing strength of fabrics.
9. Serviceability of fabrics

Recommended Readings:
TEXTILE TESTING (PRACTICAL)

Credit hours: 3/week
Duration of Exam: 4 hours

Objectives:
To understand the usage of various equipments, to analyze physical properties of textiles

INSTRUCTIONS TO PAPER SETTERS:
1. The examiner is required to set 3 questions, internal choice should be given.
2. The paper should be balanced and cover the entire syllabus

1. Fiber Tests:
   - Fiber Bundle Strength
   - Cotton Fiber Length Distribution

2. Yarn Tests:
   - Structure
   - Yarn Count
   - Breaking Strength

3. Fabric Analysis:
   - Width
   - Count
   - Thickness
   - Weight
   - Crimp

4. Fabric Properties:
   - Breaking Strength & Elongation
   - Bursting Strength
   - Tearing strength
   - Dimensional change in laundering
   - Drape
   - Seam Slippage

5. Colour fastness to:
   - Laundering
   - Crocking
   - Pressing
   - Perspiration
   - Sunlight

5. Visit to textile industry.
Recommended Readings:

FASHION COMMUNICATION (THEORY)
Maximum Marks: 50
Paper- 45
Internal Assessment- 05

Credit hours: 2 /week
Duration of Exam: 3 hours

Instructions to the Examiner:
Question paper will have four sections. Examiner will set a total of nine questions comprising of two questions from each unit, and one compulsory question of short answer type covering the whole syllabus. Students will attempt one question from each unit and the compulsory question. All questions should carry equal marks.

Objectives:
To enable the students to understand-
1. Fashion Communication
2. Concept of creative writing
3. Role of photography in fashion world.
4. Event management, advertisement and publicity.

UNIT-I
1. Communication:- Definition, concept, scope and functions of communication
2. Mass Communication:-
   • Definition, concept, scope and functions
   • Mass Communication through different media – Electronic media, Print media, Cyber media
3. Role of media in society

UNIT-II
5. Creative writing:-
   • Feature:- Different types of feature, Writing a feature, rules for writing.
   • Article:- Defining Article, rules for writing.
6. Interviews: - Definition, Concept and scope of interviews, types of interview. How to conduct an interview, writing report of interview.
7. Designing catalogues and brochures.

UNIT-III
8. Photography: -
   - Definition, concept and functions of photography
   - Types of camera, camera angles, shots and movements.
   - Role of photography in fashion world
9. Editing: - Definitions, various techniques of editing.
10. Ethics of media.

UNIT-IV
11. Event management: - Fashions shows, photo shoots, outdoor and indoor shoots.
12. Advertising: - Definition, concept, scope, functions and need of advertising in fashion world.
13. Public relations: - Definition, concept, scope, functions and qualities of good PRO. Need of PRO in fashion.
14. Publicity: - Definition and scope, event reporting, concept of image management.

Recommended Readings:

FASHION COMMUNICATION (PRACTICAL)

Maximum Marks: 50
Paper- 40
Internal Assessment- 10
Credit hours: 2 /week
Duration of Exam: 4 hours

Instructions to the Examiner:
1. The examiner is required to set 3 questions, internal choice may be given.

Objectives:
To impart knowledge of Fashion Communication by:-
1. Creative writing
2. Conducting interviews
3. Designing broucher and advertisements.

I) Creative Writing
   • Fashion events/ News reporting
   • Reviewing- Book review and film review
   • Scrap book of current fashion news

II) Interview- Interview of any two personalities from the field of fashion

III) Photography
   • Understanding of camera angles, shots and movements.
   • Develop an album/ Shot book (Indoor and outdoor shoots)
     – Exhibitions (Indoor)
     – Fashion shows (Indoor or outdoor)

IV) Designing of brochure

V) Designing an advertisement on fashion sales, exhibitions or fashion show.

Recommended Readings:

APPAREL DESIGNING AND CONSTRUCTION-II (PRACTICAL)

Maximum Marks: 100
Paper- 80
Internal Assessment- 20

Credit hours: 4 /week
Duration of Exam: 4 hours

Instructions to the Examiner:
1. Examiner is required to set one question covering the designing, style reading, pattern development and construction of any one garment.
2. Paper will be of four hour duration.
Objectives:
To impart knowledge about-
1. Style reading
2. Pattern Development and material layout
3. Various construction details.

1. Designing and style reading of the following:
   - Trousers
   - Jacket
   - One piece dress

2. Pattern Development, material layout and Construction of the above garments (one each)

Recommended Readings:

2. Metric Pattern cutting by Winifred Aldrich-New Delhi Om Service
3. Complete guide to sewing by Reader’s Digest
5. Sewing in colour by Mc Calls-London, Hamlyn, 1972

QUALITY CONTROL IN APPAREL AND TEXTILES (THEORY)

Maximum Marks: 50
Paper: 45
Internal Assessment: 05
Credit Hours: 2/ week
Duration of Exam: 3 hours

Instructions to the Examiner:
Question paper will have four sections. Examiner will set a total of nine questions comprising of two questions from each unit, and one compulsory question of short answer type covering the whole syllabus. Students will attempt one question from each unit and the compulsory question. All questions should carry equal marks.

Objectives:
To impart knowledge about
1. Various standard organization
2. Various legislations regarding fiber identification
3. Role of textile testing in quality control
UNIT-I
1. Introduction to Quality Control:
   a. Definition of quality, importance of quality assurance
   b. Concept of Total Quality Management (TQM)
   c. Tools of Quality Control
2. Legislation in Textiles/Acts:
   a. Textile Fiber Product Identification Act
   b. Wool product Labelling Act
   c. Fur product Labelling Act
   d. Flammable fabrics Act

UNIT-II
3. Standardization in textiles: concept, benefits and levels of standards
4. Stages of quality control (Design to Despatch)
5. Garment finishing and Inspection:

UNIT-III
6. Role of various standard institutions and organizations in Quality control
   ASTM, AATCC, ANSI, BSI, BIS, ISO and its series
7. Research Associations and their role
   SITRA, BTRA, NITRA, ATIRA, MANTRA, IJRA, SASMIRA, WIRA

UNIT-IV
8. Parameters for apparel quality testing and control: Stitch quality, stitch length, quality of threads, button strength, accessories and embellishments.
10. Packaging: Importance, types and various materials used for Packaging
11. Labelling: importance of labels and its types, International care labelling system, Japan/Canada/British care labelling systems, Eco-label ling.

Recommended readings:
5. Ruth EC, “Apparel manufacturing and Sewn product analysis”,
COMPUTER APPLICATIONS IN CLOTHING AND TEXTILES (PRACTICAL)

Maximum Marks: 50
Paper: 40
Internal Assessment: 10

Credit Hours: 2/ week
Duration of Exam: 4 hours

Instructions to the Examiner:
1. The examiner is required to set 3 questions, internal choice may be given.
2. The paper should be balanced and cover the entire syllabus.

Objectives:
To impart knowledge about
1. Adobe Photoshop
2. Corel Draw
3. Rich Peace

UNIT- I
1. ADOBE PHOTOSHOP
   a) Study in detail different tools of Photoshop.
   b) Create composition of stripes, checks in various textures and colours.
   c) Pick up a costume worn by a famous fashion model. Scan her figure and redesign the texture and colour combination of the dress.
   d) Design a mood board according to the selected theme.
   e) Create Logos, Pamphlets and Visiting Cards.

UNIT-II
2. COREL DRAW/ ADOBE ILLUSTRATOR
   a) Study in detail different tools of the software.
   b) Create a composition of geometrical shapes, traditional and contemporary motifs.
   c) Line development of the following
      • Bed linen
      • Table linen
      • Curtains and Towels

UNIT-III
3. RICH PEACE
   a) Study in detail different tools of the software.
   b) Drape the fashion figures in different silhouettes.
   c) Create a the metic design collection.

Recommended Readings:
1. Internet for Everyone by Alexis Leon and Mathews Leon
2. Corel Draw by BPB Publication
3. Modules of the softwares.
ENTREPRENEURSHIP (THEORY)

Credit Hours: 2 /week
Duration of Exam: 3 hours

Instruction to the Examiner:
1. Each theory paper will be of three hours duration.
2. Questions paper will have four units.
3. A total of Nine questions comprising of two questions from each unit and one compulsory question of short answer type covering the whole syllabus will be set.
4. All questions may carry equal marks unless specified.
5. Students will be expected to attempt one question from each unit and the compulsory question

Objectives:
1. To acquaint the students with various entrepreneurial skills
2. To make the students aware about creation and management of enterprise.

UNIT- I

1. Entrepreneurship as a process
   Role of entrepreneurship
   Entrepreneurship and economic development

2. Entrepreneurship in Textile industry
   Entrepreneurial skills and traits
   Case study of boutique owner

UNIT-II

3. Small Enterprises and Startups
   Rationale and objectives
   Problems of Small enterprises and Startups in India.

4. Small business enterprises in relation to Fashion Industry
   Procedure and formalities in their setup.

UNIT-III

5. Project; Meaning and classification
   Project Identification and classification
   Budgeting and Funding

6. Project Formulation
   Feasibility analysis
   Techno-Economic Analysis
   Financial Analysis and Cost-Benefit Analysis
UNIT-IV

7. Project Finance
   Long term vs short term finance
   Angel investors

8. Women enterprises in clothing and textiles in India
   Women entrepreneurs; challenges faced
   Institutions assisting women entrepreneurs in India

Recommended Readings:
1. Gupta, C. B (2004). Entrepreneurship Development in India Sultan Chand, New Delhi,
Objectives:
To be able to
• understand target customer, market trends and forecast.
• identify the product to be developed.
• understand the process of design development.
• learn the process of product development and the presentation

Content
To develop a product by taking an industry oriented or end consumer oriented problem by the following steps:
• Research
  - Target Customer
  - Market trends
  - Forecast
• Design Development
  - Theme selection
  - Design process- inspiration, mood board, and story board.

• Briefs of product
  – Product name
  – Target market
  – Occasion
  – Season
  – Technique used
  – Material and Fabric used
  – Practical outcome
• Sourcing
• Product Development
• Photoshoot of product with appropriate background and props.
• Showcasing/ Presentation

Note: No question paper shall be set.
Showcasing/ Presentation of the final product will be evaluated by jury.
M.Sc (Clothing and Textiles) 3rd sem

DYEING AND FINISHING

Theory

Credit hrs: 03/week  Total marks: 75
Duration of exam: 3hrs  Paper: 65
Int Ass.: 10

Objectives-
To understand-
- Textile dyeing
- Softening of water
- Theories of dyeing
- Textile finishes

Instructions to the Paper Setter:
Question paper will have four sections. Examiner will set a total of nine questions comprising two questions from each unit, and one compulsory question of short answer type covering the whole syllabus. Students will attempt one question from each unit and the compulsory question. All questions may carry equal marks, unless specified.

UNIT-I
I) Dyeing
   a) Definition and classification of dyes
   b) Dye fiber interaction
   c) Role of fiber structure in dyeing
   d) Application of dyes on different fabrics
   e) Dyeing of blends
   f) Dyeing machinery

UNIT-II
II) Colour measurement- L*a*b* values, K/S values, Reflectance
III) Theories of dyeing
IV) Water types and impurities and methods of softening:
   - Lime soda process
   - Base exchange
   - Demineralization
V) After treatment of dyed fabrics

UNIT-III
VI) Finishes
   a) Introduction and importance
   b) Classification of finishes
   c) Basic preparation of fabrics-
      - Cotton
      - Wool and silk
      - Manmade fabrics
d) Finishes that affect hand or texture:

**Stiffening**
- Sizing
- Permanent stiffening on cotton
- Weighting of silk
- Softening

**Surface finishes**
- Calendering- simple, glazing, ciereing, embossing, schrinering, moire
- Beetiling
- Napping
- Brushing
- Shearing
- Flocking
- Burnt-out designs
- Plisse effect
- Acid designs
- Enzyme treatment

**UNIT-IV**

**VII) Special purpose finishes**
- Absorbent
- Antislip finishes
- Antimicrobial
- Mothproofing
- Temperature adaptable finishes
- Light-reflectant
- Light-resistant
- Heat-reflectant
- Fire proofing
- Fire retardant
- Water proofing
- Water repellent
- Heat Stabalization, permanent press, durable press
- Wrinke recovery
- Shrinkage control

**References:**
7. Williams, B.J. Practical Textile Chemistry.
DYEING AND FINISHING
Practical

Credit hrs: 03/week  Total marks: 75
Duration of exam: 4hrs  Paper: 60
Int Ass.: 15

Instructions to the Paper Setters.
1. Each practical paper will be of four hours duration.
2. The question paper should be balanced.

1. Scouring and bleaching of cotton.
2. Dyeing of cotton with direct dye.
3. Dyeing of cotton with azoic, reactive and acid dyes.
4. Dyeing of silk with direct, basic and reactive dyes.
5. Dyeing of wool with acid, basic dyes.
6. Extraction and application of any one natural dye using natural source on cotton, silk and wool.
7. Application of direct dye with different mordants.

References:

M.Sc. (Clothing and Textiles), Third Semester
Textile Designing
(THEORY)

Credit hours: 2 hrs/week  Maximum Marks: 50
Duration of Exam: 3 hours  Paper: 45
Internal Assessment: 05

Objectives:
To enable the students to understand-
• Various aspects of Textile Designing
• Methods of textile printing
• Decorative and Structural Textile Designing

Instructions to the Examiner
Question paper will have four sections. Examiner will set a total of nine questions comprising two questions from each unit, and one compulsory question of short answer type covering the
whole syllabus. Students will attempt one question from each unit and the compulsory question. All questions may carry equal marks, unless specified.

Unit-I

1. Introduction to Textile Design- meaning and scope
2. Elements and principles of Design with reference to Textile Designing
3. Classification of looms
4. Working of various shuttle and shuttleless looms with their parts.

Unit-II

5. Structural textile designing
   a. Weaving –
      • Types of weave
      • Graphical representation of weaves and their drafting and lifting plans
   b. Knitting and its Classification
      ➢ Various knitting stitches- warp and weft
      ➢ Knitted fabric defects
   c. Non-Wovens
      • Felting
      • Bonding
      • Knotting

Unit-III

6. Styles of Textile Printing
   • Direct
   • Resist
   • Discharge
   • Blotch
   • Flock
   • Duplex
7. Thickening agents

Unit-IV

8. Methods of textile printing
   • Block
   • Stencil
   • Screen- flat and rotary
   • Roller
   • Heat transfer
   • Digital
9. Printed fabric defects

Recommended Readings:

• PG Tartora, “Understanding Textiles.

M.Sc. (Clothing and Textiles), Third Semester
Textile Designing
(PRACTICAL)

Credit hours: 4 /week                   Maximum Marks: 100
Duration of Exam: 4 hours                  Paper:80
Internal Assessment:20

Objectives:
To impart knowledge of
• Various types of motifs and designs
• Structural and decorative textile design
• Types of dyeing and printing techniques

Instructions to the Examiner:
3. The examiner is required to set 3 questions, internal choice may be given.
4. The paper should be balanced and cover the entire syllabus.
5.
I) Development of Woven, printed and surface ornamentation design for household textiles on sheets-
• Bedsheet
• Table cloth
• Table mats and napkins
• Curtains

II) Development of Woven, printed and surface ornamentation design for dress material according to the latest trends on sheets with different colourways for:-
• Kidswear
• Women wear

III) Setting up of handloom and making samples of basic weaves.

IV) Making following articles with structural Textile Designs (Weaving, Knitting, Tatting, Macrame)
• Coasters
• Pot holder/ bags
• Place Mats
• Handkerchief lace

V) Making two articles using following dyeing and printing techniques or their combination
• Tie and dye
• Batik
• Stencil
• Screen
• Block
Recommended Readings:-

M.Sc. (Clothing and Textiles) Third Semester
COSTUME DESIGNING AND CONSTRUCTION
(PRACTICAL)

Credit Hours: 3/ week  Maximum Marks: 75
Duration of Exam: 4 hours  Paper: 60
Internal Assessment: 15

Objectives:
To impart knowledge about
1. Sources of inspiration for costume designing
2. Designing and construction of the garments

Instructions to the Examiner:
The paper should be of four hours and the paper should be balanced and cover the entire syllabus.

1. Identification of sources of inspiration for costume designing -
   i) Art
   ii) Galleries & Museum
   iii) Ancient Civilizations
   iv) Films & Movies
   v) Music
   vi) Architecture & Interior Design
   vii) Photography
   viii) Print advertisements & Posters
   ix) Nature(Flora & Fauna)
   x) Books & Magazines
   xi) Life
   xii) Television & Internet
   xiii) Celebrities
   xiv) Folk art & Craft
   xv) Travel

2. Designing a range of costume by taking inspiration from any one of the above sources
3. Pattern development and Construction of the same. (4-6 garments)
M.Sc. (Clothing and Textiles)
Third Semester
HISTORIC COSTUMES
(THEORY)

Credit hrs: 3 hrs/week
Duration of Exam: 3hrs

Total Marks: 75
Paper: 65
Int. Ass.: 10

Objectives:
1. To study the costumes in the ancient world.
2. To know about the conservation of costumes and textiles
3. To become familiar with the styles and special features in costume from ancient world.

Instructions for paper setters:
1. There will be total nine questions carrying equal marks
2. Two questions will be set from each unit and one compulsory question carrying short answer type questions from the whole syllabus
3. Five questions will be attempted in all, selecting one question from each section and the compulsory question.

Study of the costumes including male and female dresses, ornaments, headgear, hairstyles and footwear worn during following periods in Unit I, II and III.

Unit-I

- Egypt
- Greece
• Rome
• Byzantine

Unit-II
• Middle ages
• Renaissance Period

Unit-III
• French Revolution
• Romantic Period
• Victorian Period

Unit-IV
Conservation of Costumes and Textiles
• Introduction and need of costumes and textile conservation
• Materials used in conservation of costumes and textiles
• Mending techniques used in conservation of costumes textiles : Adhesive , Stitching and Mounting
• Display and Storage : Care and Handling of costumes and textiles

NOTE:
– Assignments and Presentation of Ancient Indian Costumes
– A visit to Museum and submission of report.

Recommended Readings:
M.Sc. (Clothing and Textiles) Fourth Semester
C.A.D.
PRACTICAL

Credit Hours: 4/ week                               Maximum Marks: 100
Duration of Exam: 4 hours                          Paper: 80
                                           Internal Assessment: 20

Objectives:
To impart skills in –
  1. Developing pattern through Tuka Cad
  2. Marker layout through Tuka Mark

Instructions to the Examiner:
The paper should be of four hours and the paper should be balanced and cover the entire syllabus.

I  TUKA CAD
 1. Study in detail the different tools of TukaCad namely toolkit, dart, pleat, segment, piece, seam, standard, rotate, internal, walk, view, point, fabric and stripes.
 2. Develop basic block pattern of the following:
     - Adult’s bodice block and sleeve block
     - Skirt
 3. Create patterns of the following using basic bodice and sleeve block
     - Puff sleeve
     - Magyar
     - Raglan
 4. Manipulation of darts into:
     - Gathers
     - Tucks
     - Yokes
 5. Using basic skirt block, create following skirts:
     - Flared
     - Gored
     - Pleated
 6. Grading of the basic patterns:
     - Adult’s Bodice Block
     - Sleeve Block
     - Skirt Block

II  TUKA MARK
   – Study in detail the different tools of Tuka Mark namely Standard, Nesting, Placement, Group, Piece and Marker.
   – Marker layout of the developed patterns along with summary report
Recommended Readings:


M.Sc. Clothing and Textiles
4th Semester
IMAGE STYLING
(Practical)

Credit hours-02/week

Maximum marks- 50
Paper- 40
Internal assessment-10

Objectives:
To impart knowledge of
a. Figure types and styling of different figure types
b. Self and model styling

Note:- There will be no exam. The assessment of the work will be done internally.

1. Preparation of scrap book for the followings with special reference to image styling:
   a. Elements and principles of design
   b. Component of fashion
2. Fundamental of styling
   a. Figure – Body shape, Face shape and Skin tone
   b. Latest trend/ fashion
   c. Fashion forecast
   d. Suitability of different types of dresses and accessories for different occasions.
3. Styling of different figure types (preparation of sheets for different figure types using different fabrics, colours, textures and silhouettes)
4. Case study of Image styling of any renowned personality and report submission of the same.
5. Personality and Dressing
   *Project work- theme based self styling and model styling
6. Etiquette and grooming
   *Workshop on etiquettes and grooming.

Recommended Readings:

1. Illustrating fashion by Kathryn Mckelvey & Janine Munslow-
9. Dynamics of fashion by Elaine stone.
11. Sharon le Fate, Inside fashion Design, Harper and Row pub NY.
12. Projecting your image – a practical guide to styling for success, Mercury guides pub. 1991

M.Sc. (Clothing & Textiles) 4th Semester
Fashion Retailing and Merchandising (Theory)

Credit Hours: 3pds/week
Duration of Exam: 3hrs.
Total Marks: 75
Paper:- 65
Int. Ass.: 10

Instructions for paper setters:
1. There will be total nine questions carrying equal marks
2. Two questions will be set from each unit and one compulsory question carrying short answer type questions from the whole syllabus
3. Five questions will be attempted in all, selecting one question from each section and the compulsory question.

Objectives:
- To acquaint the students with the knowledge of fashion retailing and marketing.
- To make students understand fashion merchandising

UNIT-I

Meaning of the following terms:

UNIT-II

Fashion Retailing
- Importance of Fashion Retailing
- Components of Fashion retailing industry- Wholesalers, Discount retailers, mail orders, chain and department stores.
- Trends in retailing- Franchising and its Advantages, Concessions, Physical Distribution, Teleshopping, Service Provision, Internet- Advantages and limitations
UNIT-III

Fashion Marketing
- Role of Fashion Marketing Managers.
- The fashion marketing process
- Trends in marketing environment
- Consumer behaviour and Decision making
- Marketing Strategies
- External and Internal Factors influencing pricing decisions.

UNIT-IV

Fashion Merchandising and Sales Promotion
- Fashion Merchandising process
- Role and responsibilities of fashion buyers in marketing
- Types of sales promotion techniques- Advertising, Public Relations, Fashion Shows, Trade Shows and Fairs, visual merchandising,
- Visual Merchandising- Meaning, Purpose and Types of display

Recommended Readings:
M.Sc.(Clothing & Textiles) 4th Semester
Fashion Retailing and Merchandising (Practical)

Practical
Project (Not Exam Based)

Credit: 2 pds/week

Total Marks: 50
Exam: 40
Int. Ass.: 10

Objectives:
- To gain knowledge about various window display materials.
- To acquaint knowledge of sales promotion techniques of different stores

1. A case study of any Fashion retail store and report writing of the same.
2. Survey of sales promotion techniques followed by any two leading stores.
3. Thematic window display—Christmas, Valentine, Evening Party, Disco, Kids Birthday Party, Halloween, New Year Eve, Wedding, Beach etc.
4. One week internship providing insight into management of different divisions and handling of merchandise.

Note: The assessment of the project will be done internally.

Recommended Readings:

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