SYLLABUS OF M.Sc. HOME SCIENCE  
(Clothing & Textiles) Session w.e.f. 2012-13  
Semester – III

**THEORY:**

<table>
<thead>
<tr>
<th>Paper No.</th>
<th>Title of the Paper</th>
<th>Max. Marks</th>
<th>Exam Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>XV</td>
<td>Textile Testing and Quality Control</td>
<td>75 (60+15*)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XVI</td>
<td>Apparel &amp; Textile Designing</td>
<td>50 (40+10*)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XVII</td>
<td>Dyeing in Textiles</td>
<td>75 (60+15*)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XVIII</td>
<td>Fashion marketing</td>
<td>75 (60+15*)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XIX</td>
<td>Social &amp; Psychological aspects of Clothing</td>
<td>75 (60+15*)</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

Total - 350

**PRACTICAL:**

<table>
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<th>Title of the Paper</th>
<th>Max. Marks</th>
<th>Exam Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX</td>
<td>Textile testing and quality control</td>
<td>50</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XXI</td>
<td>Dyeing in Textiles</td>
<td>60</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XXII</td>
<td>Apparel &amp; Textile Designing</td>
<td>40</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

Total - 150

Grant Total 350 + 150 = 500

* Internal Assessment
NOTE:
- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from units I & II, four questions from each unit.
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

UNIT – I

I. Objectives & importance of textile testing. Importance of standards, different types of standards, Introduction to internal bodies such as ISI, ASTM, BIS etc
- Quality control of textile products.
- Quality standards as applicable to various types of textiles (Garments yardage, knits, woven, carpets, processing, dyeing)

II. Fiber Testing: Definition, objectives & method of testing staple length, mean length, short fiber percentage, fineness, evenness, maturity, tensile strength, elongation at break, interpretation of results.

III. Yarn Testing: Definition, Objective and methods of testing count, Denier twist, diameter, crimp, tensile strength, elongation at break, stress-strain curve, elastic recovery, yarn appearance & evenness, clothcover, interpretation of results.

UNIT – II

IV. Fabric Testing:
- Definition, objectives & methods of testing length, width, bow & skewness, thread count, ends & picks, weight, thickness, breaking strength, tear strength, bursting strength, abrasion, resistance, stiffness, drapability, pilling, crease recovery, handle, flammability &
interpretations of results.

b) Thermal properties of textile fibers.
   - Porosity and air & water permeability of fabrics, thermal conductivity.
   - Serviceability of fabrics - Service, wear abrasion, method of assessment.
   - Garment finishing – color fastness, shrinkage.
   - Concept of fabric faults as related to stages of manufacture & their remedies.

REFERENCES:

5. ISI Specifications, BIS specifications.
6. ASTM Standards.

SEMMESTER-III
Paper-XVI
Apparel and Textile Designing

Max. Marks: 50
Theory Exam: 40
Int. Assessment: 10
Duration of Exam: 3 hrs

NOTE:

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from units I & II, four questions from each units.
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.
UNIT – I

I. Apparel designing:
   - Definition
   - Tools and equipments used
   - Principles & elements of design
   - Structural and applied designs
   - Use of trimmings and decorative features

II. Factors influencing selection of fabric

III. Introduction to leading Indian and foreign dress designers

UNIT – II

IV. Textile designing:
   - Meaning & importance
   - Different techniques/methods of textile designing

V. Types of motifs and design repeats: geometrical, naturalised, stylised etc.

VI. Glossary of fabric terms: chiffon, georgette, faille etc.

References:

- Gioello and Berke : Figure Type And Size Ramnge, Fairchild Publications, New York.
- Nisbet, H : Grammar of Textile Design, Tarapoprewale Sons and Co. Bombay

SEMESTER-III

Paper-XVII

Dyeing in Textiles

Max. Marks: 75
Theory Exam: 60
Int. Assessment: 15
Duration of Exam: 3 hrs

NOTE:

- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from units I & II, four questions from each units.
• The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

UNIT – I
I. Preparation of fabric for dyeing and printing
   - Scouring, bleaching, desizing
   - Reagents used and their application
   - Specific preparatory steps for cotton, wool, silk and man-made fibres.
   - Equipments used at cottage and industrial level for yarn, fabric and price goods.
II. Dyes
   - Classification, definition, components.
   - Colour and chemical constitution of dyes.
   - Dyeing with chemical dyes.
   - Direct, reactive, vat, sulphur, azo (for cellulosic).
   - Acid, metal complex, chromeomordant (for proteins).
   - Basic, disperse (for man-made).
III. Dyeing auxiliaries

UNIT – II
IV. Dyeing with Natural dyes
   - Use of pigments
   - Dyeing machines for fiber, yarn and fibers.
   - Industrial dyeing practices.
   - Dyeing auxiliaries practices.
   - Dyeing of blends.
V. Textile design through dyeing
   - Tie and Dye
   - Batik
   - Level & Cross dyeing
VI. Dyeing defects and remedies.
VII. Advances in dyes & dyeing technology

REFERENCES:
8. ASTM and ISI Standards.

SEMESTER-III
Paper-XVIII
Fashion Marketing

Max. Marks: 75
Theory Exam: 60
Int. Assessment: 15
Duration of Exam: 3 hrs

NOTE:

• Examiner will set nine questions in all
• All the questions will carry equal marks
• Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
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• The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

UNIT – I

I. The Dynamics of fashion
Fashion terminology, fashion cycle, fashion adoption theories, fashion forecast, the role of designers in merchandising.

II. Fashion Marketing
Fashion marketing terms, activities involved in marketing distribution channels, supply chain- horizontal & vertical integration marketing strategy- strategy for pricing , distribution, promotion, branding etc. The Concept of Retailing Definitions, history, Types of Retailing & retail stores .

III. Recruitment and Management of sales force, Personal selling as a means of promotion.
UNIT – II

IV. Sales promotion Techniques: -
(a) Advertising
(b) Publicity
(c) Personal Selling
   Method of sales promotion
      i) Brand ii) Standard iii) Labelling
      iv) Fashion show v) Exhibition vi) Display

V. Visual merchandising
   - Plans and schedule: Seasons, Holiday promotions, sales, themes / ideas.
   - Types of displays – windows display, interior displays.
   - Elements of display – The merchandise, the backdrop walls and shelves, mannequins and forms signage lightning – illuminance levels relations to colour.

VI. Planning and budgeting for a retail store.
   Maintenance and ordering of stocks, preparation of sales reports.

VII. Apparel brands

VIII. Advances in fashion marketing

REFERENCES:

NOTE:

- Examiner will set nine questions in all.
- All the questions will carry equal marks.
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus.
- The remaining eight questions will be set from units I & II, four questions from each unit.
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

UNIT – I

I. Origin of Clothing
II. Theories of clothing – theory of modesty, immodesty, protections, adornment, combined need theory, other theories in fashion.
III. Relation between clothing and other disciplines.
   (a) Physical Health (b) Mental Health
   Clothing and first impressions.

UNIT – II

IV. Relation between clothing and the wearer
   (i) Personality and self concept.
   (ii) Motivation in clothing choices.
   Individual values, interests and attitudes related to clothing.
V. Behaviour and clothing choices, practices and effect and clothing on the individual.
VI. Clothing and Society.
   Clothing and social behavior
   Clothing influenced by religion and culture.
Clothes and conformity
Clothes and occupation
Uniforms in schools and college.
Clothes and colour and impact of colour.

REFERENCES:


TEXTILE TESTING AND QUALITY CONTROL
(Practical)
Semester – III
Paper – XX
Max. Marks: 50
Duration of Exam: 3 Hrs.

I. Yarn Tests
   (a) Count (b) Breaking strength (c) twist (d) Crimp

II. Fabric Analysis
   (a) Thread count (b) Weight (c) Thickness (d) Abrasion
   (e) Strength (Tensile, Tear, Bursting) (f) Crease Recovery
   (g) Dimensional changes in laundering (h) Stiffness

III. Color Partners to
   (a) Laundering (b) Crocking (c) Pressing Dry and Wet
   (d) Perspiration – Acid and Alkaline.

DYEING IN TEXTILES
(Practical)
Semester – III
Paper – XXI
Max. Marks: 60
Duration of Exam: 3 Hrs.

I. Preparation of fabric for dyeing and printing:
   • Scouring
   • Bleaching
   • Desizing, at cottage level for different and fiber blends.

II. Dyeing of yarns and fabrics with different fiber and fiber blend, shade matching.

III. Creating designs on fabrics through various dyeing process
• Tie & Dye
• Batik
• Observation of working of dyeing unit for 1 week and submission report.

APPAREL AND TEXTILE DESIGNING
(Practical)
Semester – III
Paper – XXII

Max. Marks: 40
Duration of Exam: 3 Hrs.

I. Geometrical, naturalized, stylized and traditional design development
   - enlarging, reducing and placement for allover pattern.

II. Collection of fabric samples showing different textile designing techniques:
     printing, dyeing, weaving, fancy yarns, trimmings (sequins, beads etc.),
     embroidery, combinations (eg. printing + embroidery etc), finishes (glazing,
     napping, crepe, parchmentising etc.)

III. Scrap book of dress designs for different figure, occasion, season, age,
     occupation, activity

IV. Market survey of dress trimmings & collection of trimming samples
**SYLLABUS OF MSC. (CLOTHING & TEXTILES)**
Session w.e.f. 2012-13
Semester – IV

### THEORY:

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<tbody>
<tr>
<td>XXIII</td>
<td>Garment Production Technology</td>
<td>70 (55+15*)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XXIV</td>
<td>Printing in Textiles</td>
<td>70 (55+15*)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XXV</td>
<td>Entrepreneurship Management</td>
<td>50 (40+10*)</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XXVI</td>
<td>Fashion Communication</td>
<td>70 (55+15*)</td>
<td>3 hrs</td>
</tr>
</tbody>
</table>

**Total - 260**

### PRACTICAL:

<table>
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<th>Max. Marks</th>
<th>Exam Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXVII</td>
<td>Computer Aided Designing Or Dissertation ***</td>
<td>80</td>
<td>3 hrs</td>
</tr>
<tr>
<td>XXVIII</td>
<td>Pattern Making and Grading</td>
<td>70</td>
<td>4 hrs</td>
</tr>
<tr>
<td>XXIX</td>
<td>Printing in Textiles</td>
<td>70</td>
<td>4 hrs</td>
</tr>
<tr>
<td></td>
<td>Seminar **</td>
<td>20**</td>
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**Total - 240**

**Grand Total 260 + 240 = 500**

* Internal Assessment
** A committee of three teachers will evaluate the seminar of each student and marks will be awarded based on subject matter, presentation and ability to answer questions.
*** In the place of paper XXVI computer Aided Designing students may opt for dissertation in M.Sc. II subject to the condition; that the students has obtained 70 or more marks after II semester (M.Sc.- I year)
SEMESTER-IV
Paper-XXIII
Garment Production Technology

Max. Marks: 70
Theory Exam: 55
Int. Assessment: 15
Duration of Exam: 3 hrs

NOTE:
- Examiner will set nine questions in all
- All the questions will carry equal marks
- Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
- The remaining eight questions will be set from units I & II, four questions from each unit.
- The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

UNIT – I
I. Introduction to the background and structure of the garment / creating Industry.
II. The organization of garment factory
   2. Various Departments like:
      (i) Design Departments
      (ii) Marketing Departments
      Finance Departments
      Purchasing Departments
      Production Departments
      Operations Departments

UNIT – II
III. Manufacturing Technology
    A) Cutting & Cutting Room
       (i) Market planning
       (ii) Efficiency, Method & use of worker plan.
       Methods of spreading of fabric and requirements of the spreading process.
Fusing Technology.
Sewing Technology
Sewing – properties, types
Stitch – types
Sewing Machines – Feed machines machines Needles.
Sewing threads – types of fiber, construction and furnish, thread size, thread package thread costs, thread properties and seam performance.
Sewing problems; Stitch formation, damage along the seam live puckering.
Testing for sewability and tailor ability.
Sewing machinery.
Use of components and Trims
Alternative Methods of forming materials
Fusing
Welding and adhesives
Moulding
Pressing Technology
Production Technology
Ware Housing

IV. Engineering & Quality Control
Production Engineering
Principles of Quality Control.

REFERENCES:
SEMESTER-IV
Paper-XXIV
Printing in Textiles

Max. Marks: 70
Theory Exam: 55
Int. Assessment: 15
Duration of Exam: 3 hrs

NOTE:
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• The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.

UNIT – I
I. Introduction to printing – difference between dyeing and printing.
II. Methods of printing:
   • Historical development of printing methods – block, stencil, screen roller and rotary screens used at cottage and industrial level.
III. Printing pastes – thickening agents and auxiliaries for printing and their suitability to various classes of dyes and fibers. Preparation of printing pastes for different dyes and different fibers.

UNIT – II
IV. Styles of Printing
   • Direct style, resist or resource style, discharge style and raised style.
   • Styles and methods of printing traditionally used in India.
V. Special Printing Procedures:
   • Polychromatic dyeing, transfer printing, carpet printing, flock printing.
VI. Finishing and after treatment of printed goods at cottage and industrial level.
VII. Advances in printing technology
REFERENCES:

8. ASTM and ISI Standards.

SEMESTER-IV
Paper-XXV
Entrepreneurship Management

Max. Marks: 50
Theory Exam: 40
Int. Assessment: 10
Duration of Exam: 3 hrs

NOTE:
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• Question No. -1 will be compulsory consisting of 5-10 short type questions and spread over the entire syllabus
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• The candidates are required to attempt five questions. Question No -1 will be compulsory, remaining four questions will be attempted by selecting two questions from each unit.
UNIT – I

I. Entrepreneurship – Definition, characteristics, employment promotion, efforts to reduce.

II. Business environment for the entrepreneur Government of India’s policy towards promotion of entrepreneurship, reservations and sanctions for small scale sector.

III. Agencies for development of entrepreneurship – role of SSI, procedure and formalities for setting up SSI, Role of MIDC in Industrial development, role of NSIC – supply of machinery and equipment on like purchase, voluntary organization, Bank loan.

UNIT – II

IV. Personal effectiveness; Factors affecting entrepreneurs role, effective communication skills, achievement motivation, goal orientation, psychological barriers to self employment, creativity, assert assertiveness, quick response.

V. Technical communication – Importance of Business communication, Principles, Procedures, Formulation of project proposal, budget estimate and Feasibility of report.

VI. Establishing an enterprise – problems, information, source / schemes of assistance etc.

VII. Management techniques: - Planning, organizing, appointing staffs, executing, controlling and review.

Financial management, working capital, Bank Funding, Calculating calculating risks, personal management, product management, purchase techniques, costing, marketing management, sales promotion, labour law application.

References:


SEMESTER-IV
Paper-XXVI
Fashion Communication

Max. Marks: 70
Theory Exam: 55
Int. Assessment: 15
Duration of Exam: 3 hrs

NOTE:
- Examiner will set nine questions in all
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UNIT – I
I. Fashion and the communication process: What is Fashion?
The Theories of fashion adoption need for promotion of fashion, need for the communication process, and communication through different media.
II. Written Communication:
Fashion writing, creative writing reporting features, editing and printing techniques, image management and advertising, public relations, press laws and media ethics.

UNIT – II
III. Visual Communication:
Visual merchandising and display, fashion photographs, fashion shows and multimedia.
IV. Communication in practice
Scripting shows, conducting interviews, reporting events, fashion critics, planning PR campaigns, formulating case studies, designing cataloves and
brochures, layouts for stands in exhibition. Visualisation of décor and ambience, preparing short films and audiovisuals, choreography of fashion event.

REFERENCES:
• Farbey, A.D.: How to Produce Successful Advertising, Kogan Page India Pvt. Ltd.

SEMESTER – IV
COMPUTER AIDED DESIGNING (Practical)
Paper – XXVII
Max. Marks: 80
Duration of Exam: 3 Hrs.

I. Basic Awareness of Coral Draw, Adobe Photoshop and Adobe Illustrator.
II. Creation of pattern related to textile designing using different types of yarn, weaves and knits. Making designs and its graph. Specification of packs and ends, yarn count for meaning on the computer.
   - Dobby, jacquard pile, carpet and knits. The innumerable styles of weaves, plain as well as design weave. Making punch cards from the graphs. Stimulation of various yarns like novelty, fancy and weaving them on the monitor to get different fabrics with specified end use. Colours and setting designs in different repeats and colour combination. Fitting the repeat according to the method and application of printing – roller, screen, block etc. Scanning the already printed fabric, reducing the color manually or by automatic color reduction.

III. Module I:
   Use of sketching software for development circles. Squares and triangle to study elements of design. Drawing basic silhouettes of design. Drawing basic silhouettes and proportions of the fashion figures construct styles and designs. Conversion of vector based images in to a bitmap based and their application using various effects and filters to create different designs.

   Module II:
   Introduction and use of scanning systems and its software’s. Learning of draping software. Application and change of texture print and colour in the scanned photograph. Creating color ways, new designs and textures by using
available effects like embossing, Blurring, Transparent, Translucent and other such looks on the garments.

**Module III:**
Introduction of pattern making software, knowledge of hardware and pattern making programme. Use of computer for pattern making, grading and marking. Making of specific sheets and drafting out patterns for different age groups. Putting darts, seam allowances and making the layout. Plotting and printing the pattern.

**REFERENCES:**
2. Fujii D: Colour with style, Grpahic-sha Publishing Company Ltd.

**SEMESTER – IV**
**PATTERN MAKING AND GRADING (Practical)**
**Paper – XXVIII**

Max. Marks : 70
Duration of Exam : 4 Hrs.

I. Categories of patterns – body types and Measurements, Infants, toddlers children, preteen, pre-teen, junior misses, woman, half size.

II. Style reading

III. Pattern Making :
   (a) Essential symbols and terms, Piece identification, grain line, Notches, dart, centre front, centre back, fold line, long lengthen / shorten.
   (b) Helpful markings, cutting line, stitching line, stitching direction, ease, gathers, pleats, tucks, hem width edge – finishes, clip, lap line.

IV. Developing drafts for mens garments
   • Gents shirts – formal / Casual
   • Gents Trousers / shorts.
   • Gents jackets

V. Introduction to grading
   • Terminology
   • Methodology Track or stack Method.
   • Procedure for grading blocks to various sizes.
• Children – bodice blocks, screen block skirt and shorts block.
• Women – Bodice block, Sleeve block skirt and shorts block.

VI. Preparation of Port folio:
(a) Grading standard size block to different size.
(b) Preparing to patterns with

Reference:

SEMESTER – IV
PRINTING IN TEXTILES (Practical)
Paper – XXIX

Max. Marks: 70
Training Marks: 20
Duration of Exam: 4 Hrs.

I. Developing designs for block, stencil, screen printing and hand painting.
• Sources of design, sequel arrangements of unit, center line design, spot design border design and eve all design (Sheet work).

II. Printing – preparation of screens and stencils for printing.
• Making samples with stencil, block, screen printings and hand painting on cotton, silk, wool, cotton cool, cotton silk and cotton polyester with different dye classes.
• Make one article each of block, stencil, screen and hand painting.