

**BHARATHIAR UNIVERSITY: COIMBATORE 641046**  
**SCHOOL OF DISTANCE EDUCATION**

**M. Sc. COSTUME DESIGN AND FASHION**  
 (For the student admitted from the academic year 2010-11)

**ELIGIBILITY FOR ADMISSION** : B.Sc. CDF/Textiles & Clothing/Fashion Designing/Textile & Fashion/Apparel Technology

**ELIGIBILITY FOR FACULTY** : a) M.Sc., M. Phil. in CDF/Textiles & Clothing/Fashion  
 b) M. Tech. in Textile Technology

**SCHEME OF EXAMINATION**

Subject Title	University Exam	
	Duration in Hours	Maximum Marks
<b>I YEAR</b>		
Paper I - Costumes and Textiles of the World	3	100
Paper II - Indian Textile Industry	3	100
Paper III - Research Methodology and Statistics	3	100
Paper IV - Fashion Merchandising	3	100
Paper V - International Trade and Documentation	3	100
Practical I - Ornaments and Accessories	3	100
Practical II - Draping for Fashion Design	3	100
<b>II YEAR</b>		
Paper VI - CAD in fashion Designing	3	100
Paper VII - Technical Textiles	3	100
Paper VIII - Apparel Quality Standard and Implementation	3	100
Paper IX - Textile Testing	3	100
Practical III - Textile Testing	3	100
Practical IV - Designs with Prints	3	100
Practical V - Advanced Garment Construction	3	100
<b>Project</b>	3	100
Total		1500

\*Project guidelines: Project must be done under an eligible guide. Each candidate must present his/her work carried out in two review meetings. No. of pages – 80 to 100; Minimum no. of book reference : 30 & Journals : 30.

**PAPER -I**  
**COSTUMES AND TEXTILES OF THE WORLD**

**UNIT I**

North America -Inuits and Aleuts, American Indians of the southwest, American Indians of plains and northwest, and Amish costumes.

Central America - Men and women costumes of Guatemala, Mexico, Andean countries- Colombia, Ecuador, Peru and Bolivia, Chile, Argentina. North east-Brazil, Venezuela, Paraguay and Uruguay.

**UNIT II**

European countries - Egypt, Greece, Roman,

Norway, Sweden, Denmark, Scotland, Austria, Germany, Switzerland, Hungary, Poland, Ukraine, Belarus and Netherlands

**UNIT III**

Far Eastern Countries - Mangolia, China, Taiwan, Hong Kong, Japan, North and South Korea, SriLanka, Pakistan, Burma, Thailand, Philippines, Malaysia and Singapore. .

**UNIT IV**

Africa- Costumes of North, East, West and South.

**UNIT V**

Middle East Countries: Turkey and Iran, Pakistan, costumes of Arab Peninsula.

**REFERENCES:**

1. Costumes of Indian and Pakistan, Das S N, D B TaraporevaIa Sons & Co, Bombay (1958) ""
2. Historic Costume, Chas A, 'Bernard and Co, illinois (1961)
3. Costume through the Ages, Laver, JamesSimon and Schuster, New York (1968).
4. Costumes throughout the Ages, Eoan C C, J B Limancott
5. The History of Costume; Kemper, Rachel H

**PAPER-II**  
**INDIAN TEXTILE INDUSTRY**

**UNIT I**

Origin, Growth and Development of Indian Textile Industry - Cotton, Wool, Silk, Rayon, Man-Made Textiles, Ready made garments

**UNIT II**

Five year plans for the textile Industry - Recent plan and previous 5 Five year plans  
Organisations related to the Textile and clothing Industry  
Concept of GATT, MFA, WTO, AIC, Globalization

**UNIT III**

Technological developments in Fibre Industry, Significance and uses.  
Technological developments in Yam Industry, significance and uses.

**UNIT - IV**

Technological developments in Fabric Industry -woven, significance and uses  
Technological developments in Fabric Industry - knitting, significance and uses  
Technological developments in Garment Industry, significance and uses

**UNIT V**

Technological developments in Printing and Dyeing Industry, significance and uses  
Technological developments in Processing Industry, significance and uses

**REFERENCES:**

1. Textiles - Fiber to fabric, Bernard P Corbman, 6th edition, Mc Graw Hill Book Co, Singapore
2. Fabric forming systems, Peter Schwartz, Trevor Rhodes, Mansour Mohammed, Noyes' Publications, New Jersey, USA(1996)
3. Fabric Care, Normia D'Souza, New Age International Pvt Ltd, New Delhi Journals:
4. Indian Textile Journal- Business Press P. Ltd, Maker Tower B-18 floor, Cuffparade, Mumbai - 400 009
5. Indian Cotton Mills Federation - ICM - Textile Centre 34 P-d, Mello Road, Mumbai 9
6. Indian Silk, Central Silk Board, Ministry of Textiles, M G Road, Bangalore - 560 001.
7. Man-made Textiles in India - SASMIRA, Sasmira marg, Worli, Mumbai
8. Textile Magazine, Magazine House, 710 Mount Road, Chennai
9. Textile trends, East land Publications Pvt Ltd, 44 Chittranjan Avenue, Calcutta-12.
10. Handloom Export Promotion Council 622 Mount Road Chennai
11. Garments India, Garment India Press, 53 South West Road, Chennai-17
12. Indian Jute Bulletin-Indian Regional office, 4K S Pay road, Calcutta -1 .
13. Hosiery and Textile Journal-International Magazine Home-164 Modi Street, Fort, Mumbai-1
14. Textile Highlights, 396, Veerasavarkar marg, Poabhadevi, Mumbai-25
15. Clothing News Bulletin, Clothing Manufacturers Association of India House, Mumbai-26
16. The Textile Institute and Industry, 10 Back Brance. Street, Manchester

**PAPER -III**  
**RESEARCH METHODOLOGY AND STATISTICS**

**UNIT -I**

Meaning of Research - Types of Research - Significance of Research - Research Process. Defining, the Research Problem - Sources, Identification, Selection and Statement, Review of related literature

**UNIT-II**

Research Design - Meaning, Different research designs, Basic Principles of experimental designs. Developing a Research Plan.

Sampling: Census and sample survey, Steps in sampling design, criteria for selecting a sampling. Procedure, characteristics of a good sample design, different types of sample designs.

**UNIT - III**

Methods of Data collection - observation, Questionnaire, Interview

Data processing and analysis, - Collection, classification, tabulation, Graphical, representation. and data analysis. .

**UNIT-IV**

Meaning and scope of statistics Role of statistics in research, measures of central tendency and dispersion, Co-relation,

Co-efficient of Co-relation and its Interpretation, rank Co-relation, regression equation and predictions.. .

**UNIT- V**

Elements of testing of a statistical hypothesis, formulation of the problem. Definition of type -I and type-II errors, Levels of significance large sample test for proportions. Difference in proportions for means and difference in means.

Application of students test for small samples for single mean, difference in means- test for equality of variance. Non - parametric test, Application of Chi-square test, ANOVA test.

**REFERENCE:**

1. Introduction to Research in Education, Ary, Hort Reinhart (1982)
2. Research in Education, Best J N, Prentice Hall, Delhi (1979)
3. An Introduction to Statistical Methods, S P Gupta, Vikas Publishing House, New Delhi.
4. Research Methodology, C R Kothari, Published by K K Gupta for New Age International (P) Ltd, New Delhi
5. Statistics, Voll &2, G A Zeaf Textile Institute Manchstor

**PAPER -IV**  
**FASHION MERCHANDISING**

**UNIT I**

Introduction to Merchandising, Understanding fashion Merchandising, Scope of Merchandising, Fashion merchandising terminology, Role of Merchandiser

**UNIT II**

Types of Merchandising - Export House - manufacturer - Buying house, Buying Agency - Selection of Buyer's & Buying Agency

**UNIT III**

Pre-buying Activity, Fabric types, properties and Behavior, selection of Fabric, Garment construction, Quality requirements; quality problems, Merchandiser's role after production, Delivery date extension, transport delays - Natural calamities, Importance of LC amendments

**UNIT IV**

Knowledge of Fashion Trends, Brands and Designers, Introduction to international designers, Business opportunities and avenues, Interdepartmental relationship for merchandiser, Boutique handling

**UNIT V**

Marketing analysis - Advertising and Media Planning, Fashion shows and other events, Industry tour and Project. Role play, Surveys and organizing of exhibitions

**REFERENCES:**

1. Fashion Design and Product Development, Harold Carr and John Pomeroy, Black well Science Inc, Cambridge (1992)
2. Fashion marketing, Mike Basey, Oxford University press, Wynford Drve, Don Mills,Ontario (1995) . . .
3. Introduction to Fashion, Patrick John, B T Batsford Ltd, Ireland, Fullham road, London (1992).
4. Fashion From Concepts to Consumer, Stephens Frings, Prentice Hall, 7<sup>th</sup> Edition 2002.
5. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996

**PAPER V**  
**INTERNATIONAL TRADE AND DOCUMENTATION**

**UNIT I**

Introduction to international trade, Global scene, Prospects for Indian Apparel in overseas market, Globalisation, GATT and WTO

**UNIT II**

Foreign trade document -need - types of documents related to goods, invoice to goods, invoice packing note and list - certificate relating to shipments - shipping bill- caret ticket - certificate of measurement - Bill of lading - airway bill - documents related to payment -letter of credit - bill of exchange - bank certificate for payment - document related to inspection

**UNIT III**

Import procedure and shipment - import license - procedure - special schemes replenishment license - advance license - split up license - spares for after sales service license - code number - bill entry, pre shipment inspection and quality control, post shipment formalities and procedures

**UNIT IV**

Export procedure and recent policies of the government

**UNIT V**

Customs - meaning, definition, types, exercise and customs, clearance of export cargo shipment of goods and port procedures - claiming duty draw backs and other benefits

**REFERENCE:**

Govt. of India: Hand book of import and export procedures

Bose. A, Streamline your export paper work, International trade form Oct - Dec 1965

### **PRACTICAL -I ORNAMENTS AND ACCESSORIES**

Prepare the following Samples using the available raw materials / any base material  
(Example - on top of a bangle or slipper)

1. Hand bags -4 varieties
2. Purses / Wallets / Cell Phone covers -. 4 varieties
3. Chains I Necklaces - 5'models
4. Bangles / Bracelets / Watches - 5 models
5. Slippers / Shoes - 5 models
6. Ear rings - 5 models
7. Finger rings / toe rings- 5 models
8. Belts - 5 models
9. Hair bands - 5 models
10. Anklets - 5 models
11. A set. of Bridal Ornaments - select a Bridal costume.
12. A set of Ornaments for a Dress designed for a Fashion Show

### **PRACTICAL -II DRAPING FOR FASHION DESIGN**

Prepare the following samples using the Draping Method

- Basic waist - Front and Back
- Dart Manipulation
- Pleats, Darts, Tucks and Gathers
- Neckline variations
- Armhole variations
- WaiStline variations
- The princess waist
- Midriff waist
- Yokes

Skirts- any- two

- Flared skirt
- Gore skirt
- Pleated skirt
- Hip yoke skirt

Collars - any two

- Mandarin Collar
- Band Collar
- Convertible collar
- Peter pan collar
- Shawl collar cut in one piece with front waist

Sleeves - any two

- Basic sleeve
- Dolman sleeve
- Raglan sleeve
- Kimono sleeve

Create anyone of the following garment for a girl child

- Yoke frock
- Baba suit - with bib
- Middi and middi top

Create anyone of the following garment for a boy child

- T-shirt and shorts
- Kurta and Pyjama
- $\frac{3}{4}$  pants and Tops

Create anyone of the following for an Adolescent girl

- Full Gown
- Salwar Kameez Churidhar
- Lachaas - Flowing skirt and short tops
- Middi and Tops
- Wrap around and Tops

Create any one of the following for an adolescent boy

- Night gown with shawl collar
- T-shirt and Bermudas
- Shirt and Pant

#### **REFERENCES:**

1. Dress Design - Draping and Flat Pattern, Hill House M S, Houghton Mifflin Co, London, USA
2. The Theory of Fashion Design, Brockman, Magritha, John Wiley Sons, New York.
3. Design through Draping, Sheldon, Martha, Burgers Publishing company, Minneapolis, USA.
4. Modern Pattern Design, Popin, Harriet, Funk and Wagnalls, New York and London



**PAPER VI**  
**CAD IN FASHION DESIGNING**

**UNIT I**

Computer Basics- computer specifications- input / output devices - concept of CIM Computer Aided Fashion- Computer Aided Garment Manufacture  
CorelDraw  
Development of designs for surface decorations

**UNIT II**

Computer Pattern making, grading, and marker planning, Draping on Mannequins to check the fitting and texture mapping  
Study of LECTRA, GERBER and other software's Enterprise resource planning, supply chain management.

**UNIT III**

Computer application in sewing and embroidery- Computer aided colour matching - computer controlled overhead transport and ware house storage systems .

**UNIT IV**

The impact of colour graphics of clothing design - CAD in fabric design - CAD in clothing design- Computer colour graphics- creating visual images.

**UNIT V**

Computer Applications in Fabric Design,  
Creating weave designs, creating jacquard designs

**REFERENCES:**

1. Softwares; Adobe PhotoShop, CorelDraw, TukaCAD, Tuka Studio
2. Computer Aided Design and Manufacturing, Groover M P, Zimmers E W, Prentice hall International.
3. CAD in Clothing and Textiles, Winfred Aldrich, II

## **PAPER VII TECHNICAL TEXTILES**

### **UNIT I**

Introduction, definition and scope of technical textiles, Application of technical textiles

### **UNIT II**

Finishing of Technical textiles - Introduction, finishing process, Mechanical finish

### **UNIT III**

Heat and flame protection, water proof fabrics, Geo-textiles

### **UNIT IV**

Medical textiles, Textiles-for survival

### **UNIT V**

Smart textiles and intelligent textiles

### **REFERENCES :**

Hand book of Technical textiles - A R Morrocks and S C Anand, Wood head publishing ltd, England 2000

## **PAPER-VIII APPAREL QUALITY STANDARDS AND IMPLEMENTATION**

### **UNIT I**

Introduction to quality standards, importance, benefits, levels and sources of quality, standards, British standards & ISO Standards for the Apparel Industry, ISO 9000 & 14000 standards, Total quality Management systems, Co Labeling & OKO Tex 100 standards. .

### **UNIT II**

Sensitizing dye stuffs, allergic dyes, carcinogenic amines, red-listed as per Eco specifications, Eco management of textile and apparel industry, Global Scenario, Eco mark & Environment friendly textiles.

Garment defects.- cutting defects, sewing defects, assembly defects, pressing, finishing and packaging defects ..

### **UNIT III**

Eco specification & restrictions in apparels and textiles - dry cleaning using ozone. depleting chemicals, PH values, formaldehyde contents, heavy metal contents, Pesticides and herbicides, azo dye stuffs, Nickel,. Pentachlorol phenols, color fastness, brighteners, softening agents etc.,.

**UNIT IV**

Starting a quality control program, implementation of quality systems in production line, product specifications and analysis using analytical tools. Quality management through Inspection, testing and sewing quality tools

**UNIT V**

Quality costs and customer returns; inspection procedures, AQL and quality control

**REFERENCES:**

1. Managing quality in apparel industry, Pradeep V Mehta, NIFT Publications
2. An Introduction to quality control for the apparel industry, Mehta P V, Marcel Dekker
3. Physical testing and quality control, Vo123, No. 1/2/3 textile Institute (1993)
4. Textile Testing, John Skinkle, Brooklyn Publication, New York .
5. Textile Testing, P. Angappan & Gopala Krishnan, JK. Publications

**PAPER IX  
TEXTILE TESTING****UNIT I**

Introduction to testing - terminology of testing - selection of samples for testing standard R H and temperature for testing - measurement of moisture regain conditioning oven - Shirley moisture meter

**UNIT II**

Fiber testing

1. Cotton fiber length - Baer Sorter
2. Fineness - Air flow principle instruments, Sheffield micronaire
3. Maturity - Caustic Soda swelling
4. Strength - Pressley bundle strength tester, Stelometer
5. Determination of trash and lint in cotton - Shirley trash analyzer

**Unit III**

Yarn Testing

1. Yarn numbering system - conversion of count from one system to another
2. Instruments for count determination - quadrant balance, Beesley balance
3. Yarn strength testing - Principles of CRT, CRL, CRE - Single strength tester, Lea strength tester .
4. Yarn twist - Direction of twist, twist multipliers, Twist testers - tension type, A TIRA direct type tester
5. Yarn evenness - classification of variation, methods of measuring evenness – black board, ASTM Standards, Uster evenness tester, Uster Standards, Yarn faults, classifications, Classimat
6. Yarn hairiness and crimp testing

**UNIT IV**

## Fabric testing

1. Fabric Particulars –length, width, crimp, weight, cover factor
2. Fabric Strength - fabric tensile strength tester, tearing strength tester, hydraulic bursting strength tester
3. Fabric Abrasion - resistance, handle, serviceability, assessment, Martindale abrasion tester
4. Fabric Pilling - I C I Pill box tester
5. Fabric drape -Measurement, Drape meter
6. Fabric Stiffness - Shirley stiffness tester
7. Fabric crease resistance and crease recovery measurements
8. Fabric permeability - Shirley air permeability tester, fabric water permeability tester, Bundersmann tester

**UNIT V**

Colour Fastness in Textiles - Crocking test, perspiration test, sunlight, laundering, pressing and dry cleaning aspects, whiteness index, matching cabinets, computer matching

**REFERENCE:**

- Principles of textile Testing, Booth J E, Hoybooks, London (1970)  
Technology of textile properties, Marjorie A Taylor, Forbes publications Ltd, London (1972)  
Textile Testing, Angappan P and Gopalakrishnan R, SSM Institute of textile teclmology, Komara Palayam  
Fiber Science, Mishra S P and Kesavan B K, SSM Institute of textile teclmology, Komara Palayam  
Objective evaluation of fabrics, Styios G, John Wiley & Sons USA

**PRACTICAL III  
TEXTILE TESTING**

1. Determination of Tensile Strength of the given Fabric
2. Determination of Stiffness of the given Fabric
3. Determination of Abrasion Resistance of the given Fabric
4. Determination of Crease Recovery of the given Fabric
5. Determination of Drape of the given Fabric
6. Determination of Tensile Strength of the given Fabric
7. Determination of Bursting Strength of the given Fabric
8. Determination of Colour Fastness of the given Fabric by Crock meter
9. Determination of Color Fastness of the given Fabric by Perspirometer
10. Determination of Color Fastness of the given Fabric by Laundromete
11. Determination of Shrinkage of the given Fabric

**PRACTICAL IV  
DESIGN WITH PRINTS**

Design and construct a garment with Tie and Dye Print

Design and construct a garment with Batik Print

Design and construct a garment with Stencil Print

Design and construct a garment with Block Print

Design and construct a garment with Screen Print

Design and construct a garment with Fabric Painting

Pattern Making - Draping or Drafting

**For Examination** - Prepare the Printed sample and present the garment silhouette in the form of Illustration .

**PRACTICAL V  
ADVANCED GARMENT CONSTRUCTION**

1. Design and construct Children's garment of recent fashion- any 2 styles
2. Design and construct Women's garment of recent fashion- any 2 styles
3. Design and construct Men's garment of recent fashion- any 2 styles
4. Design and construct garment for a Party wear
5. Design and construct garment for a Fashion Show based on a theme

***Method of Pattern Making*** - Draping or Drafting method

***Develop Portfolio for all the garments***