

BHARATHIAR UNIVERSITY, COIMBATORE
M. Sc. Apparel Fashion Designing
(Effective from the academic Year 2014-2015)
SCHEME OF EXAMINATIONS – CBCS PATTERN

Sem.	Study Components	Course title	Ins. hrs/	Exam				Credit
				Dur.Hrs	CIA	Marks	Total Marks *	
I	Paper I	Research Methodology and Statistics	7	3	25	75	100	4
	Paper II	Costumes and Textiles of the World	5	3	25	75	100	4
	Paper III	Global Textile and Fashion Industry	5	3	25	75	100	4
	Practical I	Advanced Fashion Sketching	4	4	40	60	100	4
	Practical II	Draping for Fashion Design	5	3	40	60	100	4
	Elect	Paper I	4	3	25	75	100	4
II	Paper IV	Fashion merchandising	5	3	25	75	100	4
	Paper V	Textile Testing and Quality Standards	6	3	25	75	100	4
	Practical -III	Surface and Accessories Designing	5	4	40	60	100	4
	Practical – IV	Digital Fashion Designing	5	4	40	60	100	4
	Practical V	Creative Pattern Manipulation and Garment Construction	6	4	40	60	100	4
	Elect.	Paper II	3	3	-	-	100	4
III	Paper VII	International Trade And Documentation	5	3	25	75	100	4
	Paper VIII	Technical Textiles and Functional Clothing	5	3	25	75	100	4
	Paper IX	Creative industries and Specialization	4	3	25	75	100	4
	Practical VI	Fabric Structure and Performance Analysis	3	4	40	60	100	4
	Practical VII	CAD in Pattern Making	5	3	40	60	100	4
	Practical VIII	Portfolio and Design Collection	4	3	40	60	100	4
	Elect.	Paper III *	4	3	--	--	100	4
IV	Project work & Viva voce		\$	-	-	-	250	10
	Elect.	Paper IV	4	3	-	-	100	4
		Total					2250	90

* **Includes 25/40% continuous internal assessment marks for theory and practical papers respectively.**

\$ - 2 hours / candidate/week. For Project report - 80% (200 marks); Viva-voce - 20% (50 marks)

*Project guidelines:

Each candidate must present his/her work carried out in three review meetings. Each review meeting will carry 50 marks (total 150 marks)

Dissertation details - 50 marks; No. of pages – 80 to 100; Minimum no. of book reference-30 & Journal-30.

List of Group Elective papers (Colleges can choose any one of the Group papers as electives)

	GROUP A	GROUP B	GROUP C
Paper I/ Sem I	Visual Merchandising	Woven Fabric Structure & Design	Visual Presentation
Paper II/Sem II	Fashion Retail Management	Knitted Fabric Science	Creative Thinking and Geometry for Designers- Practical
Paper III/Sem III	Merchandising Management	Knitted Fabric Processing & Finishing	Fashion Photography - Practical
Paper IV/Sem IV	Product Development Practice- Practical	Home Textiles	Innovative Fashion Designing -Practical

SEMESTER –I
PAPER -I
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 Manchestor

SEMESTER -I
PAPER -II
COSTUMES AND TEXTILES OF THE WORLD

UNIT I

America -Inuits and Aleuts, American Indians of the southwest, American Indians of Plains and northwest, Amish costumes, Guatemala, Mexico, Colombia, Peru and Bolivia, Chile and Brazil.

UNIT II

European countries - Egypt, Greece, Roman, Norway, Sweden , Denmark, Scotland, Austria, Switzerland, Hungary, Poland, Ukraine

UNIT III

Far Eastern Countries - Mongolia, China, , Japan, North and South Korea, SriLanka, Pakistan, Burma, Thailand, Philippines

UNIT IV

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

UNIT V

Middle East Countries Turkey and Iran, Costumes of Arab Peninsula.

REFERENCES:

1. Costumes of Indian and Pakistan, Das S N, D B Taraporevala 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

SEMESTER –I
PAPER-III
GLOBAL TEXTILE & FASHION INDUSTRY

Unit I

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

Unit II

Brief study on Technological developments in Fibre to garment Industry, Significance and uses.

Unit III

Fashion & power, Fashion Icon, Fashion Masses, Style & Vogue, Super Models, Popular fashion, High fashion

Fashion & Cinema, Birth of Cinema, Contemporary of World Cinema, Hollywood & Bollywood Cinema and Costumes, Fashion Designing For Film Industry - Case & Analysis

Unit IV

Fashion & Art, Cubism, Pop Art, German Expression, Dada, Romantism, Futurism, Classism, Neo Classism, Naturalism, Modernism, Art deco, Bauhaus – Compare & Contrast Art With Fashion

Unit V

Fashion Magazine , History of Fashion Magazine, Role of Magazine in Fashion Industry, Magazine Content & Styling, Script, Editing, Proof Reading, Photoshoot. (Fashion Magazine Analysis & Report)

World Fashion Canters Paris, Italy, London, New York, Milan, Upcoming Fashion Centres
Fashion Weeks London Fashion Week, Paris Fashion Week, Hong kong Fashion Week,

REFERENCES:

1. *Judelle & Jarnow*, Inside Fashion Business, Mac Millan.
2. *Tewtile Committee*, NIFT – Research Reports The Role Of Fashion Designer in the Future Growth f the Indial Appael Fashion Industry.
3. *Rita Perna*, Fashion Forecasting, Xerox Copy.
4. *Eline Stones*, Fashion Buying, Mc Graw Hall
5. *Gini, Stephens Frings*, Fashion From Concept to Consumer, Prentice Hall.

SEMESTER –I
PRACTICAL –I
ADVANCED FASHION SKETCHING

Part A – Fashion Sketching

1. Still Drawing
2. Model drawing,
3. Fabric painting
4. Garment Sketching-Men, Women & Kid
 - a) Creating Checked effects in a garment - one colour and multiple colour
 - b) Creating Printed effects in a garment - one colour and multiple colour
5. Outdoor Sketching
6. Fashion accessory drawing

Part B- Fashion Illustration

1. Drawing from Photographs - any 2 garment designs
2. Stylized illustration - Collage work, Cutwork illustration, 3D illustrations
3. Group illustration with different backgrounds

Note

Any one exercise from each part will be given for the University examination

**SEMESTER –I
PRACTICAL -II
DRAPING FOR FASHION DESIGN**

UNIT I

Basics of Draping

Basic Bodice – Front, Basic Bodice – Back

Basic Skirt, Dart Variations, Pleats, Dart Tucks and Gathers, Neckline variations

Armhole Variations, Waistline Variations

UNIT II

Skirt-any two, Flared skirt Gore skirt Pleated skirt Hip yoke skirt, The princess waist

UNIT III

Collars - any two, Mandarin Collar, Band Collar Convertible collar Peter pan collar

Yokes – any two, Hip yoke, Shirt Yoke, Midriff Yoke.

UNIT IV

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

UNIT IV

Create anyone of the following for an teenagers Full Gown Salwar Kameez Lachaas - Flowing skirt and short tops Middi and Tops

REFERENCES:

Draping For Fashion Design, Hilde Jaffe , Nurie Relis.

Dress Design - Draping and Flat Pattern, Hill House M S, Houghton Mifflin Co, London, USA .

The Theory of Fashion Design, Brockman, Magritha, John Wiley Sons, New York.

Design through Draping, Sheldon, Martha, Burgers Publishing company, Minneapolis, USA. Modern

Pattern Design, Popin, Harriet, Funk and Wagnalls, New York and London

SEMESTER –II
PAPER -IV
FASHION MERCHANDISING

UNIT I

Introduction to Merchandising, Understanding fashion Merchandising, Requirements of a merchandiser, Responsibilities of a merchandiser Fashion merchandising terminology, Role of Merchandiser.

UNIT II

Types of Merchandising - Export House – manufacturer Exporter-Merchant exporter – Buying house-Buying Agency –Types of Buying agency Selection of Buyer's & Buying Agency, Functions of merchandiser in an Export house, buying house and 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

Importance of costing in textile industry-elements of costing, fabric construction/ Gsm calculation, patterning vs. costing, fabric consumption calculation, fabric costing- woven and knits, value added materials in garments, Garment costing-men's style, ladies style, childrens style, shipping charges, trial costing.

UNIT V

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

REFERENCES:

1. Fashion Design and Product Development, Harold Carr and John Pomeroy, Blackwell Science Inc, Cambridge (1992)
2. Fashion marketing, Mike Basey, Oxford University press, Wynford Drive, 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, 7th Edition 2002.
5. Marketing Management, Philip Kotler, Prentice Hall, 7th Edition 1996

SEMESTER -II
PAPER-V
TEXTILE TESTING AND QUALITY STANDARDS

UNIT I

Introduction to quality standards, importance, benefits, levels and sources of quality standards.

Fibre quality: Introduction, influence of FQI on yarn quality. Yarn Testing: Influence of count & twist on fabric properties. Importance of Yarn evenness. Classification of yarn imperfections and faults.

Unit II

Fabric Physical properties testing: Weight, cover factor. Fabric Strength: Tensile strength, tearing strength, bursting strength. Testing of dimensional stability, Fabric crease recovery, serviceability air permeability, water repellency, abrasion resistance and pilling, handle, drape, Objective evaluation of fabric Handle by KES, FAST systems.

Unit III

Testing of Spirality, Bowing & Colour Fastness of apparels. Testing of buttons, zippers, elastics, hooks, hook and loop tapes. Testing of Linings, interlinings, and fusible interlinings. Seam strength, Seam Elasticity, Seam Durability and Seam Security.

Unit IV

Various Eco label & specifications. Garment defects - cutting defects, sewing defects, assembly defects, pressing, finishing and packaging defects

UNIT V

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 AQL and quality control

British standards & ISO Standards for the Apparel Industry.

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

**SEMESTER II
PRACTICAL III
SURFACE AND ACCESSORIES DESIGNING**

Part A- Printing

Prepare following the sample with the prints

- Tie and Dye
- Batik Print Design
- Stencil Print Design
- Block Print Design
- Screen Print Design

Part B- Accessories

Prepare the following Samples in 2 nos. using the available raw materials / any base material
(Example - on top of a bangle or slipper)

1. Hand bags
2. Chains / Necklaces
4. Bangles / Bracelets
5. Ear rings/Studs
7. Finger rings / toe rings
8. Hair bands
10. Anklets
11. A set of Bridal Ornaments - select a Bridal costume.
12. A set of Ornaments for a Dress designed for a Fashion Show

Note

In accessory designing one model will be demonstrated and the rest shall be carried out by students as assignment and should further submit a record book .

**SEMESTER II
Practical IV
Digital Fashion Designing**

Unit I

Image Editing & Special effects, Collage work

Unit II

Print Designing – Designing, Colour Separation, Film Making (Each student should submit digital print out of separated color films)

Unit III

Accessory Designing - Hand bag, Footwear, Hat
Garment designs with special effects – Batik, Tie and Die, Block print, Checks and stripes

Unit IV

Garment Tech Pack Design – Knitted casual wear

Unit V

Layout Design, Catalogue Design – Fashion show

REFERENCES:

1. Graphics, Rockfortpublishers,Massachusetts.
2. *Venugopal . K* , Engineering Drawing And Engineering Drawing And Graphics + Auto Cad, New Age International Privarte Ltd.

**SEMESTER II
PRACTICAL V
CREATIVE PATTERN MANIPULATION AND GARMENT CONSTRUCTION**

1. Select one pattern and stylize by adding dart or tuck elements and construct garment
2. Expand or reduce the pattern elements to form creative garment outlook.
3. Creative manipulation of basic bodice pattern into contemporary styles
4. Design and construct Children's garment of recent fashion- any 1 style
5. Design and construct Women's garment of recent fashion- any 1 style
6. Design and construct Men's garment of recent fashion- any 1 style
7. Design and construct garment for a Party
8. Design and construct Contemporary Intimate wear with latest minimalism trend
9. Design and construct Commercial garments based on taking inspiration from micro creative structures – insects/bird
10. Design and construct Commercial garments based on taking inspiration from micro/macro creative structures - architectures

Note

For University examination each student should design and develop flat sketch for one garment. Further they should develop pattern for the same by using draping or drafting method

SEMESTER III - PAPER VII

INTERNATIONAL TRADE AND DOCUMENTATION

Unit I

Need for international Trade – Features – Advantages – Problems of foreign trade

Unit II

International trade documents – Regulatory frame work – Foreign trade documents – Regulatory & Commercial documents - Letter of credit – Contract terms and export documents.

Unit III

Export procedures – getting established as an exporter – entering into export contract – Execution - post shipment procedures – Export promotion measures – Incentive and facilities to exporters.

Unit IV

Import procedures - Import process – Customs clearance for imports – role of custom and exercise in international trade.

Unit V

Recent developments in foreign trade – WTO - globalization – EXI M policy – regional trade agreements – current trends in international trade.

Reference:

1. International Trade and Export Management (2008) Francis Cherunilam, Himalaya publishing house – New Delhi.
2. Foreign Trade (2005) Jeevanandam.C, Sultan Chand & Sons – New Delhi.

SEMESTER III - PAPER VIII
TECHNICAL TEXTILES AND FUNCTIONAL CLOTHING

Unit I

Introduction to Technical textiles, definition and scope of technical textiles, developments in fibres- natural fibres, polyamide, polyester, viscose rayon, polyolefin, high performance fibres and glass and ceramics, Application of technical textiles

Unit II

Functional design of textiles, Properties – structural, aesthetic, functional and their advantages, comfort and fit.

MEDICAL WEAR: Classification of Medical textiles and their functions – Textile materials used for implants and non-implants –Healthcare and Hygiene products.

Unit III

ENVIRONMENTAL PROTECTIVE CLOTHING: Protection against rain, heat, cold, snow, wind, and insect- material selection, finishing treatments.

Unit IV

PROTECTIVE CLOTHING FOR SERVICE PERSONNEL: Clothing for soldiers, fire service personnel. Protection against knives and other weapons, Clothing for ballistic protection. Gloves, masks, helmet, respiratory devices, eye glasses and shoes.

Unit V

SPORTS WEAR: Clothing requirements, functional fibres, yarns and fabrics suitable for sportswear application and its properties. Footwear Clothing: Fabric requirements, finishing adaptability.

TEXT BOOKS:

- 1.Horrocks A R and Anand S C, “Handbook of Technical Textiles”, The Textile Institute, Woodhead Publications, 2000.
- 2.Adanur S, “Wellington Sears Handbook of Industrial Textiles”, Technomic Publishing Co., Inc, 1995.
- 3.Sanjay Gupta, “Smart Textiles – Their Production and Marketing Strategies”, Bhumica Printers, New Delhi, 2000.
4. Tao X, “Smart Fibres, Fabric and Clothing”, Textile Institute, 2001.
- 5.Richard A Scott, “Textiles for protection”, The Textile Institute, Wood Head Publishing Limited, England , 2005.

SEMESTER III
PAPER IX
CREATIVE INDUSTRIES AND SPECIALIZATIONS

Unit I

Creative Industries Meaning, Creative Industries in India & Abroad, History & Background, Compare & Contrast the Market Scenario, product Comparison, Market Strategy, Market Positioning .

Unit II

Art & Antique Market - Visual Arts, Performing Arts, Sculpture Arts, Architecture, Installation Arts, Digital Arts.

Unit III

Entertainment Industry – Mass Media, Live, Broadcast, Toys, Gaming, Music, Leisure, Film, Drama, Tourism, Electronic.

Unit IV

Glamour & Luxury Industry – Styling, Fragrance, Modelling, Make-up, Luxury Products, Home Interior, Beauty & Aesthetics, Elite Products.

Unit V

Design Applications- Industrial Design, Communication Design, Product Design, Experience Design, Graphic Design, Furniture Design, Interior Design.

REFERENCES:

1. Graphics, Rockfortpublishers,Massachusets.
2. *Widdows, Lee And Mcguinness* Catwalk : Working With Models , Jo B.T Bafsford Ltd.
3. *Calothorne, Nigel*, "The New Look" The Dior Revolution, Read Consumers Books Ltd.
4. *Bloom, Owila*, Multi Cultural Art Activities-Kit.
5. *Simple, Chie* Accessories, Thomes And Hudson.
6. *Dar, s.n.* Costumes Of India And Pakistan: A Historical And Cultural Study, Taraporcuala Sons
7. Colour And Styling : Spiring Summer 1999, Fashion Connect

**SEMESTER III
PRACTICAL VI**

Fabric Structure and Performance Analysis

Part A – Fabric Structure Analysis

Analyze the given knit and woven fabric swatch for the following particulars:

1. Courses & wales per cm/ EPI & PPI
2. Loop length /Crimp
3. Technical graph
4. Cam settings
5. Needle order

Fabric Structures

Single Jersey and Double jersey derivative structures

Part B – Fabric Performance Analysis

1. Determination of Bursting Strength of the given Fabric
2. Determination of Stiffness of the given Fabric
3. Determination of Crease Recovery of the given Fabric
4. Determination of Drape of the given Fabric
5. Performance analysis of dyed fabric to wet cleaning and rubbing.
6. Determination of Color Fastness of the given Fabric by Perspirometer
7. Determination of geometrical properties of the given Fabric

(Any one Exercise from each part may be given for final examination)

**SEMESTER III
PRACTICALS VII
CAD IN PATTERN MAKING**

Prepare pattern making, Grading and marker planning for the following garments

Children's wear

Yoke frock

Baba suit

Summer frock

Skirt and tops

Women's wear

Salwar

Kameez

Tops

Nightie

Princess line dress

Men's wear

Slack shirt

Full sleeve

T-Shirt

Bermudas

Pleated trouser

Bell bottom

SEMESTER -III PRACTICAL –VIII

Portfolio and Design Collection

Part A

Portfolio Presentation - with Customer profile, Inspiration board, Mood Board, Colour board, Flat Sketch board, Illustration board, Swatch board, Trim board, Accessory board- for the following collection

- Fashion Show- with a theme – one ramp set
- Winter collection - 3 garments
- Summer Collection -3 garments

Note

1. Customer profile: capture photograph of your customer.
2. Inspiration board: Image collection from books and magazines by scanning, Photography and drawing, use of objects for mood creation
3. Mood board: develop a theme based on group discussion, mind mapping, brain storming.
4. Colour board: spotting theme board, mood board and inspiration board arrive the color board.
5. Flat sketch board: Develop front, side and back views

Part B

Construct the garments for all the above categories

Presentation & Evaluation

CIA distribution - intrim presentation 50% and record 50%.

For University examination each student should make a presentation on their portfolio and design collection

REFERENCES:

1. *Jeanne Allen*, Designer`S Guide To Colour, Vol. I Chronicle Books.
2. *Shion, Kyoto*, Check And Stripe: A Design-Source Book 2 Kyoto Shoin Company Ltd.
3. *Whelen m. Bride*, Colour Harmony 2 Thames And Hudson.
4. *Garthe, Mary*, Fashion And Colour, Rockfort Publishers.
5. *Polly Guerin*, Creative Fashion Presentation , Fairchild Publishers.
6. *Linda Tain*, Portfolio Presentation For Fashion Designers, Fairchild Publishers.
7. *Patrick John Ireland*, Fashion Design Drawing And Presentation, B T Batsford Ltd.
8. *Prakash.K* Fashion Show: Selected By Trends 90-91 Autumn, Milan-Paris Marderd.

**SEMESTER-I GROUP ELECTIVE A
PAPER-I VISUAL MERCHANDISING**

UNIT I

Introduction – Elements of Visual Merchandising – Needs – Psychology – Display.

UNIT II

Maslows Pyramid – Postive Negative Theory – Visual Signature

UNIT – III

Applications of Visual Merchandising – Exterior, Interior, Trade show & Fair, product Package – POP (purchase of product) – Importance of POP.

UNIT IV

Mission of Shopping – Meeting Shoppers Mission – Big Shopping – Small Shopping "Store "Multi Brand Store.

UNIT V

Branded, stores 7 International and National Level

REFERENCE

1. Fashion Merchandising & Information, PRISCO
2. Fashion Merchandising, Elaini Store
3. Fashion Merchandising Introduction – Stores & Shoppers
4. Visual Merchandising
5. The business of fashion inside outside Kitty Dickerson

SEMESTER-II GROUP A: ELECTIVE PAPER-II
Fashion Retail Management

Unit I

Fashion Retailing – meaning & definition – global retailing – trends & strategies – types of retailers – functions of a retailer – middle man – distribution channel – functions of middle man

Unit II

Retail store lay out – merchandise planning – merchandise calendar – sourcing – types & strategies.

Unit III

Brand types – features of a good brand – brand positioning – Re-positioning – customer loyalty (CLP) Programme – sales promotional techniques in retailing

Unit IV

Pricing – objectives – policies – pricing methods – cost control methods in retailing business

Unit V

Visual merchandising – requirements & functions of a visual merchandiser – display – types – techniques for effective display. Direct marketing – cause marketing – event marketing – trade shows – fashion shows – case studies – strategies of eminent retailers.

REFERENCES

1. Barry Berman, Joel R. Evans, Retail Management
2. Philips Kotler, Marketing Management
3. Ramaswamy. Namakumari, S. Marketing Management

SEMESTER-III GROUP A: ELECTIVE PAPER-III
Merchandising Management

Unit I

Merchandising – meaning & definition – types of export – merchant exporter, manufacturer export – job workers & their functions – requirements and traits for a merchandiser.

Unit II

Functions of a merchandiser – programming , costing methods – CMT rate calculation – execution of sample orders

Unit III

Production schedule – master schedule – job order schedule – departmental schedule – factors for production schedule – production – follow up – inspection : in process , pre final & final inspection – AQL.

Unit IV

Team – building – team dynamics – motivation theories – motivational techniques for merchandiser

Unit V

Conflict – types – reasons for conflict – conflict resolution techniques – stress types – EUSTRESS –

DISTRESS – Work stress – causes – stress relaxation techniques

SWOT analysis – go – go situation – no-go situation – strategic planning – steps – strategies for an effective merchandising

REFERENCES

1. Daragho' Reilly, Jullian J. Gibas, Building Buyer Relationships.
2. Dennis W. Me. Leavey Peter, Production Planning & Inventory Control.
3. Mc Millan Publishing Co., Inside the Fashion Business.
4. Amubai Patel, Towards Zero Defects.
5. Pradeep Metha, Managing Quality in the Apparel Industry.
6. Strong Elian, Fashion Merchandising.

SEMESTER-IV GROUP A: ELECTIVE PAPER-IV
Product Development Practice- Practical

Students will be given export order or export enquiry and they are asked to design the Samples as per the specification given and also prepare a report containing the following Details.

1. Yarn Details & Composition
2. Yarn Consumption Per Garment
3. Fabric Details – Design, GSM, Machine Etc.,
4. Size Details
5. Factory Cost of Garment

(Totally 6 Export Orders & 6 Export Enquiries Related To Following Styles Shall Be Given)

(Men's Basic T Shirt / Men's Crew Neck Shirt / Men's Polo T Shirt / Men's High Neck Shirt / Men's Boxer Short / Men's Bermuda Short / Men's Trouser / Men's Full Arm Shirt / Men's V – Neck Shirt / Men's Collar Neck Shirt / Men's Inner Garment – Vests Rn / Rns / Men's Under Garment: Briefs With Inner Waist Band Or Outer Waist Band Of Various Models - Trunk Type. / Ladies Skirt With Pleats / Ladies Blouse / Ladies Basic Bodice / Women's Nighties / Kid's Wear Of Various Styles / Children's Suits And Pyjama)

SEMESTER-I GROUP B: ELECTIVE PAPER-I
Woven Fabric Structure & Design

UNIT I

Elements of woven design: Construction of elementary weaves – Plain – warp rib- weft rib – mat. Twills – modification of twills. Satin – sateen and their derivatives. Ordinary and Brighton honey comb– modifications. Crepe weaves.

UNIT II

Bedford cords: plain faced – twill faced. Wadded – modifications. Welt piques: wadded piques – Loose back and fast back welts and piques. Mock – leno – Distorted mock – leno. Spot figuring – arrangement of figuring for dobby and jacquard.

UNIT III

Color theory: light and pigment theory – modification of color – color combination – application of colors – color and weave effects. Extra warp and extra weft figuring. Extra warp and extra weft figuring with two colors

UNIT IV

Backward fabrics: Warp and weft back – reversible and non-reversible. warp pile – fast wire pile – terry weaves - terry stripe – terry check. Weft pile: plain back – twill back velveteen – Lashed pile corduroy – Weft plush – Length, density and fastness of pile.

UNIT V

Double cloth: Classification – self stitched – face to back – back to face – Combination face to back and back to face stitched double cloth. Wadded double cloth – weft and warp Wadded double cloth – Center warp & Weft Stitched double cloth. Basic Dobby, Jacquard Design.

References

1. Grosicki Z., “Watson’s Textile Design & Colour: Elementary weaves & Figure”, Blackwell Science, Commerce place, 1998.
2. H.Nisbet, “Grammar of textile Design”, Tarporevala sons & Co. Pvt. Ltd., 1994.
3. Bernard P. Corbman, “Textile fibre to Fabric”, McGraw-Hill, 1983.

SEMESTER-II GROUP B: ELECTIVE PAPER-II
Knitted Fabric Science

UNIT-I**Knitting structures**

Classification – comparison with woven structures – plain single jersey – end uses – double jersey – Rib Interlock – end uses, Purl knitting – end uses – flat knitting - Tricot warp knitting – end uses – Raschel warp knitting and simplex warp knitting – end uses – special knit structures.

UNIT-II**Knitting Machines**

Classification – Weft knitting and warp knitting – comparison – circular – flat – straight bar – tricot – Raschel – simplex, Knitting elements – needles – sinkers – cylinder – dials – cams – compound needle, jack raising cam – stitch cam – counter cam – Guard cam timing diagrams – elements of cam design.

UNIT-III**PROPERTIES OF KNITTED STRUCTURES**

Fabric geometry general terms – stitch density – representation of weft knitted structures - representation of warp knitted structures – comparison of single knit and double knit structures – stitches and their properties – properties of Rib and interlock structures and comparison of other structures – Spirality and other defects of knitted structures – tightness factor.

UNIT-IV**KNITTING CYCLE**

Single jersey m/c; double jersey m/c- plain and Jacquard m/c, Purl m/c, single and double bed flat knitting machine, single and double straight bar m/c, tricot, raschel & simplex m/c – passage of materials and knitting action and mechanism of operation.

PATTERNING DEVICES – Principles of selection – effect of positive yarn feeding mechanism – autostop motions – fabric take up mechanism, patterning in weft and warp knitting – pattern needles and chain links – tension control – relation between loop length and construction – fabric relaxation and shrinkage. Elastometric yarn knitting and pile knitting.

UNIT-V**Fabric engineering**

Fabric engineering concepts - control of GSM and fabric width - shrinkage control and tightness factor relationship - loop length effects- Fabric fault - Pre-requisites for faultless knitting – Various types of faults - Causes and remedies for various faults - Basic Concept – Mechanism in seamless knitting, Advantages & limitations.

References:

1. D.B.Ajgoankar, “Knitting Technology”, Universal Publishing Corporation, 1998.
2. David J. Spencer, “Knitting Technology”, Wood head Publishing Limited, 2001.
3. Samuel Raz, “Flat Knitting Technology”, Meisenbach Bamberg.
4. Chandrasekara Iyer/Mammal/Schach, “Circular knitting technology”, Meisenbach Bamberg, 1992.
5. Dr. S. Raz, “Warp Knitting Production”,

SEMESTER-III GROUP B: ELECTIVE PAPER-III
Knitted Fabric Processing & Finishing

Unit I

Water: water hardness and its effects - water softening process methods. Knitted fabric Preparatory process: Scouring: Objectives - mechanism – recipe and controlling parameters - Scouring of natural and blended textiles. Bleaching: Objectives – peroxide and chlorite bleaching - Controlling parameters and mechanism

Unit II

Concept of colour: Visible spectrum, wavelength– Metamerism / isomerism. Theories of colour: Additive and subtractive theories - Primary, secondary, tertiary, complementary and contrasting colours - Tristimulus values. Computer colour matching, Kubelka-Munk equation, colour- coordinates, CIE Lab values. Dyes: classification of dyes - Dyeing methods of cellulosic fibre with reactive. - Dyeing of protein fibres with acid dyes - dyeing of polyester fibre disperse dyes. Auxiliaries used in dyeing.

Unit III

Printing: Difference between dyeing and printing. Print paste: Constituents and characteristics, thickeners and its types. Methods of printing: screen printing-roller printing-rotary screen printing - flock printing- -transfer printing- batik, tie and dye. Styles of printing: direct – discharge – resist style. After- treatments: Importance - process and mechanism of steaming, curing, ageing and open soaping.

Unit IV

Finishing: Objectives – classification, compacting of knit goods – shearing – raising – ballon padding Heat setting: Objectives, mechanism of setting.

Working principles of wet processing machines: cheese dyeing, winch dyeing, jet dyeing and soft flow dyeing machines

Unit V

Different types washes and functional finishes – Enzyme wash, stone wash, acid wash, salt and pepper finish, peach finish, sand blasting, wrinkle free finish, Water repellent finish - evaluation of water repellency. Anti-microbial finishes on natural, and man made textiles. Treatment of textile effluents: Primary, secondary and tertiary treatments in ETP.

References:

1. Technology Of Textile Processing (Vol 1-9) – By V.A.Shenai
2. Dyeing And Chemical Technology Of Textile Fibres – E.R.Trotman

SEMESTER-IV GROUP B: ELECTIVE PAPER-IV
Home Textiles

Unit I

Different types of furnishing materials – woven and non – woven, factors influencing selection of furnishings. **FLOOR COVERINGS:** Hard floor coverings, resilient floor coverings, soft floor coverings, carpets and rugs, cushion and pads - Use. **WALL COVERINGS:** Types, factors for selection, use.

Unit II

WINDOW DRESSINGS: Different types of doors and windows – Draperies – Choice of fabrics, calculating the amount of material needed. Curtains – Types of curtains. Method of finishing draperies– Tucks or pleats. Uses of drapery rods, hooks, tape rings and pins.

Unit III

LIVING ROOM FURNISHINGS: Sofa covers, Wall hangers, Cushion, Cushion covers, Upholsteries, Bolster and bolster covers. **BED LINENS:** Definitions, types of bed linen - sheets, blankets, blanket covers, comforters, comfort covers, bed spreads, bed skirts, duvets, mattress and mattress covers, pads, pillows and pillow covers, throw pillows, shams and their uses.

Unit IV

KITCHEN LINENS: Definitions, types of kitchen linens - dish cloth, hand towels, fridge cover, fridge handle cover, mixie cover, grinder cover - their use.

TABLE LINEN: Definitions, types – table linens, table mats, table cloths and place mats, hand towels– selection – use and care. **BATH LINEN:** Towels – types, selection use and care. Mats and rugs –types and its uses

REFERENCES

1. Brian. D Coleman, "Luxurious Home Interiors", Gibbs Smith Publication, Hong Kong, 2004.
2. Robett Harding, "Curtains, Blinds and Valances" , Eagtemoss, Ohio, 1998.
3. Katrin Cargill, "Simple Curtains", Ryland Peters and Small, London, 2002.
4. Charles Randall and Sharon Templeaton, "Dream Windows",Randall International Orange, California, 2003.
5. Wendy Baker, "Curtain and Fabric Selector", Collins and Brown, London, 2000.
6. Premavathy Seetharaman and Parveen Pannu, "Interior Design and Decoration", CBS Publishers and Distributors, 2005.
7. Jay Diamond and Ellen Diamond, "Fashion Apparel, Accessories and Home Furnishings", PrenticeHall, First Edition, 2007.

SEMESTER-I GROUP C: ELECTIVE PAPER-I
Visual Presentation

Unit I

Explain Line, Shape, Space, Size, Texture & Colour. Illustrate the line, Shape, Space, Size, Texture in to basic silhouette design and design objects. Line art, lines in architecture, lines in nature, textures in nature, nature inspired texture in fashion, future textures

Unit II

Semantic Expressions of list of words in prescribed format. Using line express activities, emotions and expressions. Illustrate the activities like grow, inflate, stop-Halting, balance, heavy, light, tensed, kill, sleep, shine, sway, build, fly, crawl, vibrate, comfort, locked, wide, narrow, pure, continuation, cycle ,fire,

Unit III

Colour Theory, Science of Colour, How colour is formed, Sunlight and its components, behavior of colour pigments and paints, White space and white balance in design, Colour combinations and balance, mood creation through colors

Unit IV

Colour Perception and Human responses, Colour in Design Principles, Meaning associated with colour, warm colors and cool colors, neutral colours, colour, quality and texture.

Unit V

Use of Colors in Products and Packaging Design, Meaning and reasons associated with using particular colours in the market, Colour association with religion, politics, economy and science.

REFERENCES:

1. *Jeanne Allen*, Designer`S Guide To Colour, Vol. I Chronicle Books.
2. *Shion, Kyoto*, Check And Stripe: A Design-Source Book 2 Kyoto Shoin Company Ltd.
3. *Whelen m. Bride*, Colour Harmony 2 Thames And Hudson
4. *Garthe, Mary*, Fashion And Colour, Rockfort Publishers
5. *Polly Guerin*, Creative Fashion Presentation , Fairchild Publishers

SEMESTER-II GROUP C: ELECTIVE PAPER-II
Creative Thinking and Geometry for Designers-Practical

Unit I

Preparation of basic Geometry by free hand drawing, Geometrical construction – Basics 2D, Golden Proportions and construction of Golden Spiral, Study of Polygons.
 Practice the Golden ratio, Construction of Golden Rectangle, Illustrate Examples of Golden Ratio, Collect and make album of Golden ratio in History

Unit II

Construction of Three dimensional paper models to understand better the concepts in geometrical construction and their inter-relationships, Drawing the 3D geometry shapes and forms using geometry box
 Preparation of Basic 3D Paper Models, Cube, tetrahedron, Octahedron, Icosahedrons using one of the materials of paper, clay, form sheet

Unit III

Construction of advanced geometry shapes like Cubocto Hedron, Twin Delta Hedra, Prism, Truncate, Truncated octahedron, Creative manipulation and combination of various 3D Geometry and formulating Geometry installations.

Unit IV

Making connections, Present an anonymous object to convey an idea through imagination and creative interpretation, Find Use of one object to unrelated utility,
 Describe literal and lateral meaning of a Visual which is either Graphic, Drawing, Work of art which are collected from magazines or books. Discuss the Meaning associated with visuals icons of fashion.

Unit IV

Connect two unrelated life style accessory product with the help of SCAMPER Creativity tool. Make/innovate or connect products using the 7I's of Jane Piirto
 Discuss Semiotics in video advertisements/signages and separate Signifier and Significant in separate columns, Collect prominent examples of Visual Culture of different states of India.

REFERENCES:

1. *Patrick John Ireland*, Fashion Design Illustration : Men, Bt Blasform Ltd.
2. *Balaram.S*, Thinking Design,, National Institute of design.
3. *Janne Mills*, DesignConcepts, Xerox Copy.
4. Collezioni-I Trends, Honesty And Textile Stores.
5. kalakshetra foundation craft education and research centre kalaimani unit the kalamkavi craft tradition.
- 6 *Vera p. Goild*, New Complete Book Of Needle Craft, Blackwell Science.
7. *Pauline Chatterton*, Coordinated Crafts For The Home, Bombay Subscription..
8. *Johnston, Susan*, Erte Fashion Paper Dolls Of The Twenties, Dover Publications Inc New york..

SEMESTER-III GROUP C: ELECTIVE PAPER-III
Fashion Photography –Practical

Experiment I

Introduction to Photography, History of Photography, Types of camera lenses and Photographic camera types, Principal parts of Photographic cameras, View-finders and focusing systems

Experiment II

Study of different types of cameras, Study of apertures: f-number and their effects, opening and closing,

Experiment III

Study of shutters, focal plane and between the lens shutters, different shutter speeds, Controlling shutter speeds and movements

Experiment IV

Effect of aperture on depth of fields, Use of tripod stand, study of panning tilt head, Use of exposure meter and determination of correct exposure, Study of electronic flash, its components.

Experiment V

Types of lighting, Camera angles, Post production- Digital Image Editing for Fashion Photography, Principles of Design in Photography, Photography and Styling

REFERENCES:

1. *John Freeman* Practical Photography, Anness Publishing Limited.
2. *Tom Ang*, Advanced Digital Photography, Standard Literature.
3. *Photographs* , The Faces Of Fantasy , A Tom Doherty
4. *Rajneesh Chowdhry*, All About Photography Goodwill Publishing House.
5. *Bill Corbett* A Simple Guide To Digital Photography Wooddhar Publisher, Ltd.
6. *Bill Corbett* A Simple Guide To 35mm Photography Wooddhar Publisher, Ltd

SEMESTER-IV GROUP C: ELECTIVE PAPER-IV
Innovative Fashion Designing -Practical

Experiment I

Discuss Fashion products past and present. Describe in group the journey and influences of changing design and aesthetics of fashion products

Experiment II

Group activity Tracing the design evolution of fashion accessories. Current Trend analysis of fashion products, Meaning of contemporization, Multicultural Effects

Experiment III

Group discussion of Fashion forecasting procedure for domestic market, Prediction for summer and winter collections, identifying a market, understanding buyer expectations, presentation to end users, Storey telling method,

Experiment IV

Desktop research and presentation of Technological developments, new fabrics, intelligent textiles, new production and come up with ideation for innovative products

Experiment V

Innovate any product inside fashion scenario, Draw manually or Digitally defining the new look and aesthetics of the product, Come up with a branding and visual identity

REFERENCES:

1. *Carr Harold and Pomeroy John*, Fashion Design And Product Development, Blackwell Science.
2. *Anaggi Anna*, Karl Lagerfeld- A Fashion Journal, Thames And Hudson .
3. *Boucher, Francois*, 20,000 years of fashion: the history of costume and personal adornment, Harry N. Abrams Inc publishers
4. *Kuwayama.Y* Logotypes Of The World, Mitsuri Takahashi.
5. *Margot Hamilton, Hill Peter, A Bucknell* , Evolution Of Fashion, B.T. Batsford Ltd
6. *Ireland, Patrick John*, Introduction To Fashion Design, B.T. Batsford
7. *Anne Allen And Julian Semman*, Fashion Drawing : The Basic Principles B.B Araporevada X Sons.
8. *Tner Andrew* , Japanese Stencil Designs, Dover Publications.
9. *Yarwood, Doreen* , Fashion In The Western World, Bt Balsform Ltd.