## BHARATHIAR UNIVERSITY (CBCS PATTERN)
### B.Sc COSTUME DESIGN AND FASHION
(For the students admitted during the academic year 2008-2009 Batch and onwards)

**SCHEME OF EXAMINATION - CBCS PATTERN**

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<tr>
<th>Part</th>
<th>Study Components</th>
<th>Course Title</th>
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### Semester IV

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**Skill based Subject 2 (Diploma Paper II)**

| Surface Embellishments Practical                     | 3 | 3 | 40 | 60 | 100 | 3 |

**Tamil @ /Advanced Tamil # (OR)**

| Non-major elective -II (General Awareness #)         | 2 | 3 | 75 | 75 | 2   |    |

### Semester V

<table>
<thead>
<tr>
<th>III Core Practical IX - Men’s Apparel –Practical –I</th>
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**IV Skill based Subject 3 (Diploma Paper III)**

| Dyeing & Printing Methods                            | 3 | 3 | 25 | 75 | 100 | 3 |

### Semester VI

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<tr>
<th>III Core Practical XI - Men’s Apparel- Practical-II</th>
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**IV Skill based Subject 4 (Diploma Paper IV)**

| Fashion Portfolio Presentation                        | 3 | - | - | - | 100* | 3 |

**V Extension Activities @**

| -                                                      | - | - | 50 | - | 50   | 1 |

* Total 3600 140
* For Viva : 20 marks & report : 80 marks.
@ No University Examinations. Only Continuous Internal Assessment (CIA)
# No Continuous Internal Assessment (CIA). Only University Examinations.

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

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<th>Elective – I</th>
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<td>Fabric Production and Processing</td>
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<td>Export Analysis and Documentation</td>
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<td>Apparel Quality Management</td>
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</table>
SEMESTER-I - Core Paper-I

FUNDAMENTALS OF APPAREL DESIGNING

UNIT-I
Parts and functions of a single needle machine, essential tools – cutting tools, measuring tools, marking tools, general tools, pressing tools, seams and seam finishes – types, working of seams and seam finishes Hems – types, stitches used.

UNIT-II
Fullness- definition, types. Darts, tucks, pleats, flares and godets, gathers and shirrs, frills or ruffles, flounces, facings – bias facing, shaped facing and decorative facing. Binding – single bias binding, double bias binding.

UNIT – III
Plackets – definition, characteristics of a good placket, types – inconspicuous placket and conspicuous plackets. Method of constructing the same. Fasteners – conspicuous (Button and button-holes, button loops, button with holes, shank buttons, eyelets and cords). Inconspicuous (press buttons, hooks and eyes, zips).

UNIT – IV

UNIT-V
Collars – definitions, types, peter pan, scalloped, puritan, sailor, square, rippled, full shirt collar, open collar, Chinese, turtle neck, shawl collar pockets – types – patch pocket, bound pocket, pocket in a seam, front hip pocket.

REFERENCE:

SEMESTER-I  Core Practical-I

FUNDAMENTALS OF APPAREL DESIGNING PRACTICALS

1. Preparation of samples for seam and seam finishes.
2. Preparation of samples for hems
3. Preparation of samples for fullness
4. Preparation of samples for facing and binding.
5. Preparation of samples for plackets and fasteners
6. Preparation of samples plain sleeve, puff sleeve (any one type), raglon sleeve.
7. Preparation of samples yoke with fullness within the yoke yoke supporting fullness.
8. Preparation of samples peter pan collar , full shirt collar, shawl collar
9. Preparation of samples patch pocket, bound pocket.

SEMESTER-I Core Paper-II

PRINCIPLES OF PATTERN MAKING

UNIT-I
Body measurement –importance, preparing for measuring, ladies measurements, boys and men’s measurements. Standardizing body measurements –importance, techniques used. Relative length and girth measures in ladies /gentlemen
Preparation of fabric for cutting –importance of grain in cutting and construction, steps in preparing the fabric for cutting.

UNIT-II
Pattern making –method of pattern making – (Drafting and draping),merits and demerits
Types of paper patterns (Patterns for personal measurements and commercial patterns)
Principles of pattern drafting . Pattern details , steps in drafting basic bodice front and back and sleeve.
Draping – preparation of bodice form steps in draping a basic bodice front bodice back and sleeve.

UNIT-III
Styles created by shifting of blouse darts , adding fullness to the bodice, converting darts to seam and partial yokes and incorporating darts in to seams forming yokes.
Fitting- Standards of a good fit , steps in preparing a blouse for fitting , checking the fit of a blouse , solving fitting problems in a blouse ,fitting techniques.

UNIT- IV
Pattern alteration –importance of altering patterns, general principles for pattern alteration, common pattern alteration in a blouse.
Pattern grading –definition , types , manual –master grades ,basic front ,basic back basic sleeve ,basic collar and basic grading.

UNIT-V
Pattern layout- definition, purpose, rules in layout, types of layouts for length wise stripped designs, fabric with bold design, asymmetric designs, one way designs. What can be done if cloth is insufficient , fabric cutting ,transferring pattern marking , stay stitching , ease stitching .

Reference;
Practical clothing construction -part I and part-II Mary Mathews, cosmic press Chennai (1986)
Pattern Grading for women’s clothing, The technology of sizing –Gerry cooklin ,Blackwell Science Ltd (1990)
Zarapker system of cutting –zarapker. K. r., Navneet publications Ltd

SEMESTER-I   ALLIED PAPER I

FASHION ILLUSTRATIONS - PRACTICALS

Prepare sketches for the following
1. Different types of collar.
2. Different types of Sleeve.
3. Different types of Neckline
4. Different types of Skirts
5. Different types of ladies tops.
6. Different types of Shirt
7. Different types of Pant (Full and half)
8. Different types of Churidhars
9. Different types of Accessories –bags ,footwear , hats etc
10. Different types of Ornaments
11. Facial features –eyes ,nose , lips ears
12. Face ,hands legs –different positions
13. Lay figure -71/2 head
14. Fashion figure -8 , 10 ,12 head.

Semester –II   Core Practical -II

Children’s Apparel Practical

Designing, drafting and constructing the following garments for the features
Prescribed
List the measurements required and materials suitable
Calculate the cost of the garment
Calculate the material required-Layout method and direct measurement
Method

1. Bib- Variation in outline shape
2. Panty-plain or plastic lined panty
3. Jabla- without sleeve, front open (or) Magyar sleeve, back opens
4. Baba suit- knicker with chest piece attached (or) Romper
5. A-Line petticoat- double pointed dart, neck line and arm hole finished with
   facing(or)petticoat with gathered waist
6. Summer frock- with suspenders at shoulder line, without sleeve/collars(or)
   Angel top with raglan sleeve, fullness at neck line
7. Yoke frock- yoke at chest line, with open, puff sleeve, gathered skirt9OR0 frock-
   with collar, without sleeve, gathered/ circular skirt at waist line(or)
   Princess line frock
8. Knicker- elastic waist, side pockets
9. Shirt- open collar, with pocket

Reference:
3. Practical cutting and tailoring part II Eshwasri Anwahi, Lakhraj Hans R.B Publications, Delhi

Semester II  Core Paper-III
FASHION DESIGNING

UNIT I
Terms related to the fashion industry – fashion, style, fad, classic, and collection, chic Custom made, mannequin, fashion, show, trend, forecasting, high fashion, fashion cycle, haute couture, couture, couturier, fashion director, fashion editor, line, knock-off avant garde, bridge, buying house, apparel, fashion merchandising, pre – a – porter, sample.

UNIT II
Design- definition and types – structural and decorative design, requirements of a good structural and decorative design. Elements of design – line, shape or form, colour, size and texture. Application of structural and decorative design in a dress, selection and application of trimmings and decorations. Fashion accessories- shoes, handbags, hats, ties – different types/ shapes.

UNIT II
Principles of design- balance – formal and informal, rhythm- through repetition, radiation and gradation, emphasis, harmony and proportion. Application of principles of design in a dress.

UNIT III
Colour- definition, colour theories- prang colour chart and munsell colour system, Dimensions of colour- hue, value, and intensity. Standard colour harmonies- application in dress design. Colour in principles of design- application of the same in dress design.

UNIT IV
Designing dresses for unusual figures – becoming and unbecoming – for the following figure types. Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead.

UNIT V
Wardrobe planning for different age groups, factors influencing wardrobe selection, Fashion and season, Designing dresses for different occasions – business meetings, parties/ dinners, evenings/leisure hours, marriage functions, sports, uniforms for civil service, airhostess, hoteliers, schools – girls and boys (school, high school).
Reference:
2. Strategies for Women – Judith Rasband, Delmar publishers London Fundamentals of
3. Textiles and their Care- Susheela Dantyagi, 5th edition,. Orient Longman Ltd New Delhi

Semester – II  Core Practical -III
FASHION DESIGNING – PRACTICALS.

1. Prepare the following Charts
   a. Prang colour chart
   b. Value Chart
   c. Intensity Chart

2. Illustrate garment designs for the Elements of Design
   a. Line
   b. Colour
   c. Texture
   d. Shape or form
   e. Size

3. Illustrate garment designs for the Principles of Design
   a. Balance in dress
   b. Harmony in dress
   c. Emphasis in dress
   d. Proportion in dress
   e. Rhythm in dress

4. Illustrate the colour harmony in dress design
   a. Monochromatic colour harmony
   b. Analogous colour harmony
   c. Complimentary colour harmony
   d. Double complementary colour harmony
   e. Split complementary colour harmony
   f. Triad colour harmony

5. Application of colour and principles of design in dress
   a. Harmony through colour
   b. Emphasis through colour
   c. Proportion through colour
   d. Rhythm through colour
   e. Balance through colour
6. Designing dresses for figure irregularities- becoming and unbecoming Stout figure, thin figure, slender figure, narrow shoulders, broad shoulders, round shoulders, large bust, flat chest, large hip, large abdomen, round face, large face, small face, prominent chin and jaw, prominent forehead.

**SEMESTER-II ALLIED PAPER II
SEWING TECHNOLOGY**

UNIT-I
Sewing Machineries- Classification of sewing machines, parts functions of single Needle machine, Double needle machine, over lock machine, bar tacking machine, button Hole making machine, button fixing machine, blind stitching Machine, fabric examining machine. Special attachments, care and maintenance, Common problems and remedies

UNIT-II
Stitching mechanism- Needles, bobbin and bobbin case, bobbin winding, loops and loop Spreader, threading finger, upper and lower threading, auxiliary hooks, throat plates, takeups, tension discs- upper and lower thread tension, stitching auxiliaries, pressure foot and its types, Feed mechanisms - drop feed, differential fed, needle feed, compound feed, unison feed, puller feed.

UNIT-III
Cutting technology – definition, function, scope. Cutting equipment and tools, vertical reciprocity cutting machine, rotary cutting machine band knife cutting machine, die cutters. Types of spread and its quality, spreading equipment and tools used for spreading, spreading methods.

UNIT – IV

UNIT – V

Reference:
SEMESTER III CORE PRACTICAL IV
WOMEN’S APPAREL PRACTICAL-I

Designing drafting and constructing the following garments for the features prescribed
List the Measurements required and Materials suitable
Calculate the cost of the garment
Calculate the material required –Layout method and Direct measurements method

1. saree Petticoat- Six Panel , Decorated bottom.
2. Skirts – Circular/umbrella with style variations.
3. Blouse front open ,Fashioned neck, Waist band at front , with sleeve.
4. Middi- circular / gathered / pleated with waist band
5. Middi Top- Kimono / raglon sleeve ,
6. Salwar (or) Churidhar (or) Parallels (or) Bell Bottom
7. Kameez – with /without slit, with or without flare ,with /without opening ,with or without panels, with /without yoke.
8. Choli – Sleeve / Neck / yoke with style variations

Reference:
1. Scientific garment quality –K M Illege and Sons , Plot No. 43 , Somuvar Peth pune 411011
2. Easy cutting –Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
3. Commercial system of cutting - Juvekar commercial Tailors Corporation p vt 166 Dr. Ambedkar Road dadar.
5. Dress making- Smt Thangam Subramaniam Bombay Tailoring and embroidery college ,32 North park street ,Ambattur , channi.
Pratical clothing construction – Part I and II Mary Mathews ,cosmic Press Chennai.

SEMESTER-III CORE PAPER IV
HISTORIC COSTUMES AND TEXTILES OF INDIA

UNIT-I
Beginning of Costume, Growth of Dress out of painting, cutting etc…,
Study of dyed and printed textiles of India –Bhandhani, patola , ikkat, kalamkari- in all the above types and techniques used.
Study of woven textiles of India – Dacca Muslin, Banarasi/ Chanderi brocades, baluchar, himrus and amrus, Kashmir shawls, pochampalli , silk sarees of Kancheepuram.

UNIT-II
Costumes of India – Traditional Costume of different States of India
Tamil Nadu , Kerala , Andhra Pradesh ,Karnataka ,Assam, Orrisa, Bihar, Mizoram, Tripura ,Nagaland, W.Bengal, Sikkim
UNIT-III
Traditional Costume of different States of India;

UNIT-IV
Indian Jewellery – jewelleries used in the period of Indus valley civilization, Mauryan period, Gupta Period, the Pallava and Chola Period, Symbolic Jewellery of South India, Mughal period.
Temple Jewellery of South India, Tribal jewellery
A brief study of gems and precious stones.

UNIT-V

Reference;
2. Indian Costume – G.H Ghosrye, Popular books Pvt Ltd
3. The costumes and textiles and India – Jamila Brij Bhushan, D B Taraporevala Sons & Co, Bombay (1958)

SEMESTER-III  CORE PAPER V
FIBRE TO FABRIC

UNIT-I
Introduction to the field of textiles - classification of fibres – natural and chemical – primary and secondary characteristics of textile fibers.

UNIT-II
Manufacturing process, properties and uses of natural fibres – cotton, linen, Jute, pineapple, hemp, silk, wool, hair fibers, man-made fibres – Viscose rayon, acetate rayon, nylon, polyester, acrylic.

UNIT-III
Spinning – Definition, Classification – Chemical and mechanical spinning – blending, opening, cleaning, doubling, carding, combing, drawing, roving, spinning.
Yarn classification – definition, classification – simple and fancy yarns, Sewing threads and its properties.
UNIT-IV
Wovens- basic weaves –plain, twill, satin.
Fancy weaves- pile, double cloth, leno, swivel, doby and jacquard.

UNIT-V
Non-Wovens- felting, fusing, bonding ,lamination ,netting, braiding and calico,tatting and crotcheting.

References;

SEMESTER III       CORE PRACTICAL V
FIBRE TO FABRIC PRACTICALS

Identification of textile fibres
Fibres – Cotton, Silk, Wool, Nylon, Polyester, Lilen, Rayon, Jute.

1. Microscopic Method
2. Flame test.
3. Chemical test.

Testing of yarns/ fabrics
1. counting of the yarn using wrap reel.
2. Counting of the yarn using beesley’s balance.
3. Twist of the yarn using twist tester.
4. Determining the weight of the fabric.
5. Determining the fabric count by
   a. Raveling method
   b. Pick Glass method
6. Course length and loop length of knitted fabric.
7. Colour fastness to water.
8. Test of Shrinkage.
9. Test of Absorbency.

SEMESTER-III       ALLIED PAPER III
FASHION AND CLOTHING PSYCHOLOGY

UNIT-I
Factors influencing fashion changes –Psychological needs of fashion , Social psychology of Fashion , technological , economical , political ,legal and seasonal influence .role of costume as a status symbol , Personality and dress, cloths as sex appeal, cultural value Fashion cycles, repetition of fashion.

UNIT-II
Fashion evolution – Fashion cycles , Length of cycles , consumer groups in fashion cycles – fashion leaders , fashion innovators, fashion motivation , fashion victim, fashion victims,
Fashion followers. Adoption of Fashion – trickle down, trickle up and trickle across theory. Fashion forecasting – market research, evaluating the collection, Fashion services and resources (fashion services, colour services, video services, newsletter services, web sites, Directories and references), Design - Historic and ethnic costumes.

UNIT-III
Visual merchandising of fashion, types of displays – window displays, interior displays, Elements of display – the merchandise, mannequins and forms, props, signage, lighting. Merchandising presentation – tools and techniques - back drop, forms, fixtures. Fashion show - Definition, planning, budgeting, location, timings, selection of models, collection, set design, music, preparing the commentary, rehearsal.

UNIT-IV

UNIT-V
World fashion centers – France, Italy, America, Fareast. Contributions of well known designers from France, Italy, America, Britain and Fareast Countries.

References:

SEMESTER III  Diploma Paper-I
Basic Draping-Practical

List of Experiment:
1. Introduction to draping and dress forms
2. Draping basic front and back
3. Draping basic skirts
4. Draping yokes, Shirt yoke and midriff yoke
5. Draping collars- Peter pan, Mandarin and Shirt Collar
SEMESTER-IV       CORE -PRACTICAL VI 
WOMEN'S APPAREL PRACTICAL-II

Designing, Drafting and constructing the following garments for the features prescribed
List the measurements required and materials suitable
Calculate the cost of the garment
Calculate the material required – layout method and direct measurement method.

1. Maxi/ full gown – full length.
2. Nightie – With yoke, front open, with sleeve, full length.
3. Ladies pant - waist band, zip attached, tight fitting / parallel pants.
4. Princess line dress - Knee length, with or without sleeve.
5. Short kurta – Decorative / surface design in tailored placket, with or without collar.
6. Wrap around with short top (with/without sleeve, with/without collar)
7. Ladies apron - with pocket, single sided or double sided.
8. Ghagra – Plain / Decorative and different styles.

References:
2. Easy cutting - Juvekar, commercial tailors corporation pvt Ltd, 166 Dr. Ambedkar Road, Dadar.
3. Zarapker system of cutting - K R Zarapkar, Navneet publications Ltd
4. Dress Making - smt Thangam Subramaniam, Bombay tailoring and embroidery College, 32 North park Street, Ambattur, Chennai.

SEMESTER-IV       CORE PAPER VI
FABRIC STRUCTURE AND DESIGN

Unit-I
Elements of woven design, Methods of fabric representation, draft and lifting plan, construction of elementary weaves - plain, wrap rib, weft rib, twill, modification of twills, satin and sateen weaves - their derivatives.

UNIT-II
Ordinary and brighten honey comb, its modification, huck a back and its modifications, crepe weaves, mock leno.

UNIT-II
Extra warp and extra weft figuring – single and two colours, planting, backed fabric, warp and weft backed fabrics.

UNIT-IV
Pile fabric – basic structure, twill back and sateen back, weft plush, terry pile – 3 pile, 4 pile, 5 pile and 6 pile, length density and fastness of pile.
UNIT-V
Double cloth – classification, self stitched – face to back, back to face, stitched double cloth – warp and center stitched double cloth.

References;
2. Watson’s advanced textile design, Grosichkli Z Newness, Butter worths, London 1989

SEMESTER-IV CORE PRACTICAL VII
FABRIC STRUCTURE AND DESIGN PRACTICALS

Identification of the following weaves. Design and Draft a peg plan for the same.
1. Plain weave and its derivatives (Warp rib, Weft rib)
2. Twill Weave – Right hand twill and Left hand twill.
3. Satin
4. Sateen
5. Honey comb Weave
6. Huck a back Weave
7. Extra Warp and Weft Figuring.
8. Double cloth.
9. Terry pile structures.

SEMESTER –IV CORE PAPER VII
TEXTILE PROCESSING

Unit –I
Production sequence of textile fabrics – flowchart – brief description
Finishes – Classification – Importance of finishes.
Fabric Preparation – Singeing, Desizing, Scouring, Bleaching (different methods), Mercerizing (different methods), Carbonising

Unit –II
Dyeing – dyes- classification, properties of dyes, direct, vat, reactive, acid, basic, azoic dyes
Vegetable dyes – types and colours commonly used, significance of vegetable dyes,
Stages of dyeing - fibre, yarn, fabric and garment – process involved, advantages and limitations

Unit – III
Methods of dyeing: Batch dyeing – winch, jig, padding, package dyeing, combination dyeing, machines used and process involved
Fastness properties of fabrics – water, sunlight etc,
Unit –IV
Aesthetic finishes: Luster – glazed, moiré, schreiner, embossed, Drape – crisp and transparent, sizing, weighting, Texture – sheared, brushed, embossed, pleated, flocked, Embroidered, napped, fulled,
Special purpose finishes: Stabilisation / shrinkage control – different methods, Shape retention methods, wrinkle free finishes.

Unit –V
Comfort related finishes – water repellent finishes, pilling resistance, abrasion resistant
Biological control finishes – moth and mildew control
Safety related finishes – flame retardant
Environmental problems in the finishing and dyeing industry
Effluent treatment of water – methods and process involved

Reference

SEMESTER –IV    CORE PRACTICAL VII
TEXTILE PROCESSING- PRACTICALS

Preparation of samples for Processing
- Desizing
- Scouring
- Bleaching
- Mercerising

Dye the given fabric using suitable dye
- Direct Dye
- Sulphur Dyes
- Vat Dyes
- Disperse Dyes
- Reactive Dyes
- Acid Dyes
- Basic Dyes
- Vegetable Dyes (any one)
SEMESTER-IV  ALLIED PAPER IV  
GARMENT QUALITY AND COST CONTROL

UNIT-I
Definition and Scope of Quality control – establishing merchandising standards- establishing raw material quality quality control specifications – quality control of raw material.

UNIT-II

UNIT-III

UNIT-IV
Type of control forms – basic production systems – principles for choosing a production system – evaluating production systems – flow process grids for production control – Scheduling calculation ,graph methods , Scheduling bundles of varying amounts , mathematical formulas for scheduling – Producing many styles simultaneously – producing many styles consecutively in one line.

UNIT-V
Functions of cost control , types of costs and expenses – Apparel manufacturing cost categories – sales cost control ,purchasing cost control , production cost control , administration cost control – cost ration policies – the manufacturing budget –cash flow controls – standard cost sheet , break even – charts

References;

SEMESTER-IV  Diploma Paper –II
SURFACE EMBELLISHMENT PRACTICALS

Prepare samples for the following
1. Hand embroidery – 20 stitches -10 samples
3. Applique ( machine / hand )- 3 types
4. Smocking -3types
5. Laces – 6 types
6. Bead Work -1 sample
7. sequins work -1 sample
8. Zardosi work -1 sample
10. Bows – any 2 types
11. Tassels and fringes -2-3 samples.
12. Mirror work -1 sample
13. Fixing the stones-1 sample.

SEMESTER V  CORE PRACTICAL IX

MEN’S APPAREL PRACTICAL – I

Designing, drafting and constructing the following garments for the features
Prescribed
List the measurements required and materials suitable
Calculate the cost of the garment
Calculate the material required – layout method and direct measurement method

1. S.B.Vest – with/ without collar, button attached, sleeveless
2. T – shirt – front half open, zip attached, with collar
3. Slack shirt – with collar, half sleeve, and patch pocket
4. full sleeve shirt – full open, shirt collar, patch pocket, full sleeve with cuff
5. kalidhar kurtha – kali piece, side pocket, round neck, half open
6. Nehru kurtha – half open, stand collar, with/ without pocket, full sleeve
7. House coat – knee length, shawl collar, overlap front, with belt

Reference
1. Scientific garment quality – K M Illege and sons, Plot no 43, somuvar peth, pune, 411011
2. Easy cutting – Juvekar, commercial tailors corporation pvt ltd, 166, Dr.Ambedkar Road,Dadar
3. Commercial system of cutting - Juvekar, commercial tailors corporation pvt ltd, 166, Dr.Ambedkar Road,Dadar
4. Zarapker system of cutting – K R Zarapker Navneet Publications ltd
5. Dress making – Smt Thangam Subramaniyam, Bombay tailoring and embroidery college, 32 north park street,ambattur, Chennai
B.Sc. Costume Design & Fashion (Colleges-revised)2008-09

Unit I
Accounting concepts and conventions – rules of accounts – importance of accounting – nature and scope of accounting – double entry system – advantage – difference between double entry and single entry

Unit II

Unit III
Final accounts – trading and profit and loss A/C and balance sheet with simple adjustments

Unit IV

Unit V
Nature and objectives of business – legal forms of business of ownership – sole trader, partnership, company and co-operative societies – advantages and limitations

Note: problems – 70 marks, theory – 30 marks

References
1. Introduction to accountancy – T S Grewal
2. Principles of accountancy – N Vinayagam, P L Main, K L Nagarajan
5. Business management – Dinker Pagare

SEMESTER-V   CORE PAPER-IX
COMPUTERS IN THE GARMENT INDUSTRY

UNIT-I
Classification of computers, computer generations, computer specification, organization of computer sections. Types of storage devices (primary and secondary), input devices, output devices.
UNIT-II
Role of computers in fashion industry – Information flow – CAD, CAM, CIM, CAA, PDC – Definition and functions.
Computers in production planning and production scheduling, computerized colour matching system.

UNIT-III
CAD in designing
Textile designing – Weaving, Knitting and printing.
Creating embroidery designs.
Garment designing – 2D and 3D forms.

UNIT-IV
CAD in pattern making and grading – system description – information flow – process involved in pattern making, process involved in pattern grading.

UNIT-V

References:
3. The technology of clothing manufacture – Harold Carr and Barbara Latham, Blackwell Ltd (1994)

SEMESTER-V  CORE PRACTICAL - X
COMPUTER AIDED DESIGN- PRACTICALS-I

Create the following designs
1. Motifs / small designs.
   Embroidery designs for Kerchiefs, Neck lines
   Chest prints for T-shirts
2. Children’s Garments
   Jabla- different styles
   Frocks- different styles
   Middi and Tops - different styles
3. Women’s Garments
   Churidhar- different styles
   Full gowns - different styles
   Middi & Tops - different styles
   Princess line Dress- different styles.
   House coats, Aprons, Nighties
4. Men’s Garments  
   S B vest  
   T- Shirt - different styles  
   Shirts - different styles  
   Kurt pyjama - different styles  

5. Create logos for branded companies.  
6. Create label for garments / companies  
7. Prepare charts for production planning and scheduling.  

SEMESTER-V  
CORE PAPER – X  
CARE AND MAINTENANCE OF TEXTILES  

UNIT-I 
Water- hard and soft water, methods of softening water.  
Laundry soaps – Manufacture of soap ( Hot process , cold process ), composition of soap types of soap, soap less detergents , chemical action , detergent manufacture , advantages of detergents .  

UNIT-II 
Finishes – Stiffening Agents – Starch (cold water and hot water) , Other stiffening agents, preparation of starch .  
Laundry blues , their application .  

UNIT-III 
Laundry equipment – for storage, for steeping and Washing – Wash board, suction washer, wash boiler, washing machine.  
Drying equipments – out door and indoor types .  
Irons and ironing board – types of iron (box, flat , automatic, steam iron) . Ironing board – different types.  

UNIT-IV 
Laundrying of different fabrics – cotton and linen, woolens, coloured fabrics, silks, rayon and nylon.  

UNIT-V  
Special types of Laundry – water proff coats, silk ties, leather goods, furs, plastics, lace.  
Dry cleaning – using absorbents , using grease solvents.  
Storing – points to be noted.  
Stain removal – food stains, lead pencil, lipstick, mildew, nose drops, paint ,perfume, perspiration / mildew, tar, turmeric and kum- kum.  
Care labels – washing, bleaching,Drying, ironing and different placements of label in garments.
References:
4. Household Textiles and Laundry Work – Durga Duelkar, Amla Ram & Sons, Delhi

SEMESTER-V    Diploma Paper –III

DYEING AND PRINTING METHODS

UNIT-I

UNIT-II
Direct printing: Block printing – Brief History, Preparation of design, Blocks, table, print paste and printing process
Stencil printing – Brief history, preparation of fabric, stencils (For one or more colour)
Materials used for preparing stencils, process involved and techniques used.

UNIT-III
Screen printing – brief history, Flat screen and Rotary screen printing, Preparation of screen, print paste, screen printing process,
Discharge printing – chemicals used, process involved.

UNIT-IV
Resist printing: Brief history, Batik printing wax used, Equipments required, process sequence and techniques used.
Tie and dye – Brief history, Equipments required, process sequence and techniques used.

UNIT-V
Other printing methods: Ink jet printing, Heat transfer printing, photo printing.

References:
SEMESTER-VI       CORE PRACTICAL - XI

MEN’S APPAREL PRACTICALS –II

Designing, drafting and constructing the following garments for the features
Prescribed
List the measurements required and materials suitable
Calculate the cost of the garment
Calculate the material required – layout method and direct measurement method

1. Pleated trousers – pleats in front, Darts at back, side pocket, fly with button /zip.
2. Bell bottom trousers – Pleatless, bell bottom ,side pocket, fly with button /zip.
3. Boxer shorts
4. Bermudas
7. S.B Coat – coat collar ,coat sleeve, pocket.

Reference;
1. Scientific garment quality – K M Illege and sons, Plot no 43, somuvar peth, pune, 411011
2. Easy cutting – Juvekar, commercial tailors corporation pvt ltd, 166, Dr.Ambedkar Road,Dadar
3. Commercial system of cutting - Juvekar, commercial tailors corporation pvt ltd, 166,
Dr.Ambedkar Road,Dadar
4. Zarapker system of cutting – K R Zarapker Navneet Publications ltd
5. Dress making – Smt Thangam Subramaniyam, Bombay tailoring and embroidery college, 32
north park street,ambattur, Chennai

SEMESTER-VI       CORE PRACTICAL - XII

COMPUTER AIDED DESIGN PRACTICALS-II

1. Application of colour harmony in Design
   • Monochromatic colour harmony
   • Analogous colour harmony
   • Complementary colour harmony
   • Double Complementary colour harmony
   • Split complementary colour harmony
   • Triad colour harmony
   • Tetrad colour harmony
   • Neutral colour harmony
2. Applications of Principles of design in dress design
   - Balance – Formal and informal
   - Rhythm – by line movement, gradation, repetition.
   - Emphasis
   - Proportion
   - Harmony

3. Design Garments for the following.
   - Party Wear – Women, Men, Children.
   - Sports Wear- Tennis, Basket ball/foot ball (men and Women), Golf, any other.
   - Fashion show – Children, men and women
   - Winter Wear - Children, men and women
   - Summer Wear - Children, men and women
   - Spring Wear - Children, men and women
   - School uniforms – Preschool, school, higher secondary and college going students-boys and girls.

4. Prepare pattern for the following.
   - Bib
   - Jabla
   - Knicker

5. Grade the following patterns.
   - Bodice front
   - Bodice back

6. Scan designs from books / Magazines / photos and edit the designs – colour or features or background etc., or add details like ornaments & accessories.

SEMESTER-VI CORE PAPER-XI
KNITTING

UNIT-I
Knitting – Definition, classification and history, types of knitting- hand and machine, characteristics of knitted goods.

UNIT-II
General terms and principles of knitting technology, machine knitting, parts of machine, knitted loop structure, stitch density.

UNIT-III
Weft knitting – classification-circular rib knitting machine, purl, interlock, jacquard-single jersey machine-basic knitting elements-types and functions – knitting cycle, CAM-system-3 way technique to develop design-knit, tuck, miss-effect of stitches on fabric properties.
UNIT-IV
Warp knitting-lapping variations-tricot, raschel, simplex and milanese-kitten raschel-single bar, 2 bar, multi bar machines, types of threading, production of nets, curtains, heavy fabrics, elasticized fabrics.

UNIT-V
Care and maintenance of knitted material—washing, drying, ironing, storing.

Reference;

SEMMESTER-VI CORE PRACTICAL XIII
KNITTING PRACTICALS

Identify the given fabric
Methodology used – unravel and graphic representation
- Plain Knit
- Rib Knit – 1x1, 2x2
- Interlock
- Pique – any 2 structures
- Tricot
- Raschel

Defect Analysis
- Vertical and horizontal lines
- Holes and cuttings
- Distorted stitches
- Any other

SEMMESTER-VI DIPLOMA PAPER –IV
FASHION PORTFOLIO PRESENTATION

Portfolio development and presentation technique;
To be planned for a season or occasion

Mood board, Story board, Fabric board, colour board – to be presented separately or in a combined form.

Fabric development chart
Design development chart
Final presentation
Number of garments in a collection – 4-6 garments.
SEMESTER-V ELECTIVE PAPER I - A

TEXTILE PRINTING-PRACTICALS

1. Preparation of sample for printing.
   - Cotton
   - Polyester
   - Silk.
2. Preparation of printing paste.
3. Create Design with Block printing – Vegetable/ wooden blocks
5. Tie and Dye Designs with any three methods with single/ double/ Multi colours.
6. Batik printing with any three methods with single/ double/ Multi colours.
7. Print a Design using Screen printing methods.

SEMESTER-V ELECTIVE PAPER I - B

FABRIC PRODUCTION AND PROCESSING

Unit I:
Fabric forming Techniques – Comparison of weaving and knitting – Principles and Comparison of weft and warp knitting - Classification of machines – Terms and definition of knitting – Basic structures and characteristics – Features of modern knitting machineries.

Unit II:

Unit III:

Unit IV:

Unit V:
printing – Principles and working of garment printing machines. Printing ingredients and model recipe formulation. Need and objectives of finishing – Classification – Brief Study of various mechanical and chemical finishers.

BOOKS FOR REFERENCE:

SEMESTER – V ELECTIVE I - C
ENTREPRENEURIAL DEVELOPMENT

Unit I:
Concept of Entrepreneurship: Definition Nature and Characteristics of Entrepreneurship - Functions and types of Entrepreneurship phases of EDP. Development of women Entrepreneur and rural Entrepreneur – including self employment of women council scheme.

Unit II:

Unit III:
Institutional service to Entrepreneur – DIC, SIDO, NSIC, SISI, SSIC, SIDCO, ITCOT, IIC, KUIC and commercial Bank.

Unit IV:
Institutional finance to Entrepreneur – IFCI, SFC, IDBI, ICICI, TIIC, SIDCS, LIC and GIC, UTI, SIPCOT – SIDBI and commercial Bank venture capitals.

Unit V:
Incentives and subsidies – Subsidied Services – Subsidy for market. Transport – seed capital assistance – Taxation benefit to SSI – role of Entrepreneur in export promotion and import substitution.

BOOKS FOR REFERENCE:
1. Entrepreneurial Development – C.B. Gupta and N.P. Srinivasan
2. Fundamentals of Entrepreneurship and small Business – Renu Arora and S.KI. Sood
3. Entrepreneurial Development – S.S. Khanka
4. Entrepreneurial Development – P. Saravanan Vel
5. Entrepreneurial Development – S.G. Bhanushali
6. Entrepreneurial Development – Dr. N. Ramu
SEMESTER-VI ELECTIVE II - A

APPAREL MARKETING

UNIT-I
Meaning and classification of Marketing, fashion Marketing, fashion Market – Size and structure, Marketing environment – Micro and macro marketing environment, Trends in marketing environment.

UNIT-II
Marketing Function – Assembling, standardization and Grading and packaging, product planning and development, importance of fashion products, Nature of fashion products. The fashion industry and new product development, product mix and range planning, Fashion and related cycles.

UNIT-III

UNIT-IV
Fashion sales promotional programme for apparel marketing, communication in promotion, Personal selling, point of purchase, sales promotion – Objectives and methods, Marketing Research – Definition, Scope and Process – Areas of research.

UNIT-V
Pricing policies and strategies for apparel products, importance of price policies, Functions and factors Influencing pricing- internal and external, pricing strategies for new products, methods of setting prices.

References:
SEMESTER-VI ELECTIVE II - B
APPAREL PRODUCTION MANAGEMENT

Unit I:

Unit II:

Unit III:

Unit IV:

Unit V:
Controlling – Need for co-ordinating – Meaning and importance of control – control process – types of control.

BOOKS FOR REFERENCE:


SEMESTER-VI ELECTIVE II - C
BUSINESS FINANCE

Unit I:

Unit II:
Unit III:
Capitalisation – Bases of Capitalisation – Cost Theory – Earning Theory – Over Capitalisation –

Unit IV:
Capital Structure – Cardinal Principles of capital structure – Trading on equity – Cost of capital –
concept – Importance – Calculation of Individual and composite cost of capital.

Unit V:
Sources and forms of Finance: Equity Shares, Preference Share, Bonds, Debentures and fixed
deposits – features – advantages and disadvantages.

BOOKS FOR REFERENCE:
1. Essentials of Business Finance – R.M.Sri Vatsava
2. Financial Management – SaravanaVel
5. Financial Management – M.Y.Khan and Jain

SEMMESTER-VI  ELECTIVE III - A

ORGANISATION OF GARMENT UNIT

Unit-I
Entrepreneurship- Meaning definition and types , need for Entrepreneurs, qualities and types of
Entrepreneurship. Difference between Entrepreneur and manager.
Management- Definition , Management as a process –Planning ,organizing ,Directing
Controlling, Co ordination.

Unit-II
Institutions supporting entrepreneurs- DIC, NSIC ,SISI,SIPCOT, TIL,KVIC, CODISSIA,
COMMERCIAL BANKS –SBI.
Organizational structure of a garment unit –Hierarchical organization, production planning and
control.

Unit-III
Different department in a garment unit – Design department ,Finance department, purchasing
department , Production department, Organizing different sections – hierarchy
Personnel involved in all the departments, nature of the job.
UNIT-IV
Factory Design and layout – importance of factory design, factors affecting factory design, Types of buildings, (single and Multi-storey) – advantages and limitation. Factory layout – Process, Product and combined layout
Design requirement – requirements relating to health, safety and welfare

UNIT-V
Performance of Indian Garment Export, SWOT Analysis Setting up of garment unit for export market, Export Document, Export finance- Payment method, Export shipping
Role of merchandiser in a garment unit

Reference:
1. Principles of management- Dinakar pagare, sultan chand and sons, delhi.
2. Entrepreneurship Development in India – Dr. C.B Gupta, Dr N.P. Srinivasan, sultan Chand and sons delhi 1997.

SEMESTER-VI ELECTIVE III - B
EXPORT ANALYSIS & DOCUMENTATION

Unit I:

Unit II:

Unit III:
to inspection – Certificate of inspection – GSP and other forms. Importance of insurance of goods in foreign trade – ECGC and it’s role.

Unit IV:

Unit V:
Pre shipment inspection and quality control – Foreign exchange formalities – Pre shipment documents. Shipment of goods and port procedures – Customs clearance.

BOOKS FOR REFERENCE:

1. Paras Ram, Hand Book of Import and export Procedures

SEMESTER-VI   ELECTIVE III - C
APPELAL QUALITY MANAGEMENT

Unit I:
Meaning of quality, testing and standard and their importance in apparel industry – Quality terminologies – Sources of international standards.


Unit II:

Unit III:

Unit IV:
Unit V:

Text Book

BOOKS FOR REFERENCE: