

BHARATHIAR UNIVERSITY –COIMBATORE – 641046.
B.Sc APPAREL FASHION DESIG DEGREE COURSE WITH COMPULSORY
DIPLOMA IN FABRIC ANALYSIS AND FINISHES
(For the students admitted during the academic year 2008-2009 Batch onwards)
Scheme of Examination

Part	Study Components	Course Title	Hours per week	Examination				Credit
				Dur.Hr	CIA	Marks	Total Marks	
Semester – I								
I	Language I		6	3	25	75	100	3
II	English I		6	3	25	75	100	3
III	Core I	Pattern Making & Grading	4	3	20	55	75	4
	Core II	Fashion Design Elements & Concepts	4	3	20	55	75	2
	Core Practical I	Fashion Drawing & Sketching	4	3	40	60	100	4
	Allied Paper I	Textile Science	4	3	25	75	100	5
IV	Environmental Studies #		2	3	-	50	50	2
Semester – II								
I	Language II		6	3	25	75	100	3
II	English II		6	3	25	75	100	3
III	Core III	Garment Manufacturing Machines	4	3	20	55	75	4
	Core IV	Introduction to Computers	4	3	20	55	75	4
	Core Practical II	Fashion Illustration - I	4	4	40	60	100	2
	Allied II	Computer Applications in Fashion Practical	4	3	40	60	100	5
IV	Value Education – Human Rights #		2	3	-	50	50	2

Semester III								
III	Core V	History of Indian and Western Costumes	4	3	25	75	100	3
	Core VI	Fashion Accessories	4	3	20	55	75	3
	Core VII	Fabric Manufacturing Technology	5	3	25	75	100	4
	Core Practical III	Fashion Illustration – II	6	4	40	60	100	4
	Allied : III	Pattern Making – Practical	6	3	20	30	50	5
	Skill based Subject 1 (Diploma)	Fabric analysis & Designing-Practical	3	3	40	60	100	3
	Tamil @ / Advanced Tamil# (OR) Non-major elective - I (Yoga for Human Excellence)# / Women’s Rights#		2	3	75		75	2

	Semester IV						
III	Core VIII Garment Embellishment	4	3	25	75	100	3
	Core IX Garment Manufacturing Technology	5	3	25	75	100	4
	Core Practical IV Apparel Manufacturing - Practical	6	4	40	60	100	4
	Core X Dyeing and Printing	4	3	20	55	75	3
	Allied : IV Dyeing and Printing - Practical	6	3	20	30	50	5
	Skill based Subject 2 (Diploma) Art Portfolio-Practical	3	4	40	60	100	3
	Tamil @ /Advanced Tamil # (OR) Non-major elective -II (General Awareness #)	2	3	75		75	2
	Semester V						
III	Core XI Fashion Communication and Retailing	5	3	25	75	100	3
	Core XII Fashion Merchandising	6	3	25	75	100	3
	Core XIII Apparel Quality Management	6	3	25	75	100	3
	Core Practical V Design Specialization & Export sampling - Practical	6	3	40	60	100	3
	Elective –I	4	3	25	75	100	5
IV	Skill based Subject 3 (Diploma) Computer Aided Designing - Practical I	3	3	40	60	100	3
	Semester VI						
III	Core XIV Draping Techniques	5	3	25	75	100	4
	Core XV Garment Costing and Programming	6	3	25	75	100	4
	Core Practical VI Fashion Photography & Visual Communication Design – Practical	6	4	20	30	50	4
	Elective –II	5	3	25	75	100	5
	Elective –III	5	3	25	75	100	5
IV	Skill based Subject 4 (Diploma) Computer Aided Designing – Practical II	3	3	40	60	100	3
V	Extension Activities @	-		50	-	50	1
	Total					3600	140

@ 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)		
Elective – I	A	Textile Economics
	B	Business Finance
	C	Care & Maintenance of Textiles
Elective – II	A	Apparel Production Management
	B	Executive Business Communication
	C	Entrepreneurial Development
Elective - III	A	Fabric Production & Processing
	B	Business Communication
	C	Computer Applications in Business

SEMESTER – I CORE PAPER I - PATTERN MAKING AND GRADING

UNIT I

Introduction – Concept of basic pattern and grading – Methods of pattern making with special reference to pattern drafting - Pattern making tools – Various pattern production terms–Standard body measurements for men’s wear, women’s wear and kids wear of different countries. Style wise component parts of a garment.

UNIT II

Pattern positioning and lay out – Concept of pattern layout - Rules and methods of pattern layout – Adjusting the patterns to fabric. Fitting: Definition – Principles for a good fit– Checking the fit of a garment – Solving fitting problems in various garments.

UNIT III

Draping – Importance of draping – Dress form and types – Draping steps for basic bodice, skirt, pants. Procedure to develop necklines: Jewel neck - Round neck - ‘U’ neck - Square neck - Pentagon neck - Star neck - Inside and outside scallop neck. Procedure to develop sleeves: Plain and puff sleeves.

UNIT IV

Procedure to draft the ¼th patterns for men’s wear: Basic round neck T shirt, raglan sleeve T shirt with hood, full sleeve shirt, narrow bottom trouser.

Procedure to draft the ¼th patterns for kids wear: Jabla, knicker, pedal pusher, A-Line frock.

Procedure to draft the ¼th patterns for Ladies wear: Blouse, kameez, salwar, midi, midi top.

UNIT V

Basic principle of dart manipulation – Displacement of bust dart (waist – side seam, armhole – neck of front edge).

Grading – Definition – Principles of grading - Master grades – Basic back & front grades – Grading of basic sleeve, basic collar, basic facing. Selecting a grading system – Midi – Trace grading – Trouser grading – Jacket grading – Shirt grading.

REFERENCES:

1. *Helen Joseph Armstrong*, Pattern Making For Fashion Design, Harper Collins Publishers (1987).
2. *Winifred Aldrich*, Metric Pattern Cutting, , Blackwell Science Ltd, England (1994).
3. *Winifred Aldrich*, Metric Pattern Cutting for Men’s Wear, Blackwell Science Ltd, England (1990).
4. *Winifred Aldrich*, Metric Pattern Cutting for Children’s Wear (From 2 – 14 Years), Blackwell Science Ltd, England (1991).
5. *Gerry Cooklin*, Pattern Cutting for Women’s Outerwear, Blackwell Science Ltd, England (1992).

6. *Gerry Cooklin*, Pattern Grading for Women's Clothes, Blackwell Science Ltd, England (1990).
7. *Gerry Cooklin*, Pattern Grading for Men's Clothes, Blackwell Science Ltd, England (1992).
8. *Gerry Cooklin*, Pattern Grading for Children's Clothes, Blackwell Science Ltd, England (1991).
9. *Gerry Cooklin*, Master Patterns and Grading for Women's Outsizes, Blackwell Science Ltd, England
10. *Natalie Bray*, Dress Pattern Designing, Blackwell Science Ltd, England (1986).
11. *Natalie Bray*, More Dress Pattern Designing, Blackwell Science Ltd, England
12. *Natalie Bray*, Dress Fitting, Blackwell Science Ltd, England (1978).
13. *Maccam, Dinald H*, How to Make Sensible Pattern.
14. *Gollian Holman*, Pattern Making Made Easy.
15. *Inju Kim*, Apparel Making in Fashion Design, Fairchild Publications Inc. New York (2002).
16. *Winifred Aldrich*, Fabric, Form and Flat Pattern Cutting, Om Book Service, New Delhi (1996).

SEMESTER – I CORE PAPER II - FASHION DESIGN ELEMENTS AND CONCEPTS

UNIT I

Introduction to fashion: Fashion terminologies - Factors influencing fashion – Line: (1) Path, (2) Curve, (3) Direction, (4) Illusion. Shapes: (1) Basic types, (2) Structural & visual shapes

UNIT II

Colour: Colour wheel, Colour theory, Colour value & intensity, Texture - Colour harmony - Colour scheme – Colour psychology – Introduction to colour psychology – Importance of colour psychology in apparel export market.

UNIT III

Principles of design - Proportion – Balance – Rhythm- Harmony.

Neck lines- Collar - Sleeves - Cuffs – Waistlines - Bows & ties – Plackets-Pockets.

UNIT IV

Ruffles, cowls, shirring, smoking, quilting, yokes, draping, gathers, pleats, frills & flounces.

UNIT V

Basic concept of variety of skirts – Methodology of designing of skirts.

Basic concept of Trousers – Methodology of designing of trousers.

Basic concept & types of silhouettes.

REFERENCES:

1. *Injoo Kim & Mykyung Uh*, Apparel Making in Fashion Design, Fairchild Publications, New York (2002).
2. *Bride M. Whelan*, Colour Harmony – A Guide To Creative Colour Combinations, Rockport Publishers, USA (1997).
3. *James Stockton*, Color, Chronicle Book Publishers, San Francisco (1984).
4. *Axel Venn*, Color Kaleidoscope, Mode... Information Group (1997).
5. *Sumathi.G.J*, Elements of Fashion and Apparel Design, New Age International (P) Ltd, New Delhi (2002).
6. *Patric John Ireland*, Fashion Design Drawing and Presentation, B.T.Batsfort Ltd, London (1982).
7. *Jenny Davis*, A Complete Guide to Fashion Designing, Bharat Bhushan Abhishek Publication (2006).
8. *Kathryn Mckelvey & Janine Munslow*, Fashion Source Book, Blackwell Publication (2006).
9. *Kathryn Mckelvey & Janine Munslow*, Fashion Design, Blackwell Publication (2003).
10. *Patric John Ireland*, Encyclopedia of Fashion Details, Prentice Hall, NJ (1987).

SEMESTER – I CORE PRACTICAL I - FASHION DRAWING AND SKETCHING

LIST OF EXPERIMENTS

Part – A

Practice the drawing of lines, curves and shapes.

1. Learning object drawing and perspective drawing.
2. Learning various shading methods
3. Learning the techniques of enlarging and reducing the motifs
4. Learning the usage of various drawing and sketching medium – pencils, ink, charcoal, brushes, crayons, water colour and poster colours.
5. Learning the art of creating textures.

Part – B

6. Drawing heads, hands, arms, legs and feet in different angles.
7. Proportion study – 7½ head and 8½ head theory – stick, block and flesh figures for men and women.
8. Learning various types of hair styling and application of cosmetics.
10. Practice to draw the accessories.
11. Practice to draw landscape, architecture and interiors.
12. Practicing of free hand drawing.

REFERENCES:

1. *Patric John Ireland*, Fashion Design Illustration – Women, B.T.Batsfort Ltd, London (1993).
2. *Patric John Ireland*, Fashion Design Illustration – Children, B.T.Batsfort Ltd, London (1995).
3. *Patric John Ireland*, Fashion Design Drawing and Presentation, B.T.Batsfort Ltd, London (1982).
4. *Patric John Ireland*, Fashion Design Illustration – Men, B.T.Batsfort Ltd, London (1996).
5. *Wolfgang.H.Hageney*, Checks And Stripes – Classic Variations in Colour Vol.I, Belveden (1997).
6. *Bina Abling*, Fashion Sketch Book, Fair child Publication, New York (1987).
7. *Geral Dine Christy*, Step by Step Art School – Pastels, Hamlyn (1992).
8. *Patricia Monahan*, Step by Step Art School – Water Colour

9. *Angela Gair*, Step by Step Art School – Drawing, Letts of London (1994).
9. *Patricia Seligman*, Step by Step Art School – Oils, Hamlyn (1992).
10. *Rita Gersten*, Innovative Fashion Sketching, Rita Gersten Innovative Enterprises (1984).

SEMESTER – I ALLIED PAPER I - TEXTILE SCIENCE

UNIT I

Textile fibres: Classification – General properties – Identification of textile fibres - Polymer – Terminologies – Polymerization types - Types of polymers – Methods of filament spinning - Drawing and effects.

Cotton: Producing countries – Botanical and commercial classification - Brief study on Indian hybrid and imported commercial cotton varieties – Fibre morphology – Chemical structure & composition - Properties - End uses. Brief study about organic cotton and it's cultivation.

Jute: Producing countries – Fibre morphology – Chemical composition - Properties - End uses.

Flax: Producing countries – Fibre morphology – Chemical composition - Properties - End uses.

UNIT II

Wool: Producing countries - Grading - Fibre morphology – Chemical structure & composition - Properties - End uses - Felting – Study of Woolen and Worsted Yarns - End uses - Brief study on specialty hair fibers and uses.

Silk: Producing countries – Sericulture – Stiffling & Reeling – Throwing – Degumming – Weighting. Fibre morphology – Chemical structure & composition – Properties - End uses. Meaning of spun silk – Comparison of spun & filature silk. Brief study on wild silk varieties.

UNIT III

Semi synthetic fibres: Rayon - Regenerated and modified cellulose -Viscose rayon process flow - HWM fibres - Comparison of properties between viscose and HWM rayons –End uses –Bamboo fibre- Process flow - Properties - End uses.

Synthetic fibres: Common steps for the production – Brief study about Polyamide, Polyester, Poly Acrylic, and Spandex – Process flow for the production of Nylon 6,6, Nylon 6, Polyester filaments and staple fibres. Individual fibre properties and trade names – End uses.
- Texturisation and it's effects, Types of textured yarns - Methods of texturisation – End uses of textured yarns.

UNIT IV

Classification of yarn types- Staple spinning system - Types – Cotton Yarn Production sequence and objectives – Principles of short staple spinning – Comparison of carded and combed yarn - Winding and it's objects – Waxing and it's significance – Properties required for export quality hosiery yarns. Study of yarn twist and it's importance – Types of yarn twist – Various yarn & package defects.

UNIT V

Blended textiles: Types of blending – Benefits of blending – Prominent blended yarns of fashion apparel market - Double yarn - Properties –Uses. Classification of Sewing threads & applications – Thread prerequisites – Essential properties - Production process of spun Polyester sewing thread & core spun sewing thread – Advantages. Yarn numbering systems.

REFERENCES:

1. *Shenai. V.A.* Textile Fibers: Technology of Textile Processing, Vol.I, Sevak Publications, Mumbai (1996).
2. *Wynne, A,* The Motivate Series – Textiles, Macmillan Education Ltd., London (1997).
3. *Mishra, S.P.* A Text Book of Fibre Science and Technology, New Age International (P) Ltd Publishers, New Delhi (2000).
3. *Gordon Cook, J,* Hand Book of Textile Fibres – Vol. I & Vol. II. Wood Head Publishing Ltd., Cambridge, England (1984).
5. *Carr, C.M,* Chemistry of the Textile Industry.
6. *Phyllis G.Torton,* Understanding Textiles.
7. *Marjory L.Joseph,* Essentials of Textiles.
8. *Joseph J.Pizzuto,* Fabric Science.
9. *Goswami.J.C., Martindale.J.G, Scardino.K.L.,* Textile Yarns, Technology, Structure & Applications, Mahajan Book Distributors, Ahmedabad (1995).
10. *Moncrieff, W,* Man-made Fibres, Butterworth Scientific (1975).

11. Identification of Textile Materials, The Textile Institute, Manchester.
12. *Eric Oxtoby*, Spun Yarn Technology
13. *A.Venkatasubramaniam*, Spun Yarn Technology Vol. I – III, Saravana Publications, Madurai (1993).
14. *Sadov.F, Korchagin.M, Matesky.A*, Chemical Technology of Fibrous Material.
15. *K.P.Chellamani*, Yarns and Technical Textiles.
16. *Bernard P. Corbman*, Textiles – Fibre to Fabric.
17. *Debbie Ann Gioello*, Understanding Fabrics: From Fibre to Finished Cloth, Fairchild Publications, New York (2002).

SEMESTER – II CORE PAPER III - GARMENT MANUFACTURING MACHINES

UNIT I

Introduction to garment industry – Detailed study of process sequence. Lay and marker planning – Study of methods of marker planning – Study of spreading methods.

UNIT II

Introduction to garment cutting machines – Types of cutting machines and applications – Detailed study on straight knife, band Knife and round knife cutting machines. Brief study on notchers, drills & thread markers.

UNIT III

Classification of industrial sewing machines – Applications – Description and working of Single Needle Lock Stitch machine, Double Needle Lock Stitch machine, Over Lock machines, Flat Lock machine – Types and parts of sewing machine needles – Needle sizes.

UNIT IV

Sewing machine feed mechanisms: Drop feed – Differential feed – Variable top feed combined with drop feed - Variable top feed combined with differential feed – Compound feed – Unison feed. Machine bed types: Flat bed - Cylinder bed - Post bed – Feed – off – the – arm – Applications. Types of work aid: Guides – Folders. Details of stand, Table and motor for sewing machines.

UNIT V

Brief study on computer controlled cutting machine, Laser and Plasma cutting. Brief study on safety stitching, blind stitching, button stitching, button holing, placket making and bar tacking machines. Study on various garment finishing machines for Fusing, Sucking, Ironing and Packing.

REFERENCES:

1. *Harold Carr and Barbara Latham*, The Technology of Clothing Manufacture, Blackwell Science Ltd, England (1994).

2. *Gerry Cooklin*, Introduction to Clothing Manufacture, Blackwell Science Ltd, England (1991).
3. *Dora.S.Lewis, Mabel Goode Bowers and Marietta Kettunen*, Clothing Construction and Wardrobe Planning, The Macmillan Company : New York (1955).
4. *Terry Brackenbury*, Knitted Clothing Technology, Blackwell Science Ltd, England
5. *Ruth. E, Glock and Grace.I.Kunz*, Apparel Manufacturing, Pearson Education, New Delhi.
6. Brochures & Catalogues of various machinery manufacturers.

SEMESTER – II CORE PAPER IV - INTRODUCTION TO COMPUTERS

UNIT I

Introduction to computer - Definition of a computer - Computer generations - Classification of a computer - Areas of application - Concepts of data and information - Capabilities and limitations of a computer. Components of a computer system: Hardware – CPU, input devices, output devices, storage devices, motherboard, power supply unit. Memory: Primary memory, secondary memory. Software: System software, application software. Programming languages, packages. Introduction to numbering systems - Binary, octal, decimal and hexadecimal number systems.

UNIT II

Operating system: Functions of an Operating System - Classification of Operating Systems - Introduction to DOS - Graphical User Interface Systems - Basic components of a GUI system - Advantages of GUI over CUI - Introduction to Windows XP. Introduction to computer network, network operating systems, network concept and classification, LAN, LAN topologies, WAN, Advantages of networking - Introduction to Windows 2000 server.

UNIT III

Introduction to MS Office: The Office Assistant, Working with multiple data, clip art, templates, wizards - Introduction to word processing - Word Processor, benefits and advantages, applications, mail merging, working with word processor - Spread sheet – An introduction - Advantages of using spread sheet software, Applications of spreadsheet, Excel. Understanding workbooks and worksheets, charts & tables. Power Point - An introduction - The concept of a presentation, Creating a slide show, preparing hand-outs.

UNIT IV

Introduction to Internet, History of Internet, The World Wide Web. Internet browsers – Internet Explorer, Netscape Navigator. Internet Tools – E-Mail, advantages and disadvantages of E-Mail. Search engines and benefits. Introduction to E – commerce.

UNIT V

Virus, Types of viruses, How do virus spread, Symptoms of a virus attack, Prevention of virus attack, Detection of viruses, Removing viruses.

REFERENCES:

1. *R.Krishnamoorthi*, Computer Programming And Applications, J.J Publications.
2. *Greg Perry*, Teach Yourself Microsoft Office 2000 in 24 Hours, Tech media Publications.

SEMESTER – II CORE PRACTICAL II - FASHION ILLUSTRATION – I

LIST OF EXPERIMENTS

1. 10 Head and 12 Head Theory – Men and women - Balance and movement.
2. Practicing the illustrations of children based on age group.
3. Developing different poses of men, women and children – Side - ¾th- Front- Back- Playful pose- Sophisticated pose- Classical pose - Aggressive pose.
4. Developing illustrations from the pictures of magazine.
5. Creating illustrations with various garment styles for men, women and children. Casual wear, party wears and sports wear
6. Drawing the stylized figures of men, women and children.

REFERENCES:

1. *Patric John Ireland*, Fashion Design Illustration – Women, B.T. Batsfort Ltd, London (1996).
2. *Patric John Ireland*, Fashion Design Illustration – Children, B.T. Batsfort Ltd, London (1995).
3. *Patric John Ireland*, Fashion Design Drawing and Presentation, B.T Batsfort Ltd, London (1982).
4. *Patric John Ireland*, Fashion Design Illustration – Men, B.T. Batsfort Ltd, London (1996).
5. *Kathryn Mckelvey & Janine Munslow*, Illustrating Fashion, Blackwell Publication (2005).
6. *Kathryn Mckelvey & Janine Munslow*, Fashion Source Book, Blackwell Publication (2006).
7. *Bina Abling*, Fashion Sketch Book, Fair Child Publication, New York (1987).
8. *Caroline Tatham and Julian Seaman*, Fashion Design Drawing Course, James & Hudson Publication (2003).
9. *Julian Seaman*, Fashion Illustration Basic Techniques, B.T. Batsfort Ltd, London (1996).
10. Wolfgang Hageney, Tartans, Belvedere, Milan, Italy (1987).

SEMESTER – II ALLIED PAPER II COMPUTER APPLICATIONS IN FASHION – PRACTICAL

LIST OF EXPERIMENTS

1. Using MS Word, prepare the given report.
2. Using MS Excel, prepare the given balance sheet.
3. Using MS Excel get the output in various formats such as Histogram, Pareto chart etc., for the given data.
4. Using MS Excel do the given calculation and prepare the required statement.
5. Using MS Power Point prepare the flow chart and presentation slides for the given topic.

6. Design the given motif / design using Coral draw package.
7. Create the given situation in Coral draw.
8. Work on Adobe Photo Shop for given design card.
9. Design a web page for the given details using HTML / DHTML / Flash.

SEMESTER III CORE-V HISTORY OF INDIAN AND WESTERN COSTUMES

Unit – I

Indian Costumes

Prevedic Era, Vedic & Post Vedic Era - Mauryan, Satvahana, Kushan Dynasty, Gupta Dynasty - Mughal Period - Costumes Of The British Raj - Traditional Costumes & Textiles Of India - Contemporary Fashions

Unit – II

Western Costume

Origin Of Costume - Development Of Costume - Beginning Of Civilization – Greek, Roman & Egyptian

Unit – III

16th, 17th & 18th Century.

Costumes For Men - Costumes For Women - Costumes For Children- Accessories

Unit – IV

Costumes From French Revolution To Early 20th Century

Revolutionary Period – 1789 – 1815 - The Monarchy (1789 – 1792) - The Republic (1792 – 1795) The Directory Period (1795 – 1799) - Consulate And Empire (1799 – 1815)

Unit – V

Contemporary Fashion

From Early 20th Century To Contemporary Fashion

Reference:

1. **History Of Costumes In The West - Francois Boucher**
2. **An Illustrated History Of Fashion (500 Years Of Fashion Illustration) – Alice Mackrell**
3. **History Of 20th Century Fashion – Elizabeth Ewing [Revised By -Alice Macrell]**
4. **The Illustrated Encyclopedia Of Costume And Fashion – Jack Cassin – Scott**
5. **Evolution Of Fashion**
6. **Guide To Historic Costumes**
7. **History Of Indian Costumes**
8. **Ancient Indian Costumes**

SEMESTER III CORE-VI FASHION ACCESSORIES

Unit - I

The concept of three-dimensional sketching and relation to accessories design- Concentrating on design detail, sketch the basic shapes of footwear, handbags, hats, gloves, personal leather goods, etc. Introduction to accessory design. Various types of shoes, handbags, hats and gloves.

Unit - II

Selection of Materials, Design, functional and aesthetic performance and their advantages - Ribbons, Braids, Laces, Appliqués, Buttons, Zippers, Snap fasteners, Hooks and Eyes, Hook and Loop tape (Vell-crow), Eyelets, Tie, Scarves, Stoles, Umbrella, Socks and Veils.

Unit - III

Selection of Materials, Design, functional and aesthetic performance and their advantages - and the various styles – footwear, belts, gloves, hand bags, hats and wallets. Concepts of patternmaking techniques, Basic machinery and equipment used for these accessories

Unit - IV

Selection of Materials, Design, functional and aesthetic performance and their advantages - and the various styles – Pendants, Waist Bands, Wrist Bands, Necklaces, Head Bands, Neck Ties and Bows.

Unit – V

Selection of Materials, Design, functional and aesthetic performance and their advantages - and the various styles– Key Chain, Sunglass, Wrist watches, Rings, Ear rings, Bangles, Bracelets, anklets, Pony Tail Holder and Pen.

Reference:

1. Fashion Sketch Book – Bina Abling, Fair Child Publications, New York Wardrobe
2. Strategies for Women – Judith Rasband, Delmar publishers London Fundamentals of
- 3..Inside the Fashion Business- Heannette A Jarnow et-al, macimilan Publishing Company, New York.
- 4..Art and Fashion in Clothing Selection – Mc Jimsey and Harriet, Iowa State University Press, Jowa.

SEMESTER III CORE-VII FABRIC MANUFACTURING TECHNOLOGY

Unit I Basic Knitting Technology

Different fabric forming methods – comparison of weaving and knitting – comparison of woven and knitted fabric. Knitting machine elements- needles types - Knitting Cycle of Latch Needle with Sinkers – Terms in Weft Knitting –Comparison Of Weft And Warp Knitting – Comparison of warp and weft knitted fabric

Unit II Single knit Structures

Principal Weft Knit Stitches - Knit, Tuck, Miss Stitch Formation And Properties - Representation Of Weft Knit Stitches - Basic Weft Knit Structures - Characteristics Of Single Jersey Fabrics.

Unit III Double knit and speciality Structures

Introduction To Double Knit - Needle Gating – Rib, Interlock & Purl Fabric Characteristics. Concept of Multi Cam Track. Brief study on Jacquard- Auto Stripes, Fleece, Terry – Rib & Interlock Structures.

Unit IV Weaving

Sequence Of Preparatory Processes For Weaving & It's Objectives - Passage Of Material Through Weaving Machine (Loom) - Important Motions of Weaving - Important Parts Of Loom.

Unit V Woven Fabrics & Designs

Introduction To Fabric Designing - Plain weave & its derivatives –Twill weave – Pointed twill – Herring bone twill - Satin and Sateen Weaves - Crepe Weaves –Honeycomb and Huck a back weaves. Jacquard designs

References

1. Knitting Technology – David J Spencer
2. Knitting Technology – Prof..D.B.Ajgoankar
3. **Weaving Mechanisms. Vol. I/II – N.N.Banerjee**
4. Yarn Preparations Vol I & II B. Senguptha
5. Mechanism Of Weaving Machines - .J.Chakrovarthy.
6. Principles Of Weaving – Marks And Robinson
7. Weaving Mechanism - T. Ashwani
8. Fabric Forming – B. Hasmukhrai..

SEMESTER III CORE PRACTICAL III FASHION ILLUSTRATION –II

PART – A

Composition – Men Illustration

1. Men Illustration on the background of Party.
2. Men Illustration on the background of Office.
3. Men Illustration on the background of Playground.

PART – B

Composition – Women Illustration

4. Women Illustration on the background of Party.
5. Women Illustration on the background of Office.
6. Women Illustration on the background of Shopping.

PART – C

Composition – Men & Women Illustration

7. Men & Women Illustration on the background of Party.
8. Men & Women Illustration on the background of Shopping.
9. Men & Women Illustration on the background of Temple.

PART – D

Composition – Children Illustration

10. Children Illustration on the background of Playground, Picnic.
11. Children Illustration on the background of Playground, Picnic.
12. Children Illustration on the background of Playground, Picnic.

PART – E

13. Outdoors Sketching, Sculpture studies.

SEMESTER III ALLIED: III PATTERN MAKING PRACTICAL

Draft And Construct The Pattern Of Given Style / Sample As Per The Specification Given With And Also Grade The Same For Required Sizes

1. Men's Basic T Shirt
2. Raglan with Pocket
3. Men's Polo T Shirt
4. Men's High Neck Shirt
5. Men's Boxer Short
6. Men's Bermudas Short
7. Men's Trouser
8. Men's Kimono Sleeve
9. Men's V – Neck Shirt
10. Men's hood
11. Men's Inner Garment – Vests RN / RNS
12. Men's Under Garment: Briefs With Inner Waist Band Or Outer Waist Band Of Various Models - Trunk Type.
13. Ladies Skirt
14. Ladies Blouse
15. Ladies Basic Bodice
16. Women's Nighties
17. Kid's Wear Of Various Styles
18. Children's Suits And Pyjama

SEMESTER III DIPLOMA-I FABRIC ANALYSIS AND DESIGNING PRACTICAL

1. Development of the following samples:

1. Pique
2. Pearl
3. Lacoste
4. Twill
5. Cross miss
6. Two thread fleece
7. Mini jacquard design
8. Auto striper
9. Rib waffle
10. Flat back rib
11. Interlock
12. Ottoman rib
13. Electronic Jacquard motif

2. Analyse the given knitted fabric sample for the following particulars:

**A) Course and Wale Density B) Loop length C) Areal Density (GSM)
D) Tightness Factor E) Technical graph F) Cam order G) Needle order**

3. Analyse the given woven fabric sample for the following particulars and draw the design, draft and peg plan:

A) EPI B) PPI C) Warp and Weft crimp & count D) Cover Factor

SEMESTER IV CORE-VIII GARMENT EMBELISHMENT

Unit – I

Introduction to Surface Ornamentation and Embroidery – General rules for Hand and Machine Embroidery – Special Attachments to Sewing Machines for Embroidery – Tools and Equipments – Needles – Threads.

Unit – II

Running Stitch – Laced Running Stitch - Back stitch – Stem Stitch – Satin stitch – Bullion Knot – Pearl Knot – Cross Stitch - Blanket Stitch – Button Hole Stitch – Shaded Button Hole – Corel Stitch – Spider Web Stitch – Fly Stitch.

Unit – III

Chain Stitch – Daisy Chain Stitch – Roman Chain Stitch – Zig Zag Chain Stitch – Russian Chain Stitch – Zig Zag Cable Stitch – Chevron Stitch – Cretan Stitch – Faggoting Stitch – Feather Stitch – Fern Stitch – Fish Bone Stitch – Herringbone Stitch – Couching – Overcasting.

Unit – IV

Counted Thread Work – Drawn Thread Work – Cut Work – Bead Work – Mirror Work – Sequins Work – Introduction to print designs – Repeat Patterns – Block, Drop, Brick Variations – Surface Design Techniques – Batik – Tie and Die – Fabric Painting – Dry, Wet and Stroke.

Unit - V

A detailed study on Computerized Embroidery Machines – Concept of Designing – Special Attachments - Sequins – Cording – Boring – Chenille – Taping.

References:

1. Encyclopedia of Embroidery Stitches Including Crewel – Dover Publications – 1974
2. Computerized Encyclopedia of Needle Work – Therese De Dillmont – 3rd Edition.
3. Decorative Painting Techniques Book – Val Holmes – 2003
4. Traditional Indian Motifs for Weaving and Printing
5. 5000 Designs and Motifs from India – Ajit Mookerjee – 1996
6. Barudan / Tazima / ZSK Embroidery Machines Catalogue

SEMESTER IV CORE-IX GARMENT MANUFACTURING TECHNOLOGY

Unit – I

Elements And Functions Of Clothing

Garment Analysis And Its Classification - Measurement And Size Charts For Men, Women, And Children - Requirement And Breakdown Of Garments - Flow Process - Torso And Bifurcated Garments.

Unit – II

Machinery For Garment Manufacturing

Introduction to Sewing Machines - Classification Of Machines Based On End Use In Construction – Study Various Parts of Sewing Machines and Adjustments Related To Construction.

Unit – III.

Stitches & Seams

Method Of Stitch Formation – Lock-Stitch And Chain Stitch - Classification Of Stitches Based On Federal Standards - Stitch Class 100,200,300,400,500,600 - Comparison Of Stitches And Its Usage - Seam Types – Plain, Top Stitched Seam, Welt Seam, Lapped Seam, Slot Seam, Flat Fell Seam, Hemmed Flat Fell Seam, French Seam, Piped Seam Superimposed And Bound Seam. Seam Finishes – Devices For Introducing Fullness. Defects & Remedies Stitching Defects, Causes & Remedies: Skip Stitch, Unbalanced, Puckering, Gathering, Needle Defects, Thread Problems.

Unit – IV.

Garment Components And Embellishments

Style Detailing – Front, Back, Sleeve, Placket, Pocket, Collar, Neckline- Silhouettes – Skirts, Dresses, Trousers, Jacket .

Unit V.

Trims & Accessories

Trims And Accessories Attachments - Needle, Label, Zips, Lining, Inter-Lining, Fasteners – Sewing Thread Types And Ticket Numbering – Thread Consumption For Various Types Of Stitches And Garments

References

- Apparel Manufacturing Hand Book – Jacob Solinger
- Technology Of Clothing Manufacture – Harold Carr & B.Latham
- Knitted Clothing Technology – T.Bracken Berry
- Technology Of Stitches & Seams – Coats Viyella Limited

SEMESTER IV CORE PRACTICAL IV APPAREL MANUFACTURING- PRACTICAL

1. Exercise On Single Needle Lock Stitch Machine For Given Paper / Fabric Exercise – Straight And Curves - Fabric Exercises – Straight Lines, Curves, Squares, Rectangles, Triangles And Any Other Unlimited Shapes
2. Get At Least Five Different Stitch And Seam Samples Stitched On Various Machines And Furnish The Machine Threading Diagram Along With Stitch Density And Thread Consumption Details, For Given Details
3. Developing Seams Of Various Types - Superimpose, Bound, Lap, Piping Etc.
4. Developing Samples Of Components Such As
 - a. Round Neck
 - b. Scallop Neck
 - c. Gents Placket
 - d. Ladies Placket
 - e. Cross Pocket
 - f. Band Collar
 - g. Henley Band, etc., (As Per Diagrams And Sketches Also May Be Given)

Draft The Pattern, Cut & Construct The Following Components For The Given Measurement:

1. Different Neck Lines (At Least 3Types)
2. Different Collars (At Least 3 Types)
3. Different Sleeves (At Least 3 Types)
4. Different Plackets (At Least 3 Types)
5. Different Pockets (At Least 3Types)
6. Slits

and develop and construct the following.

1. Men's Crew Neck / Henley Neck / Raglan Sleeve Shirt
2. Men's Vest RN / RNS
3. Ladies Skirt

SEMESTER IV CORE-X DYEING AND PRINTING

Unit I

Introduction:

Introduction to wet processing. Preparatory processes for woven and knitted fabrics: **singeing – desizing – scouring – bleaching - mercerization**

Unit – II

Dyeing:

Dyes: Classification And Application. Dope dyeing – Principles & Method of Dyeing Of Cotton -Concept of Tie and Dye. Garment dyeing.

Unit – III

Printing:

Introduction – Printing paste ingredients- Printing Methods - Styles Of Printing – Novel printing methods: yarn printing - photo printing – glitter – sugar – inkjet – foil – flock – high density – spray – transfer – plastisol – khadi – pearl – burnout printing

Unit – IV

Finishing & Testing:

Introduction To Finishing – Types of Finishing – raising - shearing – embossing – heat setting – Sueding – emerising – ballon padding

Unit –V

Introduction to Testing Of Colored Fabrics For Fastness Properties. Computerized colour matching. Eco friendly textiles : Eco label & norms

References:

1. Technology Of Textile Processing (Vol 1 To 10) – V.A. Shenai.
2. Textile Finishing – J.T. Marsh.
3. Industrial Effluents – M. Manivasakam.
4. Prayag.R.S. Tech.Of Tex.Printing,1986 Mrs.Prayag 127 Belgaum Rd, Dharwad-580 008.
5. Kale.D.G., Principles Of Cotton Printing Edition - 2, 1976, Mahajan Book Depot, Ahmedabad-9.
6. Mills.Lwc, Tex.Printing 1981, Sdc Perkin House, 82, Grattom Rd, Yorkshire, England.
7. Datye.K.V.& Vaidya, Chemical Processing Of Synthetic Fibres And Blends 1984, Johnwiley & Sons Publications, New York.

SEMESTER IV ALLIED: IV DYEING AND PRINTING- PRACTICAL

1. Estimate The Hardness Of Water In PPM
2. Scour The Given Cotton Material And Estimate The Scour Loss Percentage
3. Bleach The Given Cotton Sample Using Hydrogen Peroxide.
4. Dye The Given Cotton Sample With Direct Dyes
5. Dye The Given Cotton Sample With Reactive Cold Brand Dyes
6. Dye The Given Cotton Sample With Reactive Hot Brand Dyes
7. Dye The Given Cotton Sample With Reactive Vinyl Sulphone Dyes
8. Dye The Given Wool/ Silk Material With Acid/ Basic Dyes
9. Dye The Given Polyester Sample Using Carriers and Disperse dye
10. Tie And Dye The Given Fabric Sample

SEMESTER IV DIPLOMA-II ART PORTFOLIO PRACTICAL

1. Develop Forecast Board based on seasons for Fashion and Colour.
2. Develop Trims and Accessory Board based on Season.
3. Method of developing Inspiration Boards.
4. Method of developing Story Boards.
5. Method of developing Mood Boards for different theme / inspirations.
6. Method of developing Colour Palette based on the theme / inspiration.
7. Method of developing Customer Profile.
8. Method of developing Flat Sketches based on the theme / inspiration.
9. Method of developing Specification Sheet.
10. Illustrate men, women and kid with Layout.

References:

1. The style source book – Judith Miller, Stewart, Tabori and Chang, Newyork
2. Portfolio Presentation for fashion designers – Linda Tain – 2003, 2nd Edition
3. Creative Fashion Presentation – Polly Guerin-2005, 2nd Edition.

SEMESTER V CORE-XI FASHION COMMUNICATION AND RETAILING

Unit – I

Retailing - Fashion Retailing - Scope of Retailing – Classifications - Retail Store Functions - Retail Marketing Channels - Retail Strategy Development - Retail Adaptation

Unit - II

Retail Environment - Retailing and Economy - Political and Social Influences - Retailing Structures - Department Stores, Specialty stores and Discount Retailers - General Merchandise Chains - Classic Shopping Malls

Unit - III

Visual Merchandising – Introduction – Visual Merchandising Environment – Elements - Store Design – Store Image - Global Retailing – Retail Competition – E – Retailing – Criteria for Global Success in Global Retailing – Factors.

Unit - IV

Online Marketing Communication – Strategies of Fashion Communication – Individual and Group Influences on Consumer Behaviors – Impact of Technology on Fashion Communication

Unit - V

Objectives of Fashion Retail Promotion - Promotion – Mix – Retail Sales Promotion – Publicity – Public Relation – Personal Selling – Advertising – Advertising Agencies – Fashion Shows and its types.

References:

1. Fashion Advertising and Promotion, *Jay and Ellen Diamond*, Fair Child Publishers, New York, 1999.
2. Retailing Principles, *Lynda Gamans Poloian*, Fair Child Publishers Inc., New York, 2003.

SEMESTER V CORE-XII FASHION MERCHANDISING

UNIT I

Fashion: Meaning, Definition & Terminologies – Components of fashion - Principles of fashion – Environment of fashion: Demographic & Psychographic, Economic, Sociological and psychological factors – Fashion cycle - Leaders of fashion: Designer's role, manufacturer's role and retailer's role – Theories of fashion adoption.

UNIT II

Scope of fashion business: Primary level, secondary level and retail level – Type of fashion designers - Fashion focus on Children Apparel: History, organization & operation, merchandising & marketing activities – Fashion focus on Ladies Apparel: History, organization & operation, merchandising & marketing activities

UNIT III

Fashion Focus on Men's apparel: History, organization & operation, merchandising & marketing activities – Fashion focus on Apparel accessories: History, organization & operation, merchandising & marketing activities – Fashion Forecasting – Forecasting techniques – Sources of forecasting

UNIT IV

Fashion merchandising: Store image, Target customer – Fashion direction - Design planning and selection – Merchandising plan – Buying – Receiving and Warehousing – Distribution – Retail selling and promotion – Sales evaluation – Retailing policies – Foreign Fashion Markets: France, Italy, America, Britain, German, Asian – Indian Fashion Industry

UNIT V

Fashion Shows –Types of Fashion Shows – Organising fashion shows – Check points for fashion shows – Foreign Fashion Designers: American, French, Italian, German, UK – Indian Fashion Designers – Fashion Association in India – Fashion Auxiliary services

References:

1. Strong Elian, Fashion Merchandising
2. Inside the Fashion Business.. Mc Millan Publishing Co.,
3. Apparel Merchandising
4. Fashion : Concepts to Consumers

SEMESTER V CORE-XIII APPAREL QUALITY MANAGEMENT

Unit – I

Introduction To Testing - Various International Standards – Benefits Of Standards

Unit – II

Testing Of Properties And Quality Parameters Of Yarn (Count, Strength, Twist), Fabrics (Construction Details, Areal Density, Strength, Handle Properties, Color Fastness & Dimensional Stability), Garments And Accessories That Are Responsible For Quality.

Unit – III

Introduction To Inspection – Types Of Inspection – Inspection In Coming Materials - Concept Of AQL

Unit – IV

Introduction To TQM – ISO 9001: 2008 and Its Elements– ISO-14000, SA-8000 –Certifying Bodies.

Unit – V

Quality Control Tools – Check Sheet – Control Charts – Histograms – Pareto Chart – Cause And Effect Diagram – Correlation Charts – Statistical Approaches.

References:

1. **Principles Of Textile Testing – J.E. Booth**
2. **Hand Book Of Textile Testing & Quality Control – Elliot B. Grover & D.S. Hamby**
3. **Textile Testing – P. Angappan & R. Gopalakrishnan**
4. **Managing Quality In Apparel Industries – Pradeep V Metha & Satis K Bhardwaj**
5. **ISI Standards [BIS] / AATCC / ASTM – Technical Manuals**
6. **TQM Journals**
7. **A Guide To ISO– 9000 – M. Nambiyar**

SEMESTER V CORE PRACTICAL V DESIGN SPECIALIZATION AND EXPORT SAMPLING- PRACTICAL

DESIGN DEVELOPMENT:

Flat Sketches for

1) Women's

- *Party wear
- *Street wear
- *Night wear

2) Men's

- *Formal wear
- *Eveningwear
- *Sports wear

3) Kid's

- *Infant
- *Toddler
- *Boys and girls

EXPORT SAMPLING:-

Constructing garments for all the three categories and evaluating the cost of each garment styles.

References:

1. The style source book - Judith Miller, Stewart, Tabori and Chang, Newyork
2. The creative book of fashion - Vol 1 - Sebastian Zachariah
3. Naturally 70s fabric - Constance Korosec and Leslie Pina
4. Natural fabrics - Ian Mankin

SEMESTER V DIPLOMA-III COMPUTER AIDED DESIGNING PRACTICAL- I

Using Designing Software Work The Following:

1. **Draw The Given Image Using CAD Software**
2. **Draw The Given Image And Work On Draping On A Men's Polo T-Shirt**
3. **Draw The Given Image And Work On Draping On A Women's Night Wear**
4. **Draw The Given Image And Work On Draping On A Ladies Skirt**
5. **Draw The Given Image And Work On Draping On A Kid's Wear**
6. **Scan The Given Figure And Work On Color Combination Using The Given Color Codes.**
7. **Scan The Given Figure And Do The Modifications As Needed**
8. **Create A Fully Fashioned Garment Using Knit Expert Software**
9. **Create A Set Of Garments Using Given Colors And Motifs Combination, Meant For Specific End Uses As Given**

SEMESTER VI CORE-XIV DRAPING TECHNIQUES

Unit-I

Fabric terms- Draping – Tools-Measurements – Principles of draping – Draping techniques – Different types of dress forms –Draping terminologies

Unit-II

Bodice front and back – Skirt front and back – Pant front and back – Basic sleeve.

Unit-III

Bodice – Gathered – Pleated – Darts.
Skirts - Drindle – Peg – Circular – Pleated – Straight

Unit-IV

Necklines – Sweet heart – Scooped –Scalloped –Boat –V and U neck – Round –Halter.
Yokes –Bodice –Midriff -Skirt –Gathered.

Unit-V

Collars- Convertible – Mandarin - Peter pan – Turtle - Ruffled – Shawl.
Cowls, Twists, Surplice.

References:

1. The Art of Fashion Draping, Connie Amadan Crawford, Fair Child Publications, New York, 2005.
2. Draping for Apparel Design, Hellen Joseph, Armstrong, 2008.

SEMESTER VI CORE-XV GARMENT COSTING AND PROGRAMMING

Unit – I

Principles Of Costing - Requirements Of Good Costing System - Cost Unit - Types Of Costs - Fixed Cost - Variable Cost - Semi Variable Cost - Conversion Cost- Replacement Cost - Differential Cost - Imputed Cost - Sunk Cost -Research Cost - Development Cost - Policy Cost - Shutdown Cost.

Unit – II

Elements Of Cost - Direct Material Cost - Direct Expenses - Direct Wages - Indirect Materials - Indirect Expenses - Indirect Labour - Overheads - Production Overhead - Administrative Overhead - Selling Overhead Distribution Overhead - Prime Cost - Work Cost - Cost Of Production - Total Cost

Unit - III

Cost Estimation Of Yarn, Knitted Fabric, Dyeing, Printing & Finishing. Cutting, Stitching, Checking, Packing, Forwading, Shipping, Insurance Etc., - Inco Terms & Its Relationship With Costing.

Unit – IV

Estimation Of Factory Cost For Vest, Briefs , Shorts, T-Shirts, Pyjamas, Children's Wear, Ladies Wear Etc., -

Unit – V

Various Factors To Be Considered In Costing For Domestic Products & International Products.

Books for Reference:

1. S.P.Jain and KL. Narang, "Cost Accounting", Kalyani Publishers,New Delhi.Edn.2005
2. R.S.N. Pillai and V. Bagavathi, "Cost Accounting",S. Chand and Company Ltd., New Delhi.Edn.2004.

**SEMESTER VI COREPRACTICAL VI
FASHION PHOTOGRAPHY AND VISUAL COMMUNICATION DESIGN-
PRACTICAL**

PART – A

Fashion Photography

- i. Product Photography.
- ii. Modelling Photography.
- iii. Outdoor Photography.

PART – B

Visual Communication Design

- i. Brand name & Logo development.
- ii. Visiting card & Letter pad design.
- iii. Season greetings design.
- iv. Calendar Design.
- v. Label Design.
- vi. Tag Design.
- vii. Box Design.
- viii. Lay-out Design.
- ix. Poster Design.
- x. Dangler Design.
- xi. Bag Design.
- xii. Hoarding Design.
- xiii. Audio Visual.

SEMESTER VI DIPLOMA-IV COMPUTER AIDED DESIGNING PRACTICAL II

Part – A

Develop The Patterns For The Following Styles Using Any Cad Software For The Given Measurements And Also Grade The Patterns To Various Sizes And Estimate The Lay Length And Marker Efficiency.

1. Men's Basic T Shirt
2. Raglan with Pocket
3. Men's Polo T Shirt
4. Men's High Neck Shirt
5. Men's Boxer Short
6. Men's Bermudas Short
7. Men's Trouser
8. Men's Kimono Sleeve
9. Men's V – Neck Shirt
10. Men's T-Shirt with hood
11. Men's Inner Garment – Vests RN / RNS
12. Men's Under Garment: Briefs With Inner Waist Band Or Outer Waist Band Of Various Models - Trunk Type.
13. Ladies Skirt
14. Ladies Blouse
15. Ladies Basic Bodice
16. Women's Nighties
17. Kid's Wear Of Various Styles
18. Children's Suits And Pyjama

Part – B

Digitize The Given Patterns And Store Them As Style Files And Apply Grade Rules And Estimate The Lay Length And Marker Efficiency

SEMESTER V ELECTIVE I - A : TEXTILE ECONOMICS

UNIT I

SCOPE OF METHODOLOGY : Definition of Economics – Nature and Scope of Economics – Utility analysis – Law of diminishing utility – Law of Equi Marginal utility – Indifference curve – Approaches of Economic Analysis – Methodology of Economics maximization and other objectives – Marshall's utility Analysis – Law of Diminishing Marginal Utility – Social Responsibilities.

UNIT II

THEORY OF CONSUMER BEHAVIOUR : Demand Analysis – Demand Schedule – Law of Demand – Demand Curves – Elasticity of Demand – Consumer's surplus – Analysis Schedule.

UNIT III

Production – Factors of Production – Law of diminishing Returns – Law of variable proportions – Return to scale – scale of production – Law of supply – Cost and Revenue – concepts and Curves – THEORY OF PRODUCTION . Production Function – Factors of Production Enterprise as a Factor.

UNIT IV

PRODUCT PRICING : Market Definition – Types – Equilibrium under perfect competition of Firm and Industry – Pricing – Pricing under perfect competition. Monopoly – Price Discrimination – Pricing under Monopolistic competition – Pricing under Oligopoly.

UNIT V

FACTOR PRICING – Marginal Productivity theory – Theories of wages, rent, interest and profit.

BOOKS FOR REFERENCE

1. Principles of Economics - Seth M.L.
2. A Text Book of Economic Theory - Stonier and Hague
3. Macro Economics - Jhingan

SEMESTER V ELECTIVE I – B : BUSINESS FINANCE

Unit – I

Business Finance: Introduction – Meaning – Concepts – Scope – Function of Finance
Traditional and Modern Concepts – Contents of Modern Finance Functions.

Unit – II

Financial Plan: Meaning – Concept – Objectives – Types – Steps – Significance –
Fundamentals.

Unit – III

Capitalisation – Bases of Capitalisation – Cost Theory – Earning Theory – Over Capitalisation –
Under Capitalisation : Symptoms – Causes – Remedies – Watered Stock – Watered Stock Vs.
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 Shares, Bonds, Debentures and Fixed
Deposits – Features – Advantages and Disadvantages– Lease Financing: Meaning – Features –
Forms – Merits and Demerits.

Books for Reference:

1. Essentials of Business Finance – R.M. Sri Vatsava
2. Financial Management – Saravanavel
3. Financial Management – L.Y. Pandey
4. Financial Management – S.C. Kuchhal
5. Financial Management – M.Y. Khan and Jain

SEMESTER V ELECTIVE I – C : 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

Principles of washing – suction washing, washing by kneading and squeezing , washing by machine - Process details and machine details.

Laundering 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;

1. Textiles fabrics and their Selection – Wingate I B, Allied publishers Ltd, Chennai.
2. Fundamentals of Textiles and their Care- Susheela Dantiyagi , Orient Longmann Ltd (1980).
3. Family Clothing – Tate of Glession , John Wiley & Sons I n c, Illinois.
4. Household Textiles and Laundry Work – Durga Duelpkar , Amla Ram & Sons, Delhi

SEMESTER VI ELECTIVE II – A : APPAREL PRODUCTION MANAGEMENT

UNIT 1: Introduction

Production - Definitions - Terminology - Organizing for Production -Function of Production Department - Duties and Responsibilities of Production manager / Supervisor - Effective Line Supervision - Factors of Production -Production Function - Basic Production Systems - Evaluating and Choosing the System - Process Flow and Charts for Garment - Scheduling Calculations -Assigning Operators Optimally - Setting Up Complete Balanced Production Lines to Produce Given Amount of Garments

UNIT II: Production Planning and Control

Capacity Requirement Planning[CRP] - Material Requirement Planning -Steps in Production Planning - Factors to be consider in Production Planning -Function, Qualitative and Quantitative Analysis of Production - Coordinating Departmental Activities - Practical Difficulties in implantation.

UNIT III: Production and Productivity

Methods of Production Systems - Job, Mass & Batch - Section Systems, Progressive Bundle System & 'Synchro' System - Conveyor Systems - Unit Production System - Advantages of UPS - Quick Response-Measurement of Productivity - "Men, Machine, Material" - Total Factor Productivity - Criteria for Increasing Productivity in Garment Industry -conducting productivity analysis survey in the garment industry.

UNIT IV: Plant Engineering & Line Balancing

Introduction to Garment Industry Plant Location - Location Economics -Plant Layout - Process Layout -- Product Layout - Combination Layout -Introduction to Balancing Theory - Balance Control - Balancing Exercises For Garment -Industry.

UNIT V: Work Study

Concept And Need - Method Study and Work Measurement -Techniques - Process Chart Symbol - Process Flow Chart - Flow Diagrams - String Diagrams - Multiple Activity Chart - Principles of Motion Economy - Simo Chart - Time Study Methods - Standard Time Data - Ergonomics With Special Reference To Garment Industry.

REFERENCES:

1. *Carr & Latham*, Technology of Clothing Manufacture
2. *Jacob Solinger*, Apparel Manufacturers Handbook
3. *Gerry Cooklin*, Introduction to Clothing Manufacture
4. *A. J. Chuter*, Introduction to Production Management
5. *Tripathi*, Personal Management and Industrial Relations
6. *O.P. Khanna*, Industrial Engineering and Management
7. *Rama Moorthi*, Production and Operations Management

SEMESTER VI ELECTIVE II – B : EXECUTIVE BUSINESS COMMUNICATION

Unit – I

Business Communication : Meaning – Importance of Effective Business Communication– Modern Communication Methods – Business Letters : Need – Functions – Kinds – Essentials of Effective Business Letters – Layout.

Unit – II

Trade Enquiries – Orders and their Execution – Credit and Status Enquiries – Complaints and Adjustments – Collection Letters – Sales Letters – Circular Letters.

Unit – III

Banking Correspondence – Insurance Correspondence – Agency Correspondence.

Unit – IV

Company Secretarial Correspondence (Includes Agenda, Minutes and Report Writing)

Unit – V

Application Letters – Preparation of Resume – Interview: Meaning – Objectives and Techniques of various types of Interviews – Public Speech – Characteristics of a good speech – Business Report Presentations.

Books for Reference:

1. **Rajendra Pal Korahill**, “Essentials of Business Communication”, Sultan Chand & Sons, New Delhi, 2006.
2. **Ramesh, MS, & C. C Pattanshetti**, “Business Communication”, R.Chand&Co, New Delhi, 2003.
3. **Rodriquez M V**, “Effective Business Communication Concept” Vikas Publishing Company ,2003.

SEMESTER VI ELECTIVE II - C : ENTREPRENEURIAL DEVELOPMENT

Unit – I

Concept of entrepreneurship: Definition Nature and characteristics of entrepreneurship – function and type of entrepreneurship phases of EDP. Development of women entrepreneur & rural entrepreneur – including self employment of women council scheme.

Unit – II

The start– up process, Project identification – selection of the product – project formulation evaluation – feasibility analysis, Project Report.

Unit – III

Institutional service to entrepreneur – DIC, SIDO, NSIC, SISI, SSIC, SIDCO – ITCOT, IIC, KUIIC and commercial bank.

Unit – IV

Institutional finance to entrepreneurs : IFCI, SFC, IDBI, ICICI, TIIC, SIDCS, LIC and GIC, UTI, SIPCOT – SIDBI commercial bank venture capital.

Unit – V

Incentives and subsidies – Subsidised 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.Saravanavel
5. Entrepreneurial Development – S.G.Bhanushali
6. Entrepreneurial Development – Dr.N.Ramu

SEMESTER VI ELECTIVE III - A : FABRIC PRODUCTION AND PROCESSING

UNIT I : FUNDAMENTAL CONCEPTS OF KNITTING

Fabric forming techniques – Comparison of weaving and knitting – Principles and comparison of weft and warp knitting – Classification of weft knitting machines – Terms and definitions in weft knitting – Basic structures and characteristics – Features of modern knitting machine – Study the role of machine elements and knitting elements of multi cam track jersey machine – Knitting cycle of latch needle with sinkers. Fabric faults, causes and remedies.

UNIT II : STUDY OF KNITTED FABRIC STRUCTURES

Formation of tuck and miss stitches and their influence on knitted fabric properties – Representation methods of weft knit stitches and structures – Ornamentation of weft knit structures: Need and possibilities. Elastomeric yarn types and it's effects in knitting – Study of single jersey derivative structures: Pique, Double Pique, Lacoste, Pearl and Twill. Study of rib derivative structures: Half Cardigan, Full Cardigan, Milano rib, Rib Waffle and Flat back rib. Concept of 2X2 rib and rib drop needle. Study of interlock derivative structures: Eight Lock, Ottoman rib, Ponte – di – Roma, Texi Pique and Pin tuck. Areal density and production calculation of circular knitting machine.

UNIT III : FUNDAMENTALS OF WOVEN FABRICS & DESIGNS

Weaving definition – Important terms related to woven fabric – Classification of looms – Sequence of weaving preparation processes and their objectives – Passage of material through plain loom – Important motions of a loom – Important Parts of Loom – Introduction to woven fabric designing and study of basic weaves and their derivatives.

UNIT IV : PRINCIPLES OF DYEING

Introduction to wet processing – Brief study of preparatory processes of dyeing and objectives – Meaning of dyes and pigments – Various classification methods of dyes – Principle & method of dyeing of cotton knitted fabric – Principle and working of jigger, beam dyeing, winch, soft flow and air flow machines – Concept of tie and dye – Brief study on garment dyeing.

UNIT V : PRINCIPLES OF PRINTING & FINISHING

Introduction to printing –Comparison of dyeing and printing – Methods of printing – Study of table screen printing and rotary screen printing methods. Styles of printing – Study of non conventional printing styles employed in garment printing – Principle and working of garment printing machine – Printing ingredients and model recipe formulation. Need and objects of finishing – Classification – Brief study of various mechanical and chemical finishes.

BOOKS FOR REFERENCE:

1. *D.B.Ajgoankar*, Knitting Technology, Universal Publishing Corporation, Mumbai (1998).
2. *David.J Spencer*, Knitting Technology, Wood Head Publishing Ltd. – Second Edition, England (1989).
3. *Samuel Raz*, Flat Knitting, Meisenbach Bamberg (1993).
4. *J.E.Booth*, Textile Mathematics, The Textile Institute Manchester – I Edition(1997).
5. *Peter Schwartz, Trevor Rhodes and Mansour Mohamed*, Fabric Forming Systems, Mahajan Publishers, Ahmedabad (1996).
6. *Chandrasekara Iyer, Bernd Mammel and Wolfgang Schach*, Circular Knitting, Meisenbach Bamberg (1992).
7. *Wynne, A*, The Motivate Series – Textiles, Macmillan Education Ltd., London (1997).
8. *Bernard P. Corbman*, Textiles, Fibre to Fabric
9. *Shenai.V.A.*, Technology Of Bleaching & Mercerising, Sevak Publications, Wadala, Mumbai-31.
10. *E.R.Trotman*, Textile Scouring & Bleaching, B.I. Publications Pvt. Ltd., New Delhi (1968).
11. *Warren.S.Perkins*, Textile Coloration and Finishing, Carolina Academic Press, Durham, North Carolina (1996).

SEMESTER VI ELECTIVE III – B : BUSINESS COMMUNICATION

UNIT I

Meaning of communication – Importance of effective communication in business – Objectives of communication - Media – Types – Principles, Process, Barriers - Methods to reduce barriers. Role of English Language in business communication - The sentence – Types – Verbs – Main and auxiliary – Agreement of verb and subject – Use of articles and prepositions – “WH” question and ‘yes’ or ‘no’ type questions - Punctuation and use of capital letters – Common errors- words often confused – Antonyms- Synonyms.

UNIT II

Functions of a business letter - Foreign words used in correspondence – The layout planning – Enquiries and replies – Orders and execution – Credit and status enquiries.

UNIT III

Complaints – Collection letters – Circular – Sales letters - Bank and insurance correspondence – Import and export correspondence - Agency correspondence – Correspondence of a company secretary.

UNIT IV

Memos and forms of messages – Office correspondence – Telegrams – E-mail – Fax – Interview letters – Testimonials – Appointments – Confirmation – Resignation – Report writing

UNIT V

Agenda and minutes of meeting – Advertisement – Speech making – Interviews- Information technology of the future - Telex - Teleconferencing - Fax-Internet - Multimedia

Reference:

1. Rajendra paul, Korlahalli.J.S. Essentials of business communication.
2. Krishna Mohan, Developing communication skills.
3. Champa Tickoo & Jaya sasikumar, Writing with a purpose.
4. F.T.wood, A Remedial English Grammar for Foreign Students

SEMESTER VI ELECTIVE III - C : COMPUTER APPLICATION IN BUSINESS

Unit I

Computer : Introduction – Meaning – Characteristics – Generations – Types of Digital Computer – Components of Computer – Input, Storage and Output Devices – Uses of Computers in Modern Business.

Unit II

Software: Meaning – Types of Software – Operating Systems: Meaning – Functions – Types – Programming Language – Compilers and Interpreters.

Unit III

Database Processing: Data Vs. Information – Database Management Systems: Meaning – Components – Uses – Limitations – Types.

Unit IV

Management Information System: Meaning – Characteristics – Functional Management Information Systems: Financial – Accounting – Marketing– Production – Human resource – Business Process Outsourcing.

Unit V

Networking – Meaning – Types – Internet : Meaning – Internet Basis – World Wide Web – Internet Access – Internet Addressing – Search Engines – Electronic Mail.

Books for Reference:

1. Fundamentals of Information Technology – Alexis Leon & Mathews Leon
2. Information Technology for Management – Henry C. Lucas
3. Computers and Commonsense – Roger Hunt and John Shellery
4. Management Information System – Dr. S.P. Rajagopalan