

Course: B.A Programme

Discipline: Apparel Design and Construction (ADC)

Semester Mode

Credit Scheme

Sem. No.	Title of the Paper		Code No.	Lecture		Tutorial		Practical		Total Credits
	Theory	Practical		hrs./week	hrs./week	hrs./week	hrs./week	Credits	Credits	
1.	Fundamental Textile Science & Apparel Construction-I	Fundamental Textile Science & Apparel Construction-I	A-1102	2	1	3	2	1	2	5
2.	Fundamental Textile Science & Apparel Construction-II	Fundamental Textile Science & Apparel Construction-II	A-2102	2	1	3	2	1	2	5
3.	Textile Design Techniques	Textile Design Techniques	B-3102	2	1	3	2	1	2	5
4.	Fashion Studies and Design Development	Fashion Illustration	B-4102	2	1	3	2	1	2	5
5.	Apparel Industry and Quality Assessment	Apparel Construction-I	C-1102	2	1	3	2	1	2	5
6.	Apparel Construction	Apparel Construction-II	C-2102	2	1	3	2	1	2	5

Course: B.A Programme
Discipline: Apparel Design and Construction (ADC)

Semester Mode

Scheme of Examination

Sern No.	Title of the Paper		Code No.	Credits	Maximum Marks	Duration of Exam
	Theory	Practical				
1.	Fundamental Textile Science & Apparel-Construction-I	Fundamental Textile Science & Apparel-Construction-I	A-11102	Theory-2 + Practical-2	Theory-50 Practical -50	Theory-2 hrs Practical-3 hrs
2.	Fundamental Textile Science & Apparel-Construction-II	Fundamental Textile Science & Apparel-Construction-II	A-2102	Theory-2 ÷ Practical-2	Theory-50 Practical -50	Theory-2 hrs Practical-3 hrs
3.	Textile Design Techniques	Textile Design Techniques	B-3102	Theory-2 + Practical-2	Theory-50 Practical -50	Theory-2 hrs Practical-3 hrs
4.	Fashion Studies and Design Development	Fashion Illustration	B-4102	Theory-2 ÷ Practical-2	Theory-50 Practical -50	Theory-2 hrs Practical-3 hrs
5.	Apparel Industry and Quality Assessment	Apparel Construction-I	C-5102	Theory-2 + Practical-2	Theory-50 Practical -50	Theory-2 hrs Practical-3 hrs
6.	Apparel Construction	Apparel Construction-II	C-6102	Theory-2 + Practical-2	Theory-50 Practical -50	Theory-2 hrs Practical-3 hrs

As per University Guidelines, 25% of the marks are reserved for Internal Assessment in Practical Examination

Course: B.A Programme

Discipline: Apparel Design and Construction (ADC)

Semester Mode

Course Objectives:

1. To develop an appreciation for well designed and constructed garments and an awareness of the components of quality and performance of apparel.
2. To create an understanding of the principles, processes, and techniques which are fundamental to efficient and effective clothing construction.
3. To create awareness about the parameters and specifications useful in selecting the materials required for apparel construction as well as their sources.
4. To develop proficiency in the design and construction of apparel and create an understanding the consumer preferences and the requirements of markets for apparel.
5. To inculcate appreciation for creativity and innovativeness in fashion design and create awareness about designing methods.
6. To create awareness about efficient management of resources required to commercially producing and marketing apparel and making informed consumer choices in entrepreneurial ventures.
7. To create understanding of the apparel industry and trade as well the latest trends in garment construction technologies and quality requirements.
8. To prepare students for professional careers in the garment industry.

Course: B.A Programme

Discipline: Apparel Design and Construction (ADC)

SEMESTER I- FUNDAMENTAL TEXTILE SCIENCE & APPAREL CONSTRUCTION-I (Theory)

Code No:A-1102

Maximum Marks:50

Duration of examination:2 hrs.

Periods per week: 2+1 (Theory+Tutorial)

Periods in semester:25

Objectives:

- To familiarize the students with terminology related to apparel and its construction.
- To impart knowledge about textile fibres in terms of their origin and performance characteristics.
- To create awareness regarding selection of apparel and home textiles.
- To acquaint the students with tools and equipment used for sewing.

CONTENTS

UNIT-I:

	Periods
Introduction to Apparel Construction	
1 Introduction to fabric grain – its types, identification and importance in apparel construction	1
2 Preparation of fabrics for clothing construction- shrinking, straightening, layout, marking and cutting of patterns	2
3 Sewing:	1
3a Common terms: Seam allowance, Ease, Dart, Draft, Pattern, Grading, Notch, Stay stitching, Yoke, Gusset	1
3b Tools and equipments required for measuring, drafting, pinning, marking and cutting.	2

UNIT-II:

Introduction to Sewing Machine		Periods
1	Sewing machine: its parts, working defects and remedies, care and maintenance	2
2	Use of different threads and needles for various fabrics	1

UNIT-III:

Basic considerations for selection of fabrics		Periods
1	Home furnishings: Standard size and selection of common household linen, towel, cushion cover, table linen, bed sheet and pillow covers	2

UNIT-IV:

Textile Science		Periods
1	Introduction to fibers:	
1a	Fiber-classifications based on their origin (natural and man-made) and length (staple and filament) brand name.	2
*	<i>Fabric Properties: Primary and Secondary Properties</i>	
1b	Identification of fibers through visual inspection, burning test, microscopic test, chemical test.	3
1c	Demonstration of Burning, Microscopic and Chemical test.	1
1d	Properties related to performance and care of the following fibers: cotton, linen, wool, silk, rayon, nylon, acrylic, polyester	3
1e	Demonstration of tests such as crease recovery, abrasion resistance and dimensional stability - <i>few more secondary properties strength, drape etc</i>	2

Recommended Readings:

1. Corbman, P.B., Textiles-Fibre to Fabric, Gregg Division/McGraw Hill Book Co., US, 1985.

2. Joseph M.L., Essentials of Textiles (5th Edition), Holt, Rinehart and Winston Inc., Florida, 1988.
3. Tortora, G, Phyllis, Understanding Textiles (2nd Edition), McMillan Co., USA, 1987.
4. Pizzuto, J., Fabric Science (5th Edition), Fairchild Publications.
5. Doongaji, S and Deshpande, R., basic Processes and Clothing Construction, Raj Publications, New Delhi, 1988.
6. Verma, Gayatri, Cutting and Stitching Practical, Asian Publishers, Darya Gang, New Delhi, 2007. (Hindi Book)
7. Shoric, G.P., Vastra Vigyan Ke Mool Sidhant, Vinod Pustak Mandir, Hospital Road, Agra, 2007. (Hindi Book)
8. Verma, Promila, Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003. (Hindi Book)

SEMESTER I- FUNDAMENTAL TEXTILE SCIENCE & APPAREL CONSTRUCTION-I (Practical)

Code No: A-1102

Maximum Marks: 50

Duration of examination: 3 hrs.

Practicals per week: 1 (1 practical of 3 periods)

Practicals in semester: 12

Objectives:

- To familiarize the students with terminology related to apparel and its construction.
- To impart knowledge about textile fibres and fabrics in terms of their visual appearance and performance characteristics.

CONTENTS

1	Temporary- even, uneven, pin, machine and diagonal basting	1
2	Permanent- hemming, blind hemming, back stitch, running stitch	1
3	Decorative- chain, herringbone, stem, running, lazy-daisy, satin, French knot, bullion stitch, buttonhole	1

4	Plain seam and seam finishes	1
5	French, run-n-fell, lapped seam	2
6	Fasteners: button, buttonholes, press buttons, hook-n-eye	1
7	Necklines and their finishing: bias binding, bias facing, shaped facing	2
8	Construction of a flanged pillow cover	2
9	Market survey of trimmings, fasteners, lining and interlinings available in market.	1
10	Preparation of a portfolio with different types of fabric swatches of natural and man made fibers listing the under mentioned details:	1
	- Statement of the unit price, characteristics, end use	
	- Names and addresses of the sources of swatches	

Visits:

- Visit to a handloom unit
- Visit to a Textile-testing Lab

SEMESTER II- FUNDAMENTAL TEXTILE SCIENCE & APPAREL CONSTRUCTION-II (Theory)

Code No:A-2102

Maximum Marks:50

Duration of examination:2 hrs.

Periods per week: 2+1 (Theory+Tutorial)

Periods in semester:25

Objectives:

- To impart knowledge about yarns interms of their production and properties.
- To foster an understanding about various fabric construction techniques.
- To develop an understanding about various finishes used in the apparel industry.
- To acquaint the students with the importance of taking correct body measurements and size charts.
- To introduce the concept of drafting and paper patterns.

CONTENTS

UNIT-I:

Yarns:	Periods
1 Basic steps in mechanical and chemical spinning	3
2 Yarn Properties: Yarn twist, Yarn numbering systems	2
3 Types of yarn-simple and complex	2

UNIT-II

Fabric Construction Techniques:	Periods
1 Weaving: woven structure-warp, weft, basic parts and their functions in a loom, basic and fancy weaves their identification and properties.	4
2 Demonstration of thread count and yarn count	1
3 Knitting: General properties of knitted fabrics, basic weft and warp knitted structures, wales, courses and identification	2
4 Blends: Reasons for Blending, properties, common blends available in Market	1

Yarn and fabric defects

UNIT-III

Finishes:	Periods
1 Introduction, significance and classification	1
2 Regular finishes- scouring, bleaching, mercerization, tentering, calendaring	1
3 Special finishes- shrinkage control, flame retardant, water-repellant, moth proofing.	1

UNIT-IV:

Apparel Construction		Periods
1	Importance of taking body measurements and size charts.	2
2	General principles of clothing construction:	3
2a	Methods of pattern development: Drafting, Flat pattern making, Draping	
2b	Kinds of paper pattern- blocks, commercial pattern	
2c	Pattern information, marking symbols.	

Recommended Readings:

1. Marsh, J.T., An Introduction to Textile Finishing, B.I. Publishers, 1979
2. Corbman, P.B., Textiles-Fibre to Fabric, Gregg Division/McGraw Hill Book Co., US, 1985.
3. Joseph M.L., Essentials of Textiles (5th Edition), Holt, Rinehart and Winston Inc., Florida, 1988.
4. Tortora, G. Phyllis, Understanding Textiles (2nd Edition), McMillan Co., USA, 1987.
5. Doongaji, S and Deshpande, R., Basic Processes and Clothing Construction, Raj Publications, New Delhi, 1988.
6. Bains, S. and Hutton, J., Singer Sewing Book, Hamlyn, London, 1972
7. Armstrong, Helen., Pattern Making for Fashion Design, Harper Collins Publishers., 1997.
8. Kindersley, Dorling., The Complete Book of Sewing, Dorling Kindersley Limited, 1992.
9. Shorie, G.P., Vastra Vigyan Ke Mool Sidhant, Vinod Pustak Mandir, Hospital Road, Agra, 2007. (Hindi Book)
10. Verma, Promila., Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003. (Hindi Book)

SEMESTER II- FUNDAMENTAL TEXTILE SCIENCE & APPAREL CONSTRUCTION-II (Practical)

Code No: A-2102

Maximum Marks: 50

Duration of examination: 3 hrs.

Practicals per week: 1 (1 practical of 3 periods)

Practicals in semester:12

Objectives:

- To foster an understanding of basic drafts and their adaptation techniques for apparel construction.
- To introduce the basic concept of sketching.

CONTENTS

Basic Drafting:

- | | | |
|---|----------------------------|---|
| 1 | Child's basic bodice block | 1 |
| 2 | Child's basic sleeve block | 1 |

Adaptation of drafts:

- | | | |
|---|---|---|
| 3 | Basic sleeve adaptation to flared and puff sleeve | 1 |
| 4 | Drafting of collars on basic neck line- Peter pan, Shirt collar, Chinese band | 2 |

Apparel Construction:

- | | | |
|---|--------------|---|
| 5 | A-Line Frock | 3 |
| 6 | Petticoat | 3 |

Basic Fashion Sketching:

- | | | |
|---|------------------|---|
| 7 | Geometric croqui | 1 |
|---|------------------|---|

SEMESTER III- TEXTILE DESIGN TECHNIQUES (Theory)

Code No: B-1102

Maximum Marks: 50

Duration of examination: 2 hrs.

Periods per week: 2+1 (Theory+Tutorial)

Periods in semester: 25

Objectives:

- To provide comprehensive knowledge about the concepts of dyeing and printing of textiles.
- To foster understanding of traditional Indian embroideries-motifs used, colour combinations used etc.

CONTENTS

UNIT-I:

	Introduction to Dyes	Periods
1	Natural and Synthetic dyes	1
2	Preparation of fabric for dyeing	1
3	Suitability of dyes on different fabrics cellulosic and protein-direct, reactive, acid, vat and disperse dyes	2
4	Stages of dye application and their effect on finished fabric	1
5	Colour fastness parameters and demonstration	1

UNIT-II:

	Concept of Printing	Periods
1	Dyeing vs. Printing	1
2	Styles of printing	1
3	Methods of printing with particular reference to resist dyeing techniques like tie and dye and batik.	2

Dyeing and Printing defects.

UNIT-III:

Traditional Indian Embroidery

Periods

- 1 Indian Hand Embroideries: Kantha, Phulkari, Kashida, Mirrorwork (Gujarat), Chikankari with reference to: 12
 - 1a Motifs
 - 1b Color combination
 - 1c Type of thread used
 - 1d Stitches – demonstration

Preparation of a file with samples showing stitch types of the above traditional embroideries

Recommended Readings:

1. Chattopadhyaya, K., Handicrafts of India, All India Handicrafts Board, New Delhi, 1975.
2. Miles, L., Textile Printing, (2nd Edition), Society of Dyers and Colourists, England, 1994.
3. Clarke, W., An introduction to Textile Printing, Newnes-Butterworths, Boston, 1977.
4. Storey, J., Manual of Textile Printing, Thames and Hudson publication, London, 1992
5. Shorie, G.P., Vastra Vigyan Ke Mool Sidhant, Vinod Pustak Mandir, Hospital Road, Agra, 2007. (Hindi Book)
6. Verma, Promila., Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003. (Hindi Book)
7. Meller, S and Eiffer, J., Textile Design, Thames and Hudson, London, 1991

SEMESTER III- TEXTILE DESIGN TECHNIQUES (Practical)

Code No: B-1102

Maximum Marks: 50

Duration of examination: 3 hrs.

Practicals per week: 1 (1 practical of 3 periods)

Practicals in semester: 12

Objectives:

- To provide comprehensive knowledge about the concepts of dyeing, printing and batik of textiles.
- To inculcate designing ability using combination of above techniques on apparel.

CONTENTS

1	Dyeing of different fabrics using direct dyes- cotton, linen, rayon, wool, silk, chiffon, net, lace.	1
2	Dyeing of different fabrics using reactive dyes- cotton, linen, rayon, wool, silk, chiffon, net, lace.	1
3	Tie and dye technique	3
4	Block printing using single and double coloured blocks	2
5	Concept of formation of corners using blocks	1
6	Batik technique	2
7	Preparation of an article/garment with any 2 techniques learnt above	2

Visit to Crafts Museum and Crafts Fairs.

SEMESTER IV- FASHION STUDIES AND DESIGN DEVELOPMENT (Theory)

Code No: B-2102

Maximum Marks: 50

Duration of examination: 2 hrs.

Periods per week: 2+1 (Theory+Tutorial)

Periods in semester: 25

Objectives:

- To understand the concept related to elements and principles of design.
- To understand terminology related to fashion.
- To acquaint the students with the basic factors influencing fashion.

- To foster an understanding of international designers and their work.
- To familiarize the students with the role of a designer.

CONTENTS

UNIT-I:

	Periods
Elements and Principles of Design	
1 Elements of design and their effects- Line, Color and Texture.	3
2 Principles of design and their effects- Proportion, Balance, Emphasis, Rhythm, Harmony	3

UNIT-II:

	Periods
Terms and Concepts Related To Fashion	
1 Fashion:	1
1a Fashion terms: Fashion, Style, Fad, Classic, Trend, Haute-couture, Prêt-a-porter, Knockoff	2
1b Inspiration and sources of fashion- printed sources, historic/traditional costumes, media, travel, fabrics, awareness	2
1c Fashion cycle	1
1d Factors favoring and retarding fashion	1
2 Major fashion centers of the world and their leading designers- Paris, Milan, Tokyo, New York, London, India	3

UNIT III

Design Development	Periods
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1	Role of a designer in the following:	
1a	Fashion forecast and sourcing of fabrics	2
1b	Development of a line and sample garment	2
1c	Making of a specification sheet and cost sheet	2

Recommended Readings:

- 1..Shoric,G.P.,Vastra Vigyan Ke Mool Sidhant,Vinod Pustak Mandir, Hospital Road, Agra,2007.(Hindi Book)
- 2.Verma, Promila.,Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Akademy,Bhopal,2003.(Hindi Book)
- 3.Frings Gini, Fashion-From Concept to Consumer, (5th Edition), Prentice Hall Publications,1996
- 4.Ireland, Patrick .,Introduction to Fashion Design, B.T. Batsford Ltd, London, 1992
- 5.Armstrong, Helen.,Pattern Making for Fashion Design, Harper Collins Publishers.,1997.
6. Jarnow, Jand Judelle, B.,Inside Fashion Business,Merill Prentice Hall, New Jersey, 1987

SEMESTER IV- FASHION ILLUSTRATION (Practical)

Code No:B-2102

Maximum Marks: 50

Duration of examination: 3 hrs.

Practicals per week: 1 (1 practical of 3 periods)

Practicals in semester: 12

Objectives:

- To understand basic sketching technique for draping garments on a croqui.
- To foster an understanding of colour and using various mediums to match textures.
- To equip the students with the know-how about the technique of rendering.

CONTENTS

1	Muscle figure development -front view, 3 1/4 view, back view	2
2	Draping of garments on croqui	2
3	Different silhouettes: necklines, sleeves, tops and collars	2
4	Concepts of color: Color wheel, Value and Intensity	2
5	Matching according to different textures using various color mediums	2
6	Full rendering of dresses on croqui along with swatches	4

Preparation of a portfolio of any 3 themes with one sketch each

SEMESTER V- APPAREL INDUSTRY AND QUALITY ASSESSMENT (Theory)

Code No: C-1102

Maximum Marks: 50

Duration of examination: 2 hrs.

Periods per week: 2+1 (Theory+Tutorial)

Periods in semester: 25

Objectives:

- To provide a comprehensive knowledge about judging the quality of readymade garments.
- To acquaint the students with the readymade garment industry and its problems and prospects.
- To understand the concept of marketing and its 4 P's.
- To work on various promotional campaigns like advertising brochures, etc.
- To understand the role of a merchandiser in the apparel industry.

CONTENTS

UNIT-I

Quality Assessment		Periods
1	Judging the quality of readymade garments: overall appearance, fabric, fit, workmanship, price	3
2	Project work: Visit to a retail outlet for readymade garments of 3 different levels (Designer outlets, middle class outlets, ordinary outlets) and compare the workmanship, fabric, etc of the garments. Presentation of a report	2

UNIT -II:

Importance of Labels and Consumer Awareness		Periods
1	Garment Labels: Types and importance of labels with special reference to care labels	2

UNIT-III:

Marketing In Apparel Industry		Periods
1	Introduction to Apparel marketing and merchandising concepts	
1a	4Ps of Marketing- Product, Price, Place and Promotion	4
1b	Market Segmentation-Target group and Demographics	1
1c	Principles and techniques of merchandising	1
1d	Role of a merchandiser	1
2	Introduction to promotion campaigns-Advertising through brochures, leaflets etc	3
3	Readymade garment industry:	

3a	Importance in Export and Domestic sector	2
3b	Problems and prospects	1
4	Apparel Retailing: A brief overview of different channels	2

Visits

- Visit to Garment export house and fabrication unit
- Attending relevant seminars

Recommended Readings:

1. Kotler, P and Armstrong, G., Principles of Marketing, Prentice Hall of India, New Delhi, 1999.
2. Fritz, A and Cant, J., Consumer Textiles, Oxford University Press
3. Bharadwaj, S.K. and Mehta, P.V., Managing Quality in the Apparel Industry, New Age International, New Delhi, 1998.
4. Constantino, M, Fashion Marketing, BT Batsford, London, 1998
5. Stone, Elaine, Fashion Merchandising, Mc Graw Hill Inc, 1985
6. Jackson, Tim, Mastering Fashion and Merchandising Management, Mc Millan Press, London, 2001
7. Diamond, E., Fashion Retailing a Multichannel Approach, Prentice Hall, 2005
8. Grace, E, Introduction to Fashion Merchandising, Prentice Hall, New Jersey, 1978

SEMESTER V- APPAREL CONSTRUCTION-I (Practical)

Code No: C-1102

Maximum Marks: 50

Duration of examination: 3 hrs.

Practicals per week: 1 (1 practical of 3 periods)

Practicals in semester: 12

Objectives:

- To familiarize the students with the basic blocks used for adult upper garment.
- To acquaint the students with the technique of construction of some basic Indian women's apparel.

CONTENTS

1	Pattern making :	
1a	Adult's basic bodice block	1
1b	Basic adult sleeve block	1
2	Garment construction: Adaptation of basic blocks to construct the following garments:	10
2a	Saree blouse	
2b	Kameez: simple and designer	
2c	Salwar / Churidar	

SEMESTER VI- APPAREL CONSTRUCTION (Theory)

Code No: C-2102

Maximum Marks: 50

Duration of examination: 2 hrs.

Periods per week: 2+1 (Theory+Tutorial)

Periods in semester: 25

Objectives:

- To familiarize the students with the concept of handling of different fabrics.
- To understand the common fitting problems and their correction.
- To understand the role of CAD in garment designing in the apparel industry.
- To equip the students with the knowledge about the problems faced by a textile consumer and his rights.

CONTENTS

UNIT-I

Handling Special fabrics		Periods
1	Fabric estimation and Layout planning as per different fabric types and widths	2
2	Precautions to be taken while working with different kind of fabrics: sheers and lace, silk & crepe, velvets, wool, plaids, stripes and figured prints. Handling of fabrics with reference to designing, marking, cutting, stitching, care and maintenance, shrinkage, needle sizes, stitch sizes, threads used, seams and other special considerations.	4
	Preparation of a sample file	

UNIT II

Fit related problems & Self help garments		Periods
1	Common fitting problems and pattern correction	4
2	Self-help garments: garments for special needs, basic principles and requirements	2

UNIT III

Rights and Responsibilities of Textile Consumer		Periods
1	Consumer Problems, Rights and Responsibilities	3

UNIT IV

Introduction to Internet & Computer Aided Designing		Periods
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retailing

1	Basic computer terminology: hardware, software, network	1
2	Use and importance of Internet and websites as a source for Design Ideas. Using search engines to source design ideas, designers, design trends. Hands on practice on the internet for using search engines, browsing internet for collecting information, sending emails	2
3	Introduction to the role of Computer Aided Designing (CAD) in garment designing. Demonstration of various features and functionalities of various CAD Packages used for garment designing, pattern making and marking	4

Recommended Readings:

1. Doongaji, S and Deshpande, R., basic Processes and Clothing Construction, Raj Publications, New Delhi, 1988.
2. Verma, Gayatri, Cutting and Stitching Practical, Asian Publishers, Darya Gang, New Delhi, 2007. (Hindi Book)
3. Shorie, G.P., Vastra Vigyan Ke Mool Sidhant, Vinod Pustak Mandir, Hospital Road, Agra, 2007. (Hindi Book)
4. Verma, Promila, Vastra Vigyan Avam Paridhan, Madhya Pradesh Hindi Granth Akademy, Bhopal, 2003. (Hindi Book)
5. Bains, S. and Hutton, J., Singer Sewing Book, Hamlyn, London, 1972
6. Armstrong, Helen, Pattern Making for Fashion Design, Harper Collins Publishers, 1997.
7. Kindersley, Dorling, The Complete Book of Sewing, Dorling Kindersley Limited, 1992

SEMESTER VI- APPAREL CONSTRUCTION-II (Practical)

Code No: C-2102

Maximum Marks: 50

Duration of examination: 3 hrs.

Practicals per week: 1 (1 practical of 3 periods)

Practicals in semester: 12

Objectives:

- To foster an understanding about dart manipulation technique.
- To familiarize the students with the technique of handling different fabrics in apparel construction.