3.1 GARMENT ANALYSIS

L	T	P
-	-	3

RATIONALE

After going through this subject, the students should be able to analyse a garment to understand the various inputs involved in its construction.

DETAILED CONTENTS

PRACTICAL EXERCISES

1. Operation breakdown of following garments (Branded Garments)

    a) Skirt
    b) Denim trouser
    c) Shirt
    d) T-shirt

Note: The operation breakdown should consist of following:

1. Stitching sequence
2. Machines required
3. Seam types
4. Stitch types, S.P.I.
5. Thread consumption
6. Work aids required
7. Helping operations, and related important aspects

RECOMMENDED BOOKS

1. Binran, Juki Publications

3.2 PATTERN MAKING

L	T	P
-	-	8

RATIONALE

The students are supposed to know how to adapt basic blocks to various garment designs, and layouts. Thus the subject deals with variations of pattern and styling of garments. After going through this subject, the students will be able to draft various components of the garments and express design ideas by a three dimensional process of pattern making.

DETAILED CONTENTS

PRACTICAL EXERCISES

1. Drafting of women's adult's bodice block and sleeve

2. Adaptation of adult's bodice block to saree blouse

3. Drafting of adult bodice block and sleeve for knit fabric

4. Adaptation of basic block into T-shirt

5. Drafting of adult's skirt block

6. Adaptation of skirt block to various styles

7. Adaptation of plain sleeve to the following sleeves

    - Ruffle sleeve
    - Bishop sleeve
    - Kimono sleeve
    - Raglan sleeve
    - Dolman

8. Drafting of the following collars

    - Chinese band
    - Shawl collar
    - Stand and fall collar
    - Two piece notched collar
    - Reversible
    - Cowls

9. Introduction of style lines in the garment

    - Princess line
    - Empire line

RECOMMENDED BOOKS

1. Fashion Drawing Designs; Magazine of Thailand
2. Pattern Designs for Haute Couture Volume – I
3. Fashion Drawing – The Basic Principles by Anne Allen and Julion Seaman
4. Latest Fashion Style by Winter Hiver
5. Jasmine's "New Look, On Indian Fashion Scene"
6. Lifestyles: Fashion Styles by Katheryn Samuel
7. Spring and Summer Collection; Tokyo, New York
8. Draping for Fashion Design by Jaffe, Hilde
9. Fashion from Concept to Consumer by Stephens
10. Armstrong – Pattern Making.

3.3 CAD IN GARMENT TECHNOLOGY - I

L	T	P
-	-	4

RATIONALE

The term CAD has found its way into all major disciplines that have got anything to do with designing or drafting techniques. The objective of the subject is to expose professionals and to meet the needs of the users by complementing their knowledge, skills and ability, creativity in the field of garment technology and their application in the industry.

DETAILED CONTENTS

PRACTICAL EXERCISES

(Software: Use of Corel Draw and Adobe Photoshop)

1. Detailed study of tools of Corel Draw and Adobe Photoshop

2. Create a file portfolio consisting of various motifs and their placements geometrical motif, stylized motif, realistic motif, abstract motif, traditional motif

3. Students are required to present/submit a PowerPoint presentation of their file portfolio

Note: Visit Design Studios in Export Houses and Industry to understand the use of these softwares by designers

RECOMMENDED BOOKS

1. Literature from the supplier of each software can be consulted

2. Corel Draw 12 – BPB Publication (latest version)

3. Adobe Photoshop 5.5 - BPB Publication (latest version)

3.4 GARMENT CONSTRUCTION-III

L	T	P
-	-	8

RATIONALE

The diploma holders are supposed to fabricate the garments for kids as per the layouts and specifications. Hence this subject has been included in the curriculum in order to develop such competencies.

DETAILED CONTENTS

(SECTION-A)

The following topics should be covered through instructions/demonstration along with practicals. The students will be evaluated on the basis of a final viva-voce based on the instructions.

1. Preparation of fabric for cutting

   - Straightening the fabric
   - Shrinking the fabric
   - Ironing/pressing the fabric

2. Sequence of cutting

   Laying out of pattern pieces, marking and transferring the pattern details, cutting

3. Selection and handling of special fabrics while cutting and stitching

4. Construction details

   - Seams and seam finishes
   - Fullness and its types – Gathers/Pleats
   - Shirring, Smocking
   - Plackets and fasteners
   - Hem finishes
   - Lining/interlining
   - Facing/interfacings

5. Decorative Details

   - Frills, flounces, peplums
   - Trimmings
   - Belts and bows

6. Fitting

- Principles of good fit
- Sequence of fitting
- Alterations to achieve a good fit

(SECTION-B)

PRACTICAL EXERCISES

1. Construction of following garments :

- Romper
- Gathered Frock
- Skirt

Note: Exposure to different types of linings and fusing materials available in the market.

RECOMMENDED BOOKS

1. Pattern Making for Fashion design by Amstrong, Vikas Publishing House Pvt. Ltd. Delhi

2. Clothing Construction by Doongaji, Raj Parkashan, New Delhi

3. System of Cutting by Zarapkar, Navneet Publications (India) Ltd

4. Clothing Construction by Evelyn A Mansfield, Hougutan Miffin Co., Boston

5. Creative Sewing by Allynie Bane; McGraw Hill Book Co., Inc., New York

6. How You Look and Dress by Byrta Carson; McGraw Hill Book Co., Inc., New York

7. Complete Guide to Sewing by Reader's Digest, Pitman Publishing Corpn. New York

3.5 CUTTING ROOM TECHNIQUES

L	T	P
3	-	3

RATIONALE

This subject informs the students about all the techniques followed in the cutting room, i.e. spreading, cutting and marker making. After going through this subject, they will be able to plan and schedule all the operations of cutting room

DETAILED CONTENTS

	THEORY		PRACTICAL EXERCISES
1.	Marker Planning	(15 hrs)	
	How to plan a marker on basis of - No. of pieces in a garment - Number of sizes - Width of fabric - Nature/Hand of fabric - Design/orientation of fabric - Calculation of marker consumption		Estimation of materials using different sizes and fabric width Developing miniature patterns for various widths of fabric Placement of pattern on paper (manual marker)
2.	Spreading Techniques Mode of fabric spreading	(10 hrs)	- Identifying different spreading techniques for various types of fabrics (knit, woven, checks, stripes) - Mode of fabric spreading – FONO, FONE (Swatches) etc.
3.	Spreading Equipment - Manual spreading techniques - Automatic spreading techniques	(5 hrs)	Demonstration of spreading. Practice with spreading equipment (Demonstration of CAM)
4.	Cutting Equipment	(6 hrs)	Practice on cutting machine and maintenance of cutting machine (Circular knife cutter & straight knife cutter, auto cut, water jet, laser, notcher, die cutter, drills)
5	Bundling/Ticketing	(4 hrs)	
6.	Cutting Defects	(4 hrs)	Demonstration of cutting defects
7.	Fusing techniques	(4 hrs)	Demonstration of Fusing Techniques

INSTRUCTIONAL STRATEGY

The teacher should give extensive training to the students on cutting techniques so that the students are able to plan and schedule various operations adopted in a cutting room. They should be taken for industrial visit to demonstrate various cutting processes.

RECOMMENDED BOOKS

1. Industrial Machinery – Solinger, Oxford University Press, USA
2. Managing Quality – PV Mehta and SK Bhardwaj, New Age Publisher, Delhi
3. Introduction to Clothing Technology – Harold Carr & Latham, John Wiley & Sons, New York
4. Complete guide to sewing by Reader's Digest, Pitman Publishing Corporation, New York

SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	15	35
2	10	19
3	05	09
4	06	12
5	04	07
6	04	09
7	04	09
Total	**48**	**100**

3.6 INDUSTRIAL GARMENT MACHINERY

L	T	P
3	–	3

RATIONALE

The students are expected to know various types of machinery and equipment used in manufacturing of garments. They should be able to operate and maintain the machinery and rectify the common defects. The subject intends to develop such skills in the students.

DETAILED CONTENTS

	THEORY	PRACTICAL EXERCISES
1.	The main types of stitching machinery and their uses in garment assembly (industry setup) (16 hrs)	SNLS, DNLS, FOA, BARTACK, Overlock(3th/5th), Button Sewing, Collar Turning, Chain Stitch
2.	Basic functions of different components of sewing machine (10 hrs)	Dismantling and assembly of a hand operated sewing machine Usage of various components of machines with respect to various operations
3.	Work-aid and Attachments: Tuckers, hemmer, seam, guide, binders, button hole, folders and trimmers (10 hrs)	Dismantling and assembly of a treadle operated sewing machine with all attachments
4	Sewing Needles (02 hrs)	
5.	Feed Mechanisms (06 hrs)	Demonstration of parts of following machines or visit to a garment manufacturing unit to study different type of garment manufacturing machines Making of following samples: - Lock stitch machine (SNLS) - Chain stitch machine (SNCS/ DNCS) - Over lock machine (O/L) - Button hole machine(B/H) - Zig-zag machine - Double needle lockstitch machine (DNLS) - Bar-tacking machine - Blind stitch machine - Flat lock machine (F/L) - Feed off the Arm

6.	Necessity of preventive, periodic and corrective maintenance (04 hrs)	Cleaning and lubricating of different types of sewing machines Demonstrate various types of stitches in the laboratory or visit to a garment manufacturing unit to show various type of stitches

INSTRUCTIONAL STRATEGY

The students should be given exercises on fault finding and repairing the defective machines by demonstration so that they are able to maintain the garment machinery in proper working condition.

RECOMMENDED BOOKS

1. Industrial Machinery by Solinger, Solinger, Oxford University Press, USA
2 Introduction to clothing Technology – Harold Carr and Latham, John Wiley & Sons, New York
2. Managing Quality - PV Mehta & SK Bhardwaj, New Age Publishers, Delhi

SUGGESTED DISTRIBUTION OF MARKS

Topic No.	Time Allotted (Hrs)	Marks Allotted (%)
1	16	25
2	10	25
3	10	20
4	02	11
5	06	12
6	04	07
Total	**48**	**100**