### 3.1 GARMENT ANALYSIS

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## 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

## 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 FASHION TECHNOLOGY - I

## 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

## 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 TRADITIONAL INDIAN TEXTILES

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## RATIONALE

The students of fashion designing should know and acquire relevant skills in embroidery techniques of different types of traditional Indian embroideries and textiles. The subject aims at developing skills in various types of stitches, traditional embroidery.

## DETAILED CONTENTS

## Theory

1. Embroidered Textile
(12 hrs)

To study in detail the following:

- Kantha of Bengal
- Kasuti of Karnataka
- Chikankari of Uttar Pradesh.
- Chamba of Himachal Pradesh
- Kashida and aariwork of Kashmir
- Phulkari of Punjab
- Kutch of Gujarat

2. A brief study of various woven textiles of India:

Brocades, Chanderi, Paithani, Maheshwari, Kanchiwaram, Patolas, Pochampalli, Ikat, Kani shawls of Kashmir, Jamdani, Baluchars, Jamawar
3. Printed Textiles of India

Sanganeri prints, Bagroo, Tie and Dye - Leharia and Bandhinis
4 To study in brief the traditional Painted Textiles - Kalamkari
5 To study in brief the Carpets and Namdas of Kashmir

## PRACTICAL EXERCISES

1. Creative surface ornamentation

Various contemporary embroidery techniques the students should be shown different materials used in embellishments e.g. stones, marbles sequins
2. Preparation of samples on following traditional embroideries of different states of India

- Kantha of Bengal
- Kasuti of Karnataka
- Chikankari of Uttar Pradesh.
- Phulkari of Punjab and Haryana
- Kashida and aari work of Kashmir
- Kutch of Gujarat

3. Making samples of

- Tie and dye with various techniques
- Batik
- Block printing

4. Craft Survey and Documentation

- Evolution of crafts of any identified region.
- Understanding the material characteristics (raw materials)
- Relating craft to contemporary situation


## Note:

1. Before the students go for the documentation, they have to understand the region completely in terms of geographic locations, climatic conditions, connectivity to the main place (State)
2. Visit to crafts museum
3. Browse through computers for information
4. Consult relevant books/Regional centers / Bhawns / Regional Emporiums

## RECOMMENDED BOOKS

1. Embroidered Textiles; Traditional Pattern Form Five Continents by Paine published by M/S Haper \& Row, New York
2. Traditional Embroideries of India by Shailja D. Naik published by M/S APH Publishing Book Centre, New Delhi
3. Traditional Indian Embroideries by Samrity Pandit published by M/S APH Publishing Book Centre, New Delhi
4. Master Pieces of Indian Textiles by Rustam Mehta published by M/S D,B. Taraporevala Sons, New Delhi
5. Traditional Textiles of India by Kamaldevi Chatopadhya published by M/S APH Publishing Book Centre, New Delhi
6. Handicrafts of India by Kamaldevi Chatopadhya published by M/S New India Publishing Agency, New Delhi
7. Ethenic Indian Embroideries by Usha Srikant published by M/S Super Book House, New Delhi
8. Traditional Embroideries by Jamila Brijbhushan published by M/S APH Publishing Book Centre, New Delhi

## SUGGESTED DISTRIBUTION OF MARKS

| Topic No. | Time Allotted (Hrs) | Marks Allotted (\%) |
| :---: | :---: | :---: |
| 1 | 12 | 38 |
| 2 | 08 | 24 |
| 3 | 04 | 13 |
| 4 | 04 | 13 |
| 5 | 04 | 12 |
| Total | $\mathbf{3 2}$ | $\mathbf{1 0 0}$ |

### 3.6 INDUSTRIAL GARMENT MACHINERY

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## 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

1. The main types of stitching machinery and their uses in garment assembly (industry setup)
2. Basic functions of different components of sewing machine

PRACTICAL EXERCISES
SNLS, DNLS, FOA, BARTACK, Overlock(3th/5th), Button Sewing, Collar Turning, Chain Stitch

Dismantling and assembly of a hand operated sewing machine

Usage of various components of machines with respect to various operations

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 Cleaning and lubricating of different corrective maintenance (04 hrs)
7. 

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
3. 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 | $\mathbf{4 8}$ | $\mathbf{1 0 0}$ |

### 3.7 KNITTED GARMENT TECHNOLOGY

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## RATIONALE

The students are exposed to latest developments in knitted garment manufacturing and their design features. This subject will focus on the latest trend in knitted garment manufacturing.

## DETAILED CONTENTS

I. Basics of knitting Technology

1. Main features of the knitting machine (brief description only)

- Frame (needle bed), yarn supply, knitting element, machine control and drive system, fabric take - away mechanism, quality control systems

2. Parts and basic knitting action of -
a) Latch needle
b) Bearded needle
c) Compound needle
3. A comparison between flat bed and circular bed knitting machines
II. Knitted Garments - Classification on the basis of production methods (16 hrs)
a) Fully cut
b) Stitch shaped cut
c) Fully fashioned
d) Integral
(Note: Introduction, Importance and production sequence)
III. Handling precautions of knitted fabric during spreading
IV. Suitable stitches for knitted garments (402, 406, 407, 602, 603, 604, 605, 607, 608)

## RECOMMENDED BOOKS

1. Knitting by Carmine Mazza, Paola Zonda
2. Knitted Clothing Technology, Terry Brackenbury

## SUGGESTED DISTRIBUTION OF MARKS

| Topic No. | Time Allotted (Hrs) | Marks Allotted (\%) |
| :---: | :---: | :---: |
| 1 | 10 | 30 |
| 2 | 16 | 35 |
| 3 | 04 | 25 |
| 4 | 02 | 10 |
| Total | $\mathbf{3 2}$ | $\mathbf{1 0 0}$ |

