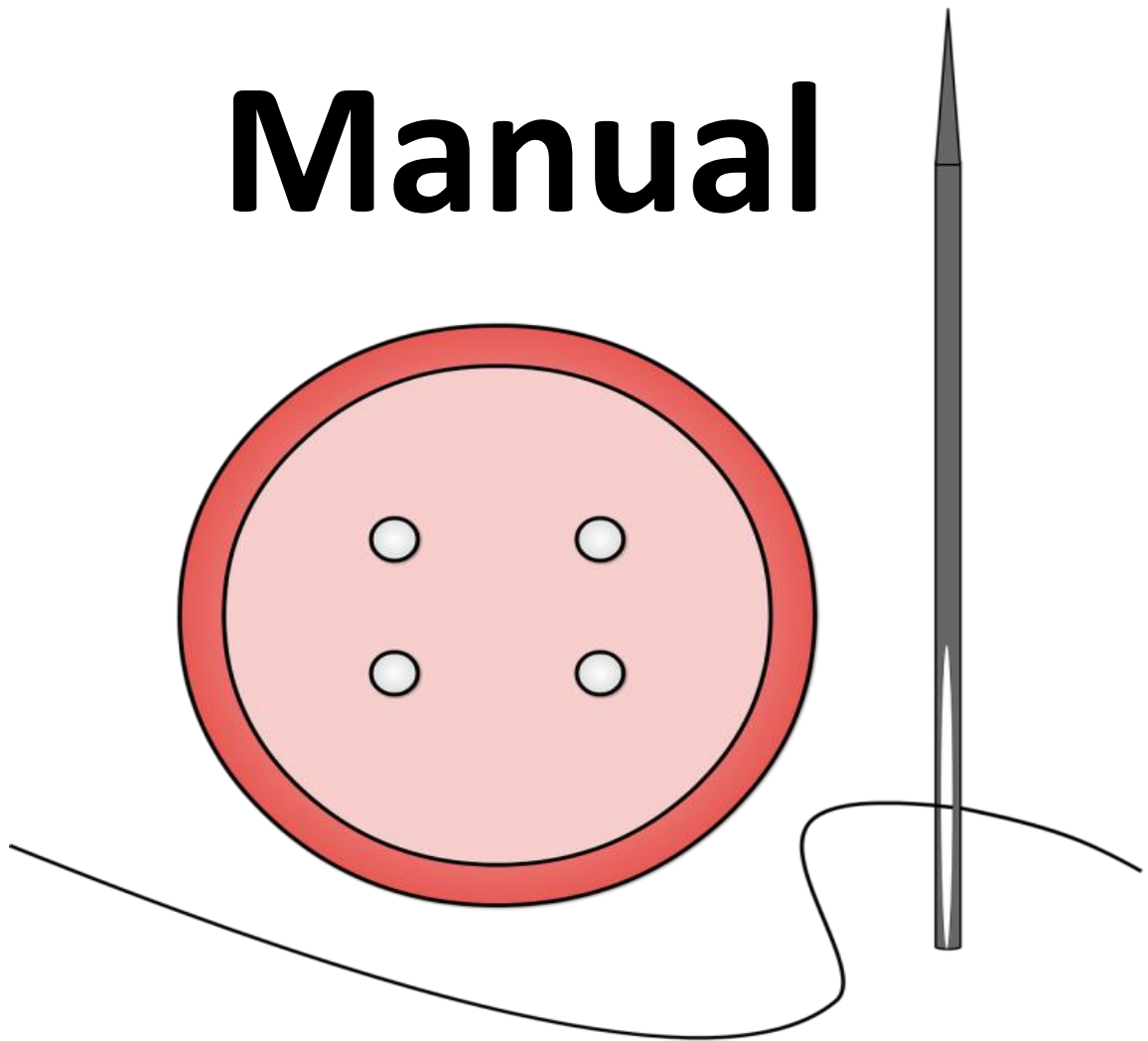


Practical **Manual**



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Dear learners,

Welcome to this practical course BHCL-010 of Diploma in Apparel Merchandising – Applied (DAPMERA).

Practical activities should be a part of educational programs since practice makes comprehension simpler. It can help the programme structure and improve the knowledge with engagement of learners in activities. Learners will learn more if they engage in activities. This Practical Manual is based on practical empirical learning of the apparel Industry. The main role of this Practical Manual is to support students in their learning and to link the theoretical domain and hands on practices. The practical activities can strengthen and develop many skills required for apparel merchandisers.

The activities of this Practical Manual can be done by survey in your city or town. Some practical activities can be done at home such as collection of fabric samples, using the internet and visiting retail shops etc. Exploring different kinds of fibers, yarn, fabrics, finishes and fashionable garments is recommended. Visit retail shops, branded showrooms and big stores to get an idea about store layouts. These activities you can also be done with your internship.

The activities in this manual must be completed in the actual practical manual itself and sent to the Student Evaluation Division (SED), IGNOU, Maidan Garhi, New Delhi-110068, immediately.

DAPMERA Practical Manual-BHCL-010
Student Evaluation Division (SED)
Indira Gandhi National Open University,
Maidan Garhi, New Delhi-110068

Competition of Practicum Course is mandatory for completing this Diploma.

Note: The mark for the Practical Manual and Internship file are separate. Hence, Practical manual and Internship file have to be submitted separately.

Please read each activity carefully and devote sufficient time to doing it. You must follow the guideline given in this manual and do it properly.

**Programme Coordinators
Diploma in Apparel Merchandising – Applied**

PRACTICAL (WORKBOOK)

Structure

1.1 Introduction

1.2 Objective

1.3 Organization of the Manual

Activity 1 Identification of Textiles Fibres, Yarn and Fabric

Activity 2 Elements and Principle of Design

Activity 3 Classifications of Trims and Accessories

Activity 4 Dyeing and Printing

Activity 5 Understanding of Checklist Document Generation for Export

Activity 6 Identification of Seams and Stitches

Activity 7 Care Labels of Apparel and Textiles

Activity 8 Calculate the Selling Cost of Garment

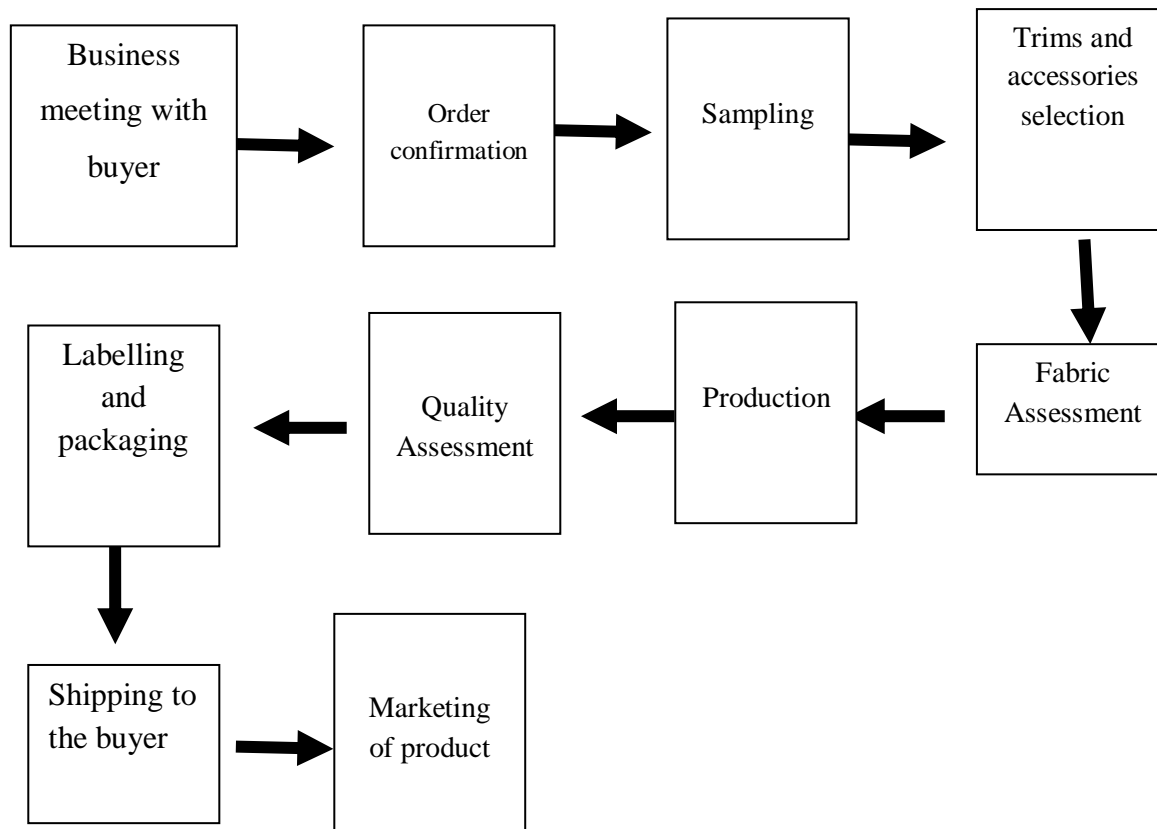
1.1 INTRODUCTION

This Manual introduces the practical activities that you are expected to carry out towards the successful completion of the Programme. We trust that you will find this experience interesting as well as informative. Indeed, you will likely have beautiful experiences working in the apparel industry.

This Practical Manual is designed for the Practical Course BHCL-010. The manual comprises practical activities of 4 Credits. To create a solid foundation of knowledge for comprehending the apparel sector thoroughly, this worksheet has been meticulously created by specialists from the apparel industries and academicians in related subjects. Apparel merchandising is a multi-chain business to satisfy the consumer's requirements. The process begins with getting to know about the requirements of customers and finishes with sending them high-quality goods.

1.2 OBJECTIVES

- The main objective of the practical manual in apparel merchandising is to provide learners with a detailed and practical understanding of the processes involved in the producing and managing the apparel products. The manual typically gives step-by-step instructions on performing various tasks involved in the merchandising process, such as product development, sourcing and identification of material etc.
- This practical manual is designed to help learners to apply the theoretical knowledge to real-life situations. It also helps students to develop the necessary skills and competencies required to succeed in the apparel merchandising industry. The manual typically covers a range of activity such as identification of fibre, yarn and fabric, pattern making, identification of the different type of garment components and so on.
- The objectives of the practical manual are to provide learners with a comprehensive understanding of the merchandising process. The apparel merchandising process includes the following processes as :



- This manual aims to help learners to develop problem-solving skills and the ability to think critically about the merchandising process
- By using the practical manual, learners can practice and refine their skills, ensuring that they are well-prepared for the challenges of the apparel merchandising industry.

Importance of Practical Manual

- A practical manual provides an opportunity for the learners for hands-on learning and allows them to apply theoretical knowledge in a practical setting. This type of learning will help learners to develop a deeper understanding of the concept they have learned in three blocks.
- This manual provides detailed instructions on how to perform a specific task. It will provide a clear understanding of the time required to complete each activity and help them to manage their time more effectively.
- This manual provides the necessary skills and knowledge to excel in the industry.

1.3 ORGANIZATION OF THE MANUAL

The various core area of apparel merchandising is included in the practical manual, like identification of yarn and fabric, availability of software used in apparel industries, type of trims and assessors used, garment construction techniques, quality analysis, export-import of apparels, marketing and so on. These are also interdependent with each other. In the manual, activities are arranged Block-wise and the Unit to which each activity is related has been specified. Before starting the practical activity, read all the captions and go through each activity section. Each activity in manual is essential and compulsory for completion of the course.

ACTIVITY 1 IDENTIFICATION OF TEXTILES FIBRE, YARNS AND FABRICS

1. Identification of Fibres

A **fibre** is the smallest unit of the textile material, which can be made into a fabric by various methods of fabric construction such as weaving, knitting, etc. It is a long, thin hair-like strand, either obtained from nature or manufactured by chemical processes. There is much different type of fibres that can be broadly classified into two categories: natural and synthetic.

Natural Fibres are those that come from plants and animals. Such as cotton, wool silk, flex, jute, etc.

Synthetic Fibres are made from chemical substances and are not found in nature. Such as polyester, nylon, acrylic etc.

Note: Refer to Course 2 (Units 5 and 6 of Block 2) to perform this activity.

Identification of fibre, yarn and fabric is an important aspect of textiles testing and analysis. There are two types of test performed for the identification of fibres such as Technical Test and non- technical test. Technical tests are performed in a laboratory to identify the fibres nature and composition. Non-technical tests can be performed with minimum requirements. In this activity, Non-technical tests you have to perform for the identification of fibres.

Non-technical Tests: Non-technical testing does not require any special equipment and is simple to perform and includes the following:

Visual Inspection: The fibre is examined according to its appearance and texture. It is determined by its physical characteristics such as colour, length and texture. For texture, hand and feeling test is used.

Hand/ Feeling Test: Skilled perception of feeling the fabrics by touching them is acquired only after handling many different fabrics over a period of time. The feeling effect is created by the heat-conducting property of the fibres and fabrics. For example, wool fabrics will feel warm when touched because the heat generated by wool, which is a non-conductor of heat, will remain in the touched area.

The following Table 3.1 provides fibre specific information about the colour, length and the experience of feeling by touching.

Table 3.1 Fibre Specific Information

FIBRE	COLOUR	LENGTH	HAND/ FEEL
Cotton	White/ off-white	.5 – 1.5 inches	Cool to touch, feel soft and inelastic
Wool	White/ brown/ off-white/ black	1-4 inches	Warm to touch, feels elastic and springy
Silk	White/ off-white/ Golden / Brown	300 to 600 meters	Warm to touch, feels elastic and smooth
Linen	White/ off-white	1 to 6 inches	Cool to touch, feels smooth and lathery
Jute	Golden / Brown	.5 – 1.5 inches	Cool to touch, feels smooth and leathery
Rayon	White, off white	May Vary according to the end use	Cool to touch, feels smooth, inelastic and lustrous
Nylon	Transparent, White, off white	May Vary according to the end use	Feels very smooth, light weight elastic and lustrous
Polyester	White, off white	May Vary according to the end use	Feels very smooth and stiffer
Acrylic	White, off white	May Vary according to the end use	Feels of wool, but light weight and slippery feeling

Burning Test: The fibres are chemically different and therefore show different burning characteristics, which can be used to identify them. The burning test is relatively simple test but it requires a keen observation of what happens at different stages, such as:

- a) When approaching the flame,
- b) Propagation of flame
- d) The smell emitted,
- e) Colour of the smoke
- f) The residue after the burning.

The burning test is more efficient than the feeling test but has its limitations. For example, fabrics made of bi-constituent fibres, which are a combination of two different textile polymers, cannot be identified with burning test.

Table 3.2 Fibres Reaction While Burning Test

Fibre	When approaching the flame	Propagation of flame	The smell emitted	Colour of the smoke	The residue after the burning
Cellulosic Fibres (Cotton/Linen/Hemp/ Rayon/Bamboo):	Ignites and burns quickly	glowing ember after flame is extinguished	like burnt paper or leaves	white or light coloured	Ash is light grey or white and very soft
Protein Fibres (Silk/Wool, Cashmere, Alpaca, etc.)	Burns slowly and shrinks or curls away from the flame	stay lit after flame is removed	smells like burnt hair(wool) and feathers (silk)	Black and grey, very little smoke	Ash is a gritty powder or a dark brittle, easily crushable bead
Synthetic Fibres (Acetate Rayon /Polyester/Acrylic):	Ignites and burns quickly	burn after a flame is removed and may shrink, melt and drip	Chemical like smell it	Black smoke and hazardous fumes	Hard plastic-like bead.

Instruction of Activity:

These tests can be performed at home without major tools. For this test, you only require the samples and source of fire (candle, fire lamps, and matchbox). To perform this test, some steps should be taken, such as: First, collect different kind of fabric at your house, or you can collect it from scraps at a tailoring shop, than pullout yarn from them and remove fibre by untwisting yarn for fibre identification.

- **Visual Test:** First, fibres are tested for visual inspection. Check colour, length and texture of the fibre and note it on give space in the table. You can paste your sample at the given space.

TABLE 3.3 Visual Inspections

S.No.	NAME OF FIBRE (Paste your sample here)	COLOUR	LENGTH	HAND/ FEEL
			
			

Note : Add extra sheet if needed

- **Burning Test:** Burn the fire source first and take your sample towards the fire. Just touch the fibre to the flame and remove it. Minutely observe the reaction of fibre in various stages discussed previously.

TABLE 3.4 Burning Test

Fibre Name	When approaching the flame	Propagation of flame	The smell emitted	Colour of the smoke	The residue after the burning

Note: Perform the burning test carefully.

We are not discussing technical tests in the activity because the technical test requires proper lab facility such as a microscope and chemicals. You can experience technical test at your internship center if the organization have R&D unit.

2. Identification of yarns

Yarn is the essential component to convert fibre into fabric. Yarns are essential for knitted, woven or knotted structures and for many braided ones. In this activity you have to collect different type of yarns (simple/complex and novelty) and classify them according to their appearance, texture, twist, and elasticity.

Note: Refer to Course 2 (Unit 7 of Block 2) for yarns identification

Instructions for identifications:

- For the collection, you can pull out one yarn from the fabric swatches or scraps or old garments. Inspect them visually and paste it in Table 4.1, and write observations.
- Check the twist type of yarn and twist of yarn sample.

Table 4.1 Yarn Identification

Sl. No.	Sample	Name of Fibre Colour	Type of Yarn	Twist (S/Z)

Note: Add extra sheet if needed

3. Fabric Identification

A fabric is a pliable, plane-like structure that can be made into two or three-dimensional products. There are three fabric construction techniques that convert yarn into fabric. Three techniques of fabric construction are weaving, knitting, and nonwoven.

Note: Refer to Course 2 (Unit 9, 10 and 11 of Block 3) for this activity.

Instructions for identifications:

- For this activity, you have to collect different kinds of fabric swatches. The size of the sample should be minimum of 2 X 2 inches. You can use leftover fabric swatches or scraps, or old garments. Inspect it visually and paste it in the given space, and write observations.
- Check the numbers of warp and weft in the woven fabric by counting numbers of warp and weft in 1 inch square area.
- Examine the type of knit in knitted fabric.
- You must suggest the end use of different kind of fabric samples.

Table 4.2 Fabric Identification

S.No.	Sample	Name of Fabric Colour	Construction Technique	End Use

Note: Add extra sheet if needed

ACTIVITY 2 ELEMENTS AND PRINCIPLES OF DESIGN

Design is the intentional arrangement of elements to create a visual composition that communicates a message or evokes an emotion. To create effective designs, designers use a set of fundamental principles and elements of design.

The element of design is the basic visual components that designers use to create their compositions. These include line, shape, texture, colour, value, space, and forms. Each element has its unique properties and can be used to create distinct effects in a design.

The principles of design are the guideline that designers use to organize the elements of design in a harmonious way. These include balance, contrast, emphasis, rhythm, unity and proportion. This activity will help you to understand the application of elements and principles of design in design development.

Note: Refer to Course 2 (Unit 1 of Block 1) to perform this activity

Instruction for activity:

- Read the question carefully and perform all the activities
- Use coloured pencils and water colours for drawing activities.

Attempt all the activities:

1. Identify the example of the following lines



a.....

b.....

c.....

d.....

2. Identify the shapes in following examples:



a.....

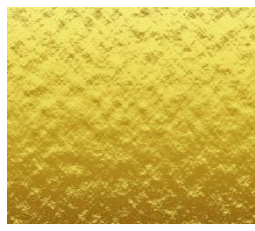


b.....



c.....

3. Identify visual textures of following :

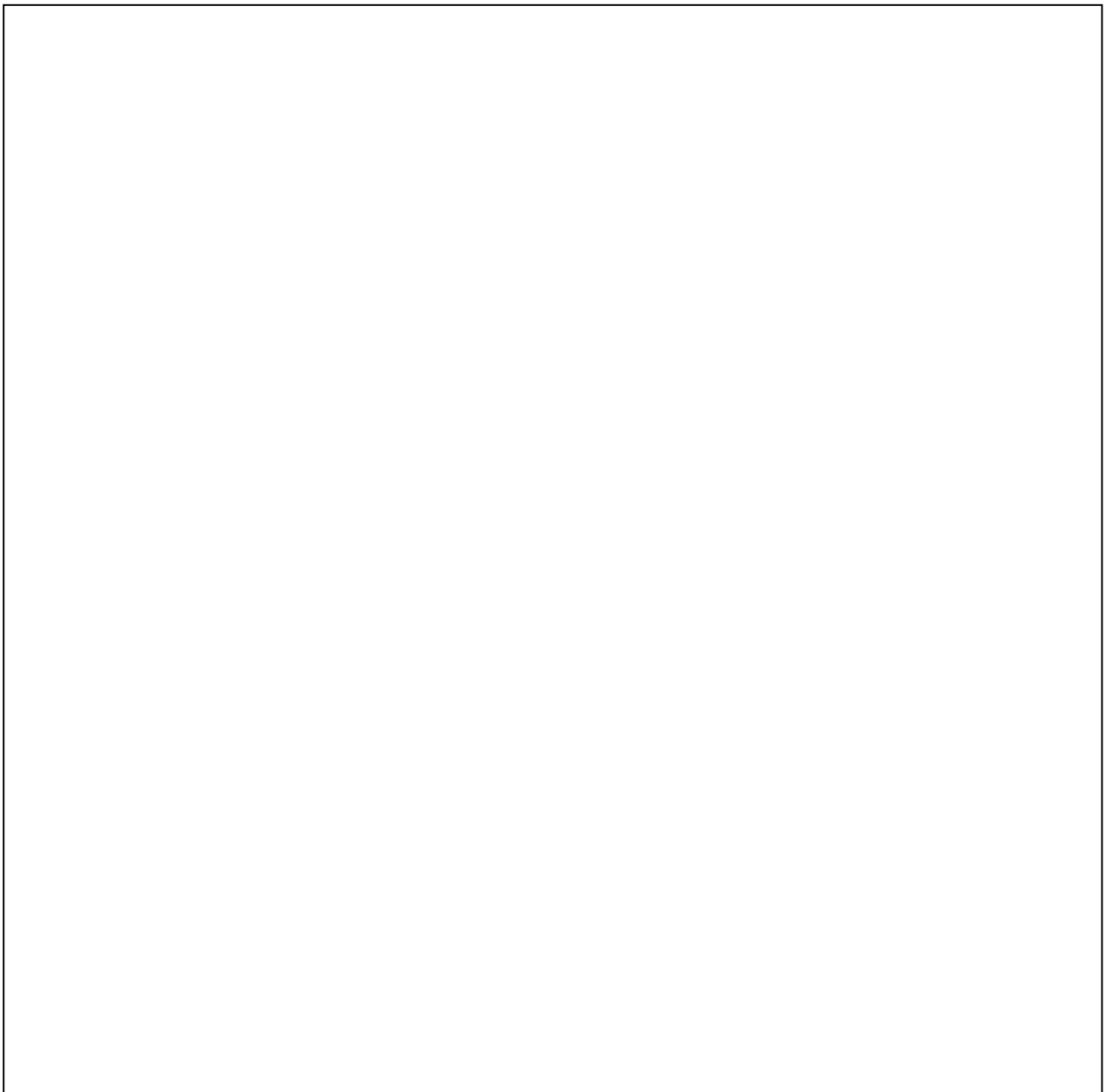


a.....

b.....

c.....

4. Draw a Colour Wheel showing all the colour scheme:



5. Identify the principles of designing the given dress and



a.....



b.....

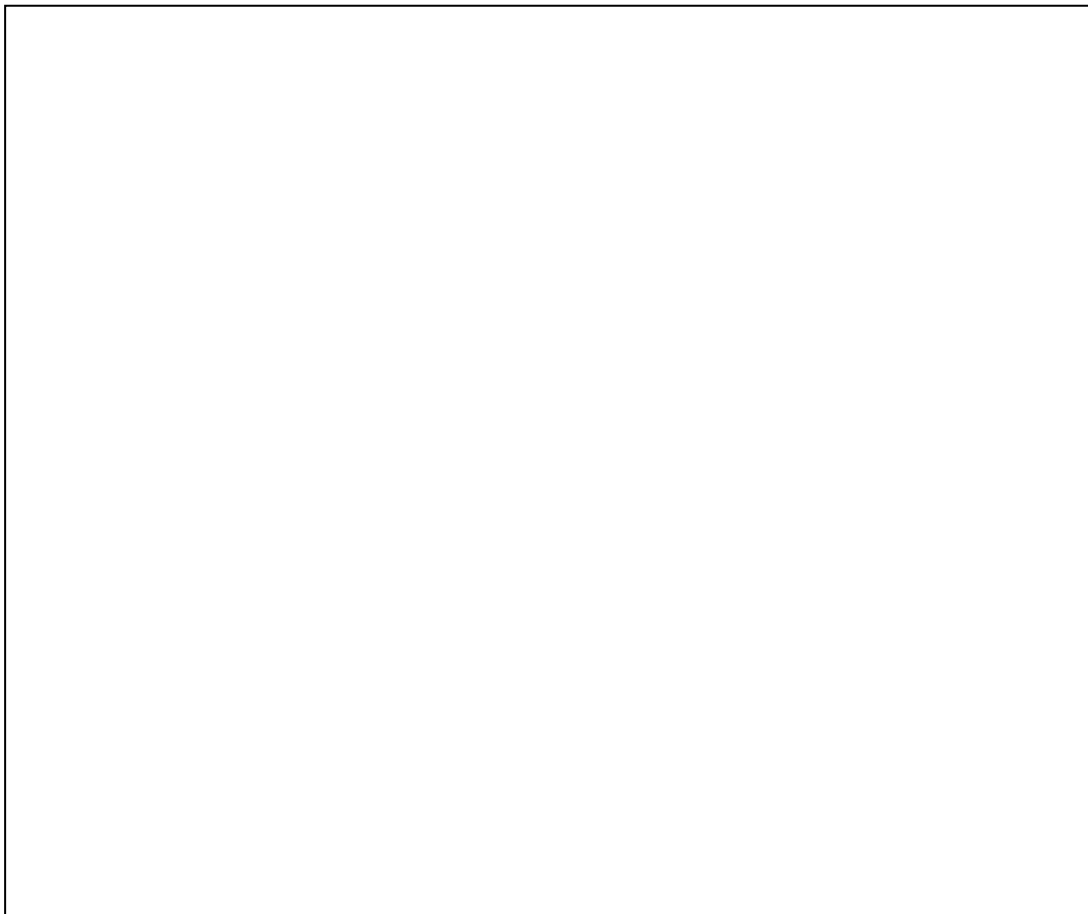


c.....



d.....

6. Draw a composition within the space provided using any three principles of design and write a note how the principles used in your composition.



ACTIVITY 3 CLASSIFICATIONS OF TRIMS AND ACCESSORIES

Trims are applied in clothing to enhance the functionality and aesthetic beauty of any garment. These are the components that give clothing or accessories their final look. The complexity and number of trimmings depend on the type of garment. Trimming may be employed for performance, aesthetics, or a mix of the two. For instance, buttons serve a functional purpose while also being aesthetically pleasing.

Note: Refer to Unit 17 of Block 4 of Course 2 for this activity.

Instruction for Activity

- Collect different types of trims and fashion accessories which can be used in the finished garment.
- Categorized the collected trims and accessories according to their use in garment

Table 6.1 Types of Trims and Accessories

Sl. No.	Sample	Name of Trim and Accessory	End Use (aesthetic/functional)

Note: Add extra sheet if needed

ACTIVITY 4 DYEING AND PRINTING

Dyeing and printing are two processes used to add colour to the fabrics. Dyeing involves immersing the entire fabric in a solution of dye, which penetrates the fibres and colour them. On the other hand, printing involves applying colour to a specific area of the fabric using a patterns or design.

Note: This activity is taken from Unit 13 & 14 from Block 3 of Course 2.

COLLECTION OF DIFFERENT TYPE DYED AND PRINTED SAMPLE:

- Collect different dyed and printed fabric available at your house, or collect it from scraps from the tailored shop. The sample size should be minimum 2x2 inches.
- Identify them and paste them into the given table and write their name of techniques of dyeing and printing technique.

Table 6.1: Identification of Dyed and Printed Fabric

S.No.	SAMPLE	DYE/PRINTING

ACTIVITY 5 UNDERSTANDING CHECKLIST OF DOCUMENT GENERATION FOR EXPORT

A document creation checklist is crucial for export since it guarantees that all required papers are created accurately and on time. There are several paperwork and regulatory procedures involved in exporting commodities from one country to another. Missing and incorrect documents can cause delays, fines, or even the rejection of the goods at the border. The checklist for document generation can help exporters such as:

- Different countries have different regulations for importing goods. The required documents are mainly dependent on the type of good, country of origin and destination. A checklist can help exporters to identify all the necessary documents and ensure that they comply with the relevant regulations.
- Incorrect documents can cause delays in the export process, which can be costly for both the exporters and importers. This checklist can help exporters to prepare all the necessary documents in advance and avoid delays at the border.
- It also helps exporters ensure that all the information on the document is accurate and complete reducing the risk of error and rejection.

Note: This activity is related to Block 2 International Trade & Finance, Unit 7 of Course 3.

Instruction for the activity:

- For the present activity, you have to make a checklist of documents for the export of Apparel.
- You have to create a document for the hypothetical order.
- You can do this activity while your internship.

Before doing this activity you have to answer give questions like.

- a) What are the formalities, registrations, and tasks to complete before an exporter have to enter into an export business?
- b) What are the commercial documents? Why they are necessary for export?

Use the space provided below for writing down your activity:

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ACTIVITY 6 IDENTIFICATION OF SEAMS AND STITCHES

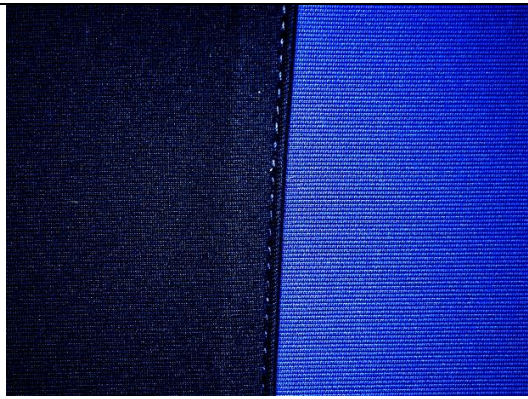

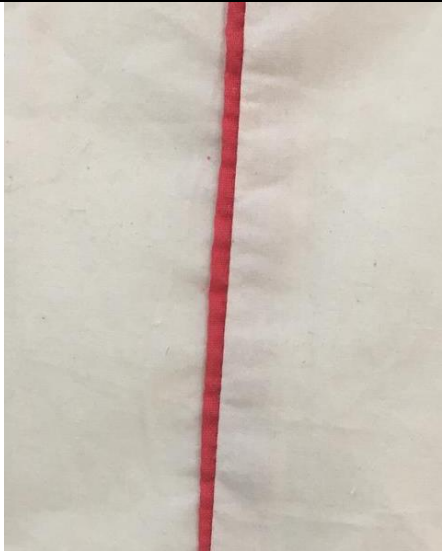

Seam and stitches are essential part of sewing and play an important role in the construction and durability of a garment. These are important to hold the fabric pieces together and create a strong bond that can withstand the stress of wear and tear. These also allow shaping and contouring of fabric to fit the body of the wearer. It creates a finish edge. The seams and stitches are also used to create decorative effects such as top stitches or embroidery.

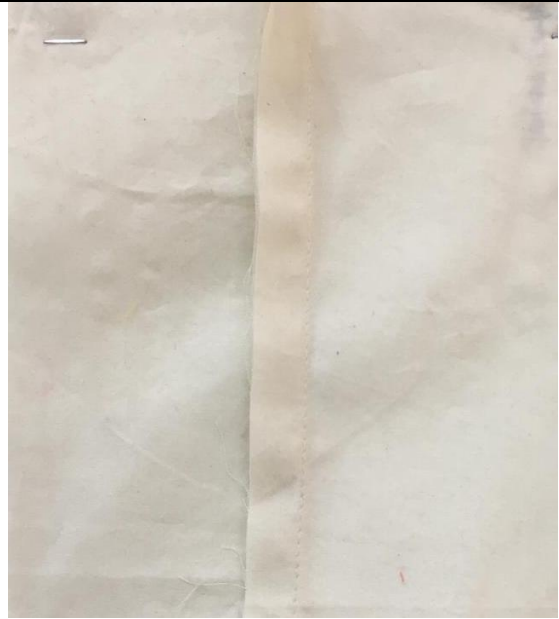
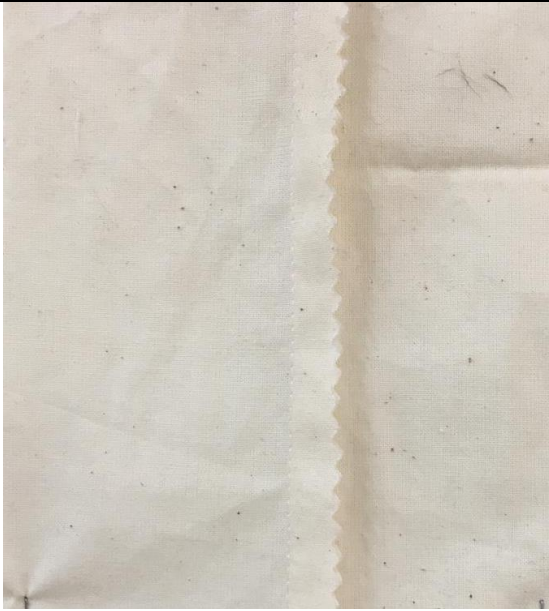
Note: Refer to Course 3 (Unit 14 of Block 3) for this activity

Instruction for Activity

- Read the question carefully and perform all the activities
- Write your answers in the given space

1. Identify the samples of seams and stitch

	
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ACTIVITY 7 CARE LABELS OF APPAREL AND TEXTILES

The care labels are the information provided on garments that advises consumers on how to properly care and maintain the garment. Instructions for washing, drying, and ironing are included in this information. This is provided in writing and in symbols as well. These care labels can help to promote sustainability, consumer protection and improve the quality of clothes.

Note: Refer to Unit 21 of Block 4 of Course 3 for this activity.

Instruction for Activity

- Collect different types of care labels and tags from your old garments
- Paste the care labels in the table and read the instructions carefully
- Write the details, such as the type of garment from which the label was taken and an explanation of symbols used on the care label.

Table 13.1: Types of Care Labels and Tags

S.No.	Labels	Type of Garment	Explanation of Symbols use

ACTIVITY 8 CALCULATE THE SELLING COST OF GARMENT

Cost is in terms of money spent on the garment's production and manufacturing. It generally includes raw material cost, construction cost, trims, and expenses in operating and manpower.

Note: The activity pertains to Block 5 Apparel Costing, Unit 24 of Course 3 for the Costing of Apparel.

Instruction for the activity:

- For the present activity, you have to take any one garment of your choice and calculate its cost by estimating its fabric consumption, trims used, finishing, construction, and packing, and shipping.
- You will have to add infrastructure cost and labour costs in the final retail cost of the garment. Add 20-50% Profit margin of total cost of the garment (raw material, infrastructure and labour cost).
- You can perform this activity during your internship.
- You can use the cost sheet below for the calculation.

Before doing this activity, you have to answer questions below:

- A) What are the main factors which affect garment cost?
- B) What do you understand by selling cost?

Use the space provided below for writing down your activity:

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COST SHEET

DATE: -

STYLE NO. :-

DISCRIPTION:-

OCCASION :-

CATEGORY:-

SIZE:-

COLOR:-

SELLING PRICE :-

1. MATERIAL [FABRIC]	CONSUMPTION	AMOUNT/mtr [Rs.]	TOTAL AMOUNT [Rs.]
TOTAL AMOUNT.			
2. TRIM			
TOTAL AMOUNT.			
3. INFRASTRUCTURE COST			
4. LABOUR COST			
GRAND TOTAL			
5. PROFIT MARGIN			
6. RETAIL COST			

Note: