Basic apparel production

Level-I

Learning Guide -41

Unit of Competence: - Produce Simple Garments

Module Title: **-** Producing Simple Garments

LG Code: IND BAP1M14 LO1-LG-41

TTLM Code: IND BAP1 M14 0919v1

LO1. Prepare garment components

Instruction Sheet	Learning Guide #-

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Selecting pattern
- Selecting fabric
- Determining Sequencing of garment assembly operations
- Calculating fabric amount
- Laying out and pinning or tacking pattern pieces.
- pattern markings
- Cutting fabric
- Checking cut pattern pieces
- Making corrections
- Laying out garment components

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, **you will be able to –**

- Selected ***Pattern*** according to size and style required.
- Selected ***Fabric*** to suit purpose and design of garment.
- Determined Sequencing of garment assembly operations according to pattern requirements.
- Calculated Fabric amount according to fabric width, pattern size and pattern requirements.
- Tacked pinned Pattern pieces are laid out to make best use of fabric length and to match fabric pattern, nap and weave.
- Accorded Fabric is cut to seam allowances and ***pattern markings.***
- Checked are Cut pattern pieces against garment requirements and fabric characteristics, and any required corrections are made.
- Sequenced to Garment ***components*** are laid out according to assembly operations

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 20.
3. Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” **in page -.**
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.

7. Submit your accomplished Self-check. This will form part of your training portfolio.

Information Sheet-1	Selecting pattern

1.1. Selecting pattern

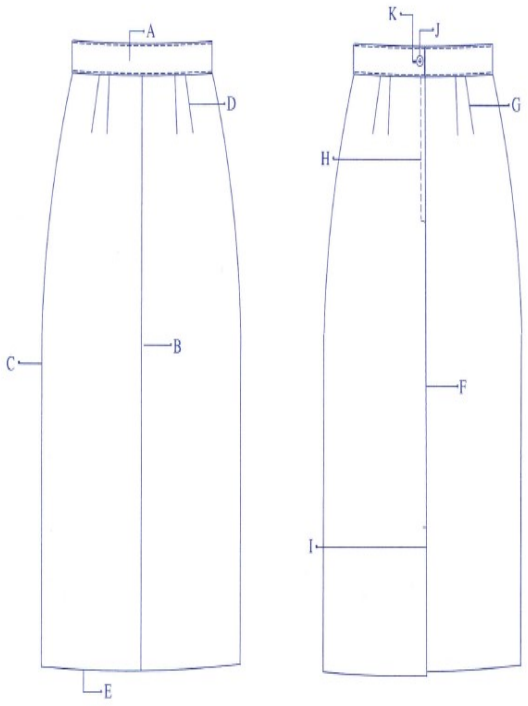
Select pattern requires and according to size and style
The garment marker is produced by laying all of the pattern pieces out on the fabric. The pattern pieces should be placed so that their grain lines match the straight grain of the fabric. The width of the fabric and sizes of the pattern pieces will dictate how the pieces are laid. Much of this process is handled by computers in industry, but it is still important to be familiar with the relationship between fabric and pattern

- **SKIRT**

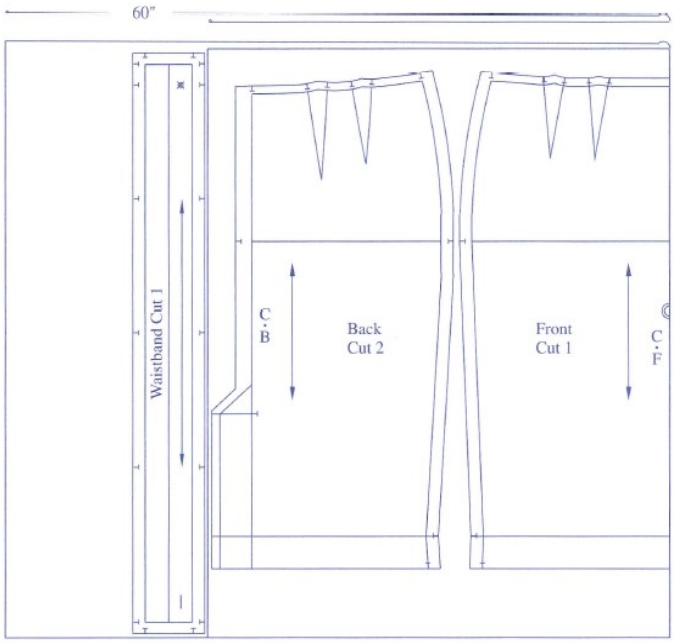
The skirt covers the lower part of the body in a tubular shape, from the waist down to the desired length. Historically, skirt silhouettes have evolved under the combined influences of economics, custom, and social change. The chief influences on a skirt silhouette are its length and the sweep. Changing the position of the waistline, adding design details (e.g., darts, pleats, shirring), and using different types of fabric can all create various skirt styles.

Components of skirt

A. Waistband.
B. Center front.
C. Side seam.
D. Front dart.
E. Hemline.
F. Center back.
G. Back dart.
H. Back zipper.
1. Button.
K. Buttonhole.



Drawing 4.1



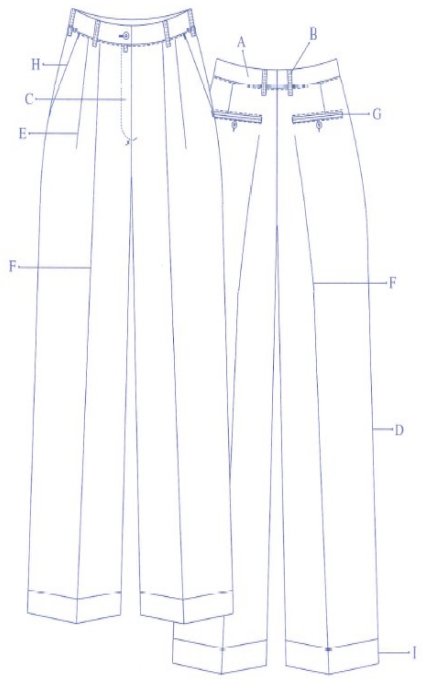
Drawing 4.25

. PANTS

Pants are garments worn on the lower torso. Unlike skirts, pants have tubes surrounding each leg. There is a wide variety of pant silhouettes, including fitted, slim, wide, tapered, straight, bell, and pegged. Depending on the style and fabric used, pants can be worn for recreation, business, or formal occasions. Numerous variations can be developed from the basic pants slope, using methods that include dart manipulation; slash-and-spread; changing the waistline, adding pockets, and varying the pant length. Pant fit is altered primarily by changing three items: the
amount of ease at the hip circumference, the crotch depth, and the crotch length.

Pant components.

A. Waistband.
B. Belt loop.
C. Pants fly.
D. Side seam.
E. Front pleats.
F. Crease.
G. Hip pocket.
H. Front pocket.
I. Cuff hem.



Drawing 5.1

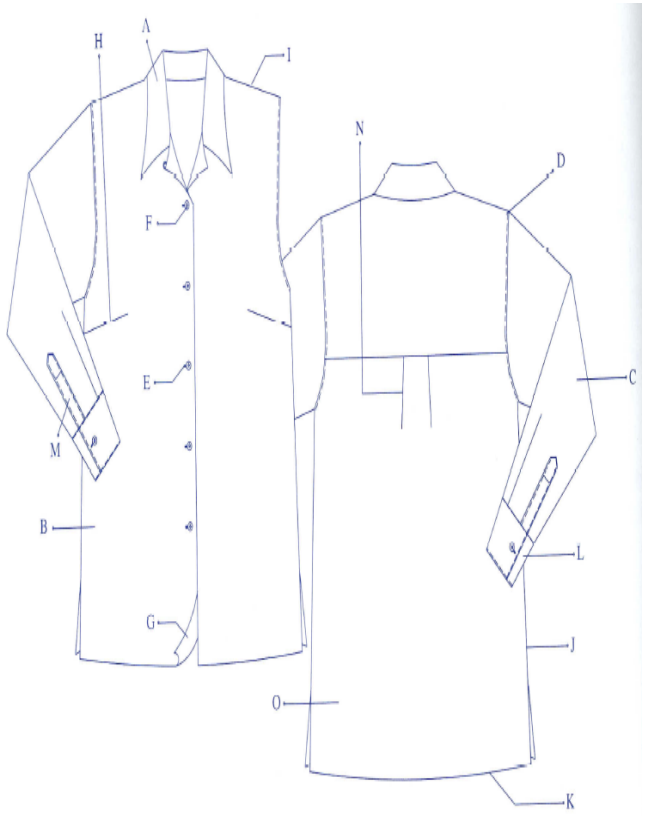
Drawing 5.15

- Blouses (shirts)

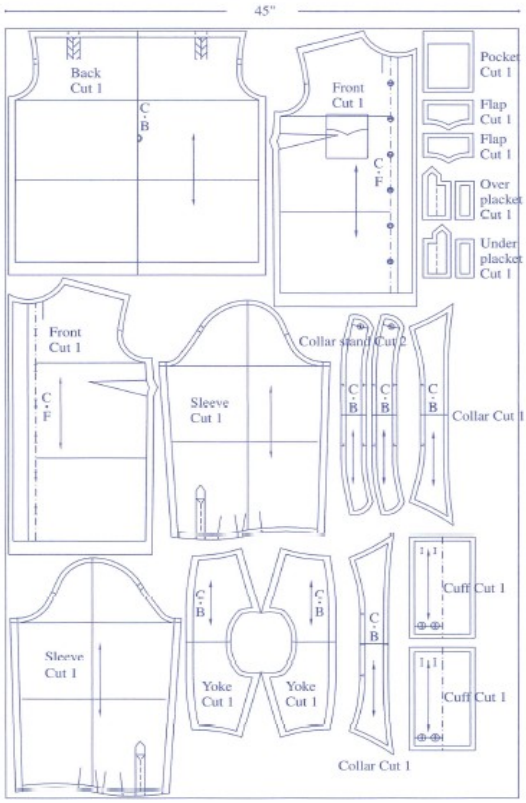
Blouses (shirts) cover the upper torso. They feature an infinite variety of style lines, depending on their design details and the occasions for which they are designed. Depending on their fabric and decoration, blouses can be worn casually, for work, or for formal occasions. Design features, such as sleeves, collars, cuffs, and plackets, can be used to alter or enhance the overall appearance of a blouse.

Blouse components.

A. Collar.
B. Front bodice.
C. Sleeve.
D. Armhole seam.
E. Buttonhole.
F. Button.
G. Facing.
H. Dart.
1. Shoulder seam.
J. Side seam.
K. Hem.
L. Cuffs.
M. Placket.
N. Pleat.
O. Back bodice



Drawing 10.1



Drawing 10.25

- Select fabric to suit purpose and design of garment

- A range of fabric types including cottons, woolens, synthetics, velvets, lace, stretch, knitted, etc.
- single and multi-directional prints
- Interfacings and linings

Self-Check -1	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

Give short answer

1. What is the components skirt? (3)
2. What is the components blouse? (3)
3. What is the component of pants? (3)

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 4 - 5 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-2	Selecting fabric

1.2. Selecting fabric

Wool

Wool is the most popular fabric choice for men due to its versatility and refined aesthetic. Wool is a natural material, which means it breathes well, and can be worn both in the heat of the day or the cool of the night. It is soft and wrinkle free but is sometimes criticized by those wanting lighter, more slimming fabrics. Common wool types include tweed, flannel, cashmere, merino and worsted.

Wool fabric

COTTON FABRIC

Cotton is the second most popular fabric for suits and is derived from plant fibers. Cotton suits move and breathe well but tend to crease easily, which can make the suit look sloppy. They are satisfactory when it comes to softness but lag behind in the luxury department when compared to wool fabrics.

Tip: Choose cotton in the spring, summer and autumn. Suits all body types and those wanting a semi-formal look to outdoor events. For work, choose reasonably heavy cotton or wool/cotton blend as this helps the fabric retain its silhouette.

LINEN

Linen suits are super lightweight and maintain their coolness in soaring temperatures. However, linen wrinkles easily and stains even easier, meaning it requires regular dry cleaning to maintain a fresh, crisp look.

Tips: Choose linen in the summer. Best worn as a more casual alternative to cotton or wool. Suits larger body types to be worn at semi-formal events but never to the office.

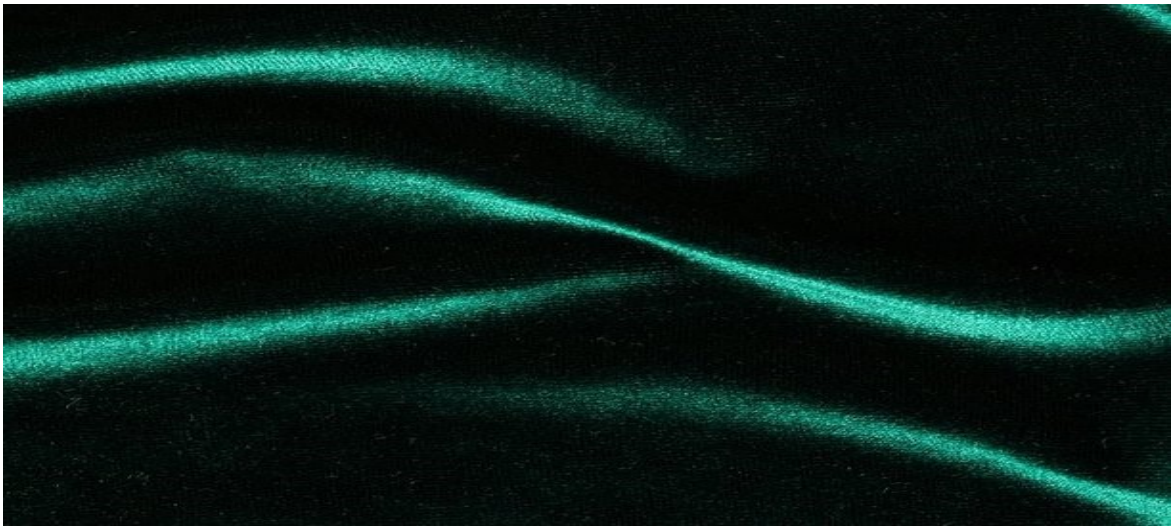
POLYESTER

Polyester is made from synthetic materials (not natural like wool) and is deemed lower quality. It usually comes blended with another fiber, such as wool, in order to cut costs. Suit fabrics that are made from polyester tend to wrinkle (more than wool but less than linen) and have a reputation for not breathing very well. Polyester produces more fabric shine compared to wool and cotton, making the suit look cheap. Tip: Polyester should only be worn in spring and autumn to avoid extreme temperatures. Opt for a blend with wool to increase quality and wear ability to formal events. Suits most body types for dressy casual events and office wear

SILK

Derived from insects, silk is an animal protein typically used by moths to build cocoons. Silk offers superior comfort and is much more expensive than polyester to produce. It is a breathable fabric and a natural temperature regulator, helping the body retain heat in cold weather while excess heat is expelled in warm weather.
Tips: Silk can be worn in spring, summer, autumn and winter. Suits most body types and is perfect for luxurious events

VELVET



Velvet is a closely woven fabric of silk, cotton and nylon. For suiting, velvet mostly applies to the smoking jacket. The texture of velvet is luxurious to touch and it is breathable. But due to its blending with nylon, is less aerated than silk.

Tips: Velvet is great for a dinner party jacket to be worn all year. Keep it away far, far away from the office.

Lining

In sewing and tailoring, a lining is an inner layer of fabric, fur, or other material inserted into clothing, hats, luggage, curtains, handbags and similar items.

Linings provide a neat inside finish and conceal interfacing, padding, the raw edges of seams, and other construction details. A lining reduces the wearing strain on clothing, extending the useful life of the lined garment. A smooth lining allows a coat or jacket to slip on over other clothing easily, and linings add warmth to cold-weather wear.

Interlining

This is an additional layer of fabric between the lining and the outer garment shell. Insulating interlinings for winter garments are usually sewn to the individual lining pieces before the lining is assembled

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write list of fabric type?(3)
2. What is Interlining? (3)
3. What is lining? (2)

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-3	**Determining Sequencing of garment assembly operations**

1.3. Determining Sequencing of garment assembly operations

Introduction:

The readymade garment manufacturing processing depends on some steps and techniques. The clothing creation running actions and methods included in the developing outfits for the huge of creation in company time frame for company reasons is known as outfits developing technologies. Garments plants are identified according to their item kinds are as follows: Garments Factory are classified with some dept.

Garments Production Process:

Stepwise garments manufacturing sequence on industrial basis is given below:

Design / Sketch

↓

Pattern Design

↓

Sample Making

↓

Production Pattern

↓

Grading

↓

Marker Making

↓

Spreading

↓

Cutting

↓

Sorting/Bundling

↓

Sewing/Assembling

↓

Inspection

↓

Pressing/ Finishing

↓

Final Inspection

↓

Packing

↓

Dispatch

Operations of Garments Manufacturing are given below in details:

SL No.	Operation	Job	Method
01	Design/Sketch	It is given by buyers to manufacturers containing sketches including measurements of particular styles	Manual/Computerized
02	Basic Block	Basic block is an individual component of garments without any style of design (without Allowance, Style, Design)	Manual/Computerized
03	Working Pattern	When a pattern is made for a particular style with net dimension regarding the basic block along with allowance then it is called working pattern.	Manual/Computerized
04	Sample Garments	To make a sample, this will be approved by buyer. After making a sample, it is sent to buyer for approval to rectify the faults	Manual
05	Approved Sample	After rectify the faults, sample is again sent to buyers. If it is ok then , then it is called approved sample	Manual
06	Costing	▪ Fabric Costing ▪ Making Charged ▪ Trimmings ▪ Profit	Manual

07	Production Pattern	Making allowance with net dimension for bulk production	Manual/Computerized
08	Grading	If the buyer requires different sizes, so should be grade as S, M, L, XL, XXL	Manual/Computerized
09	Marker Making	Marker is a thin paper which contains all the components for different sizes for a particular style of garments	Manual/Computerized
10	Fabric Spreading	To spread the fabrics on table properly for cutting	Manual/Computerized
11	Cutting	To cut fabric according to marker dimension	Manual/Computerized
12	Sorting & Bundling	Sort out the fabric according to size and for each size make in individual bundles	Manual
13	Sewing	To assemble a full garments	Manual
14	Ironing & Finishing	After sewing we will get a complete garment which is treated with steam ironing & also several finishing processes are done for example extra loose thread cutting	Manual
15	Inspection	Should be approved as initial sample	Manual
16	Packing	Treated by Polyethylene bag	Manual
17	Cartooning	After packing, it should be placed In cartooning for export	Manual
18	Dispatching	Ready for export	Manual

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Garments Production Process?(3)
2. What is garment assembly operations describe? (3)

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-4	Calculating fabric amount

1.4. Calculating fabric amount

Introduction

If you are buying your sewing patterns to make your clothes you will not have to read this post, unless you forgot to read the pattern instructions before going shopping for fabric. If you are drafting your dressmaking patterns yourself you will need to calculate how much fabric you need to complete the garment.

One very important thing before going about to buy fabric is to get the measurements of the body right. Checkout this tutorial to measure the body right (this is a must for dressmaking) and learn how to read the tape measure.

Some general facts about fabric – Fabric is usually measured by yards or meters. One yard is around 3 feet, which is about 90 cms.

One meter equals 1.09 yards or 39.4 inches. The width of the fabric (checkout the different types of fabric available) is usually 35-36 inch, 44-45 inch, 54 inch and 58-60 inch, 72 inch. Fabric with width around 110 inches are also available but not so commonly found in stores (atleast where I shop). Pant/trouser materials are available mostly in 58-60 inch width. Dressmaking fabrics are usually 36 inch or 44 inch

10 millimeter = 1 centimeter

100 centimeter = 1 meter

1 inch = 2.54 centi meter

39.3 inch = 1 meter

1 yard = .91 meters.

Check out this post on some tips for buying fabric.

For tops and dresses with panels, and when sewing with one way prints or fabric with naps or cutting fabric on the bias, or matching prints/ patterns these guesstimates will not apply.

Fabric with pattern repeats

Making clothes with printed/patterned fabric requires more yardage when matching the prints exactly. When making clothes with plain fabric with lining fabric quantities will be the same for lining and main fabric but with patterned fabric, there may be a drop pattern and you have to join them correctly so you may need more of the patterned fabric than the plain fabric.

Here are some tips for cutting and sewing printed fabric. You may need extra yardage if you want particular prints in a particular direction on your garment. For this, making paper patterns and then calculating the yardage is the way to go. I have read that when sewing with checks you may need to buy atleast 25% extra, so that they match in seams.

Easy reading of the measurements

To convert inches to millimeters multiply by 25.4
inches to centimeters -multiply by 2.54
inches to meters -. Multiply by .0254
yards to centimeters – multiply by 91.44
yards to meters – multiply by .9144

YARD	INCHES	CMS/METER
1/8 (.125 yard)	4 .5 inches	11.4 cms
1/4 (.25 Yard)	9 inches	22.9 cms
1/3 yard	12 inches	30.5 cm

YARD	INCHES	CMS/METER
3/8 (.375 yard)	13.5 inches	34.5 cms
1/2 (.5 yard)	18 inches	45.7 cms
5/8 (.625 yard)	22.5 inches	57.2 cms
2/3 yard	24 inches	61.0 cms
3/4 (.75 yard)	27 inches	68.6 cms
7/8 (.875 yard)	32.5 inches	80 cms
1	36 inches	91.4 cms
1 1/8 (1.125 yard)	40.5 inches	1.02 meters
1 1/4 (1.25 yard)	45 inches	1.14 meters
1 3/8 (1.375 yard)	49.5 inches	1.25 meters
1 1/2 (1.5 yard)	54 inches	1.37 meters
1 5/8 (1.6 yard)	58.5 inch	1.48 meters
1 3/4 yd (1.75 yard)	63 inches	1.6 meters
1 7/8 (1.87 yard)	67.5 inches	1.71 meters
2 yard	72 inches	1.82 meters

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write
2.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-5	Laying out and pinning or tacking pattern Pieces.

1.5. Laying out and pinning or tacking pattern Pieces.

Objectives

Identify the various ways fabric may be folded in preparation for layout, pinning, and cutting. This lesson will provide the information you need to lay out, pin, and cut out your pattern pieces.

• Correctly lay out a pattern.

• give reasons for various layouts, pinning, and cutting procedures.

• interpret layout, pinning, and cutting information found on the pattern instruction sheet.

Following the correct pattern layout will help ensure that your garment is cut out on grain. Pinning and cutting your garment carefully will avoid wasting fabric.

You will first need to make sure the cut ends of your fabric are on-grain.

Folding the Fabric

Fabric can be folded in a variety of ways before pattern pieces are positioned for cutting. The type of fold used depends on

• the number of pattern pieces that must be placed on a folded edge

• the fold that results in the most economic use of the fabric

• the width of the fabric

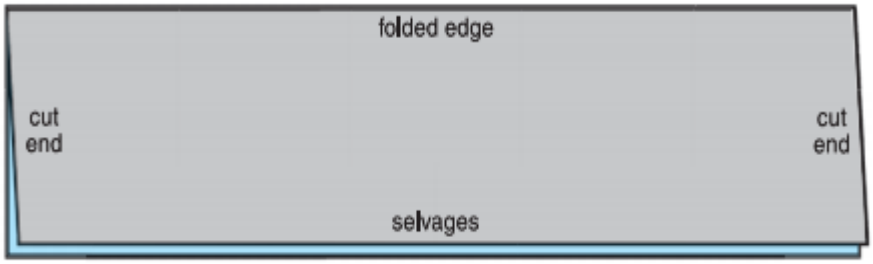
• the pattern size

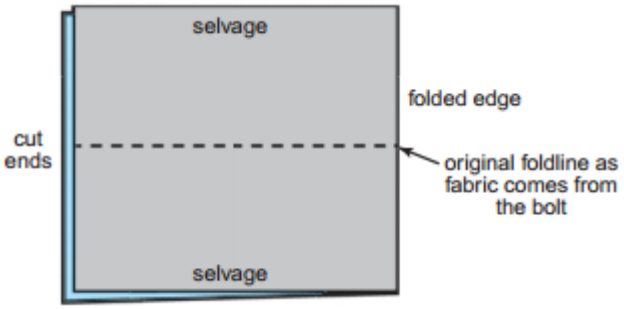
Pattern companies have already taken these factors into consideration for you. Therefore, you should fold your fabric as shown in the diagram found on your pattern instruction sheet Lengthwise fold. Most fabric is folded lengthwise on the bolt. Pattern instructions generally show a *lengthwise fold* with fabric folded in half

lengthwise so that selvages match. However,

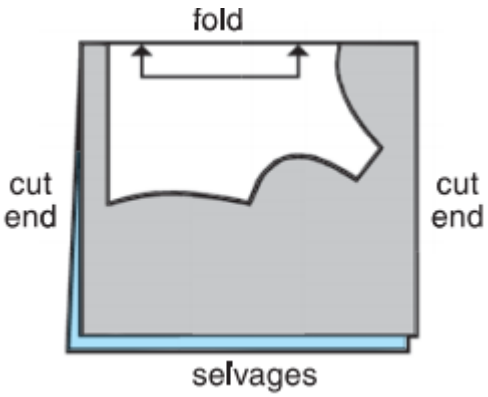
lengthwise folds can also be *partial folds* leaving

some of the fabric extended as a single layer.





Try to press out the lengthwise crease on knit fabrics before laying out pattern pieces.
Often this crease is permanent in knit fabrics and, if used on the garment, may be unsightly.
If you cannot press out the crease, you can avoid using it by folding your fabric with a double fold.
Another possibility is to position the crease to work with the pattern design. For instance, place pattern pieces so that the crease will fall down the center of sleeves or pant legs.
Circle the correct layout diagram on your pattern instruction sheet. Choose the correct diagram according to the pattern view, size, and fabric width.
Lay all pattern pieces on the fabric before pinning any of them in place. This will allow you to make sure that all pieces will fit on the fabric.
Sometimes a layout diagram will show two pattern pieces with the same number. This indicates that the pattern piece will have to be cut out twice, such as when you need four cuff pieces.
• Avoid placing pattern pieces on the selvage edges of the fabric. Selvages do not give and can cause seams to pucker.
Check for pattern pieces that must be placed on the fabric fold. When cutting out these pieces, never cut along the folded edge.



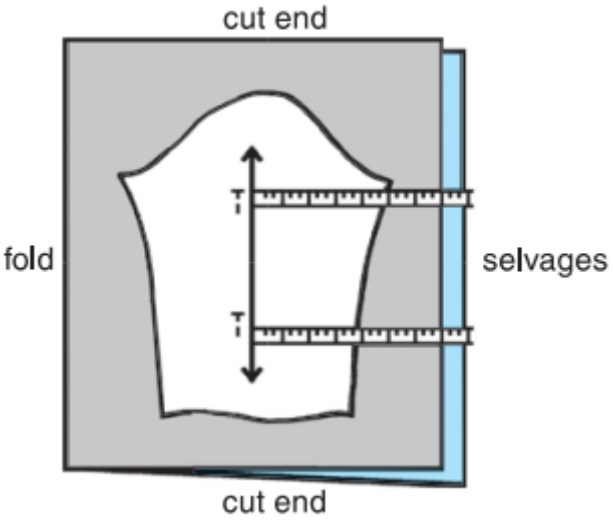
Accurate measuring will help you make sure your pattern pieces are cut out on-grain. Follow these steps:

1. Place each pattern piece so the grainline arrow runs lengthwise on the fabric. Grainline arrows should run parallel to the selvage edges regardless of the way the fabric has been folded.
2. Pin one end of the grainline arrow to hold it in place.
3. Measure from the pinned end of the arrow to the fabric selvage edge.
4. Now measure from the other end of the grainline arrow to the fabric selvage edge.

Make sure it is the same distance from the selvage as the end you have already pinned in place.

Adjust the distance if necessary and then pin the arrow in place.

5. Pin the edges of the pattern piece in place. The lengthwise grain on knits is seen as a rib. Use this rib to place pattern pieces on the straight of grain.



Use the following guidelines when pinning your pattern pieces to your fabric:

• Pin with care to prevent inaccurate cutting. A cutting error of ⅛ inch on each side of a pattern piece can result in a ½ inch difference in the final garment.

• Use only enough pins to hold down the pattern securely. Depending on the fabric and the size of the pattern piece, placing pins about six inches apart is usually enough.

• Place pins completely inside the cutting line.

• Place pins diagonally in corners.

• Use pattern weights instead of pins to hold the pattern in position, if desired. However, be sure to pin grain lines in place first.

Do not allow the fabric to hang over the edge of the table when you are cutting.

Cut notches out away from the seam allowance.

Cutting notches into the seam allowance will weaken the seam.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (5).
2. What is accurate measuring will help you make sure your pattern pieces are cut out on-grain Follow these steps? (3)

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-6	pattern markings

1.6. Pattern markings

Pattern markings Garment fitness is the 1st priority for every consumer. To get perfect fit of garment, well planned or defect free pattern must be needed. When ornamental designs are apply on the garment, then a perfect pattern should be produced for making this garment. A standard pattern making is the most essential part to the success of ready-to-wear clothing.

On the other words, pattern is a hand paper which is made by flowing all the specifications of each and individual components. Actually a pattern is the template from which the parts of a garment are traced onto fabric before being cut out and assembled. Pattern making is the connection of design to production by creating paper templates for all components such as cloth, hemming, fusible etc. which have to be cut for finish a perfect garment. Now CAD software are used to make pattern for better correction.

Methods of pattern making

There are three types of pattern making methods used in apparel industry. These are in below:-

Pattern drafting method

Pattern draping method

Flat pattern making method

1. Pattern drafting method:

Pattern drafting method is mainly depends on accurate measurements taken on a person, dress or dummy. To complete the pattern, measurements are taken for chest, waist, hip and so on, and ease allowances are marked on paper and construction lines are drawn also. This drafting method is used to made basic, foundation or design patterns. Basic pattern set is the example of drafting method.

2. Pattern draping method:

Pattern draping method is a three-dimensional process of pattern making. In this pattern making method, muslin cloth is used to drape over a Human body or on a mannequin. For making this draping method commonly used muslin, plain weave fabric of unfinished cotton fabric. When a two dimensional (2D) piece of fabric is around on a form of dress or a model, following its shape, creating a three-dimensional (3D) fabric pattern. To get an actual design for finished garment, pattern maker give ease allowances for movement before the garment piece is cut and sewn. This pattern can be marked with pencil lines and the finished muslin

pattern can be used repeatedly. But, it is requires more material, more expensive and time consuming than flat paper pattern making method.

3. Flat pattern making method:

Flat paper pattern making method is used to the development of a fitted basic pattern with ease movement and comfort to fit a person or body form. For developing a standard pattern, it is the fastest and most efficient method, so that the basic block is modified to create new and various styles. It is dependent on previously developed patterns. In flat pattern making, the patterns are manipulated by using a slash or pivotal method to create design patterns.

Pattern Making

Pattern making is a highly skilled technique which calls for technical ability, and a sensitivity to interpret a design with a practical understanding of garment construction. For successful dress designing pattern making forms the fundamental step. This function connects design to production by producing paper templates for all components such as cloth, hemming, fusible etc. which have to be cut for completing a specific garment.

Pattern making is an art. It is the art of manipulating and shaping a flat piece of fabric to conform to one or more curves of the human figure. Pattern making is a bridge function between design and production. A sketch can be turned into a garment via a pattern which interprets the design in the form of the garment components. A pattern is flat while the body is not. The body has height, width and depth. Within this roughly cylindrical framework there are a series of secondary curves and bulges, which are of concern to the pattern maker. Darts are the basis of all pattern making. They convert the flat piece of cloth into a three dimensional form, which fits the bulges of the body.

A pattern maker typically makes a pattern from a flat sketch with measurements or a two dimensional fashion illustration. The basic pattern is the very foundation upon which pattern making, fit and design are based. The basic pattern is the starting point for flat pattern designing. It is a simple pattern that fits the body with just enough ease for movement and comfort.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. ----------is method is mainly depends on accurate measurements taken on a person, dress or dummy.(1)
   a. Pattern drafting
   b. Pattern Making
   c. Flat pattern making
   d. Pattern draping
2. ---------- is a highly skilled technique which calls for technical ability, and a sensitivity to interpret a design with a practical understanding of garment construction (1)
   a. Laying out
   b. Pinning or tacking
   c. Pattern Making
   d. drafting

3. What is Pattern drafting method? (3)
4. What is Flat pattern making method? (2)
5. What is Pattern draping method? (2)
6. Write Methods of pattern making? (3).

Note: **Satisfactory rating - 6 points** **Unsatisfactory - below 6 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-7	**Cutting fabric**

1.7. Cutting fabric

Introduction

Cutting is the major operation of the cutting room, when the spread fabric is cut into garment components. Of all the operations in the cutting room this is the most decisive, because once the fabric has been cut, very little can be done to rectify serious mistakes. Cutting can be done manually using powered knives or by computer-controlled system.

Cutting is the process which cut out the pattern pieces from specified fabric for making garments. Using the markers made from graded patterns and in accordance with the issue plan, fabrics are cut to prepare garment assembly. This is the major operation of the cutting room, of all of the operations in the cutting room this is the most decisive because once the fabric has been cut, very little can be done to rectify serious mistakes

Straight blade- straight reciprocating blade of up to 13" height and 0.5" width could be sharpened by attached grinding wheel. Most commonly used, could be used for larger depth of fabric, high cutting speed, sharp corners could be cut

Band knife- endless loop of flexible blade, one side sharpened, thinner than straight knife, machine stationary whereas the fabric moves, much more accurate cut for smaller parts, suitable for cutting sharp corners. Not suitable for large parts, more fabric wastage as block piece of fabric is required; workload is high due to stationary cutting machine.

Die cutter- suitable for smaller garment parts like shoulder pads, very accurate for sharp corners & circular patterns. Not suitable for larger parts, difficulty in producing dies (labor, time), higher fabric wastage due to use of block pieces

Requirements of Cutting

- **Precision of cut**: Garment cannot be assembled satisfactorily and may not fit the body correctly not been cut accurately to the pattern shape and size must be as per original sketch.
- **Clean edge:** The edge of the fabric should not show fraying. such defects on imperfectly knife.
- **Infused edge:** The buildup of heat in the knife blade comes from the friction in between the blade and fabric lay especially for man –made fiber may resulting.

- **Support of lay**: The cutting system must provide the means not only to support the fabric but also allow the blade to penetrate the lowest ply of a spread lay and save all the fabrics.
- **Consistent cutting**: To get consistency of cutting, marker are placed on lay and see plies are clamped tightly with table so that all plies are cut at same time and same pressure.
-

Manually Operated Power Knives

Straight knife

- The elements of straight knife consist of an electric motor, Stand, a base plate usually on rollers, Handle, Knife etc.
- Knife is driven by electric power
- Grinding wheel is present to sharp the knife during cutting
- Blade edge: straight edge, wave edge, serrated edge
- Straight edge is mostly used
- Blade stroke 2.5 to 4.5 cm
- Can cut heavy fabric such as canvas & denim

Advantage:

- Comparatively cheap & transferred easily from one place to another place
- Higher lay of fabric can be cut easily
- Round corner can be cut more precisely then even round knife
- Production speed is very good & fabric can be cut from any angle

Disadvantage:

- Sometime deflection may occur due to the weight of the motor
- Knife deflection is high in risk, when lay height is too high
- Sometime accident may happen

Band Knife

- Band knife comprises a series of three or more pulleys, powered by electric motor
- Cutting knife is endless in shape & flexible
- Blade is usually narrower than on a straight knife
- This method m/c is stationary but fabric is moveable

- This is like saw mill cutter

Advantage:

- Used when a higher standard of cutting accuracy is required
- Extensively used to cut very sharp corners small parts such as collars & cuff
- Used more in men's wear than ladies wear
- Intensively risk of accident is low
- Possible to cut 90˚ angle of the fabric

Disadvantage:

- Work load is high as m/c is stationary & fabric is moveable
- Not suitable for cutting large amount of garments parts
- Fabric wastage is high
- Power loss is high
-

Round Knife

- Element of round knife:
  - Base plate & Electric motor
  - Handle for the cutter to direct the blade
  - Rotating circular blade
- Blade diameter varies from 6-20 cm
- Blade is circular
- Blade is driven by electric power
- Suitable for single ply cutting as well as multi-layers (say 20-30 layers)

Advantage:

- ❑ Suitable for small scale cutting
- ❑ Suitable gentle curve cutting
- ❑ Easy to operate

Disadvantage:

- ❑ Not suitable for cutting very curve lines in higher no. Of lays
- ❑ Not suitable for higher production
- ❑ Possibility of accident is high
- ❑ Difficult to cut small component
- ❑ Needs skilled operator

Die Cutting

- ❑ Die is used to cut the fabrics
- ❑ Main parts of all die cutting m/c are Blade, Die, Motor & Operating System of Ram etc.
- ❑ Die is made by metallic strip
- ❑ Most useful to cut sharp & small parts

- **Advantage:**

- ❑ Extensively used to cut sharp corners of small parts of dress accurately
- ❑ Most useful to cut at any shape or any angle
- ❑ Comparatively less time required
- ❑ Best method of cutting knitted fabric

- **Disadvantage:**

- ❑ High labor cost
- ❑ To change the style quickly is impossible
- ❑ Difficult to cut large components of dress

Notcher Cutting Machine

- ❑ Special type of cutting m/c & used in special case
- ❑ Used to cut notch in the edge of some components
- ❑ The invention of notcher m/c was done to make notch
- ❑ The notch can be made in u-shape or V-shape

Advantage:

- ❑ Useful to cut small notch to the fabric
- ❑ Most useful to make consistency in notching

Disadvantage:

- ❑ Only used to make notch
- ❑ Thermoplastic fiber cannot cut by this m/c
- ❑ Time loss
- ❑ Use of the m/c is limited

Drill Cutting Machine

- ❑ Needed to mark on the end of components of dresses especially for pocket & dart setting
- ❑ This m/c contains a motor, base plate, drill.
- ❑ For tightly woven fabric, making of hole by drill is permanent for long
- ❑ In hypodermic drill some color is sprayed along with the hole so that it can easy to find the marked place

Advantage:

- ❑ Needed to mark on the end of components of dresses especially for setting pocket & dart
- ❑ Make the hole permanently for long time

Disadvantage:

- ❑ Only used for making hole in the fabric especially for setting pocket & dart
- ❑ For loose woven fabric it cannot make the hole permanently for long time

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

Choose the best answer

1. Needed to mark on the end of components of dresses especially for setting pocket & dart (2) point
   A. Drill Cutting
   B. Notcher Cutting
   C. Round Knife
   D. Band Knife
2. Special type of cutting m/c & used in special case (2) point

A. Drill Cutting Machine C. Band Knife

B. Notcher Cutting Machine D. Round Knife

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Band Knife advantage and disadvantage? (3).
2. Write Straight knife advantage and disadvantage? (2)
3. Write Round Knife advantage and disadvantage? (3)
4. What is of Notcher Cutting Machine? (2)

Note: **Satisfactory rating - 7 points** **Unsatisfactory - below 6 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-8	Checking cut pattern pieces

1.8. Checking cut pattern pieces

1. Pattern Layout Guide

Follow the layout guide that comes with your pattern. Pattern companies have created the best layout possibilities according to the yardage amount they recommend on the back of your pattern. This is to ensure you get the best results with the most efficient use of your fabric.

2. Pressing

Press your tissue pattern pieces before you lay them on your fabric. Your pattern pieces will have creases in them from being folded in an envelope. If you put your iron on a low setting, you can safely press the creases out without damaging your pattern pieces.

For digital patterns, I punch 4 or 5 holes in them at the top of each pattern. I use the same kind of hole puncher used to punch holes in notebook paper. Then I store them on a hanger to avoid creases. I have pressed out creases, also on a low heat, but prefer to avoid them altogether when working with printer paper.

A wrinkled pattern piece is not going to lay as flat as it should on your fabric. It tends to draw up, which can definitely have an effect on the fit of your garment, making it tighter shorter than you'd like. Avoid unnecessary problems by taking the time to press out those wrinkles and creases.

Following the layout guide also includes choosing the right layout for your fabric. Pattern companies try to anticipate the most common layout possibilities needed, according to different fabric types and widths.

The layout will be based on your fabric width and whether or not all your pieces need to lay the same way. For instance, velvet fabric requires a different kind of layout than cotton fabric.

3. Grain lines

The grain line on your pattern piece is very important. The grain line is there to:

Tell you what direction your pattern piece should be placed on your fabric. Your grain line is always parallel to the selvage. If your pattern piece should be lay lengthwise, crosswise or on the bias, the grain line will tell you (as well as the layout guide).

The grain line is the straight line on your pattern piece that's parallel to your center front or center back.

Making sure your pattern pieces are on your fabric straight before you cut takes a little extra time. But the extra will benefit you by saving you a lot of headaches in your fitting and sewing.

4. Cutting

Cutting your fabric with one hand on your pattern piece at all times ensures that it stays in place while you cut. This means that left-handed people will cut their pieces out in clockwise direction and right handed people will cut their pieces out in a counterclockwise direction.

Place one hand on your pattern piece while cutting to prevent shifting or any kind of movement.

It's especially important to hold your pattern piece in place with one hand while you cut when you use pattern weights instead of pins. Depending on how heavy your weights are, your pattern piece could shift while you cut.

Cutting your pattern piece by lifting it a little or not holding it in place can cause slight movement, which can affect the sewing or fit of your piece.

5. Marking

After checking your grain lines and carefully cutting out your pieces, the last and also an important step is marking them. Every symbol has a purpose and is there to aid you while you sew. They're used for things like matching seams and dart or pocket placement. It's also important to mark these symbols BEFORE you remove your pattern pieces.

Go to this post to learn more about marking tools. Look at numbers 4, 5, and 6. You can also watch this video on How to Mark Your Fabric for Sewing, by Professor Pincushion.

If you want your sewing projects to look professionally made, don't ignore any of these 5 areas when you lay out your pattern pieces:

1. Pressing
2. Pattern Layout Guide
3. Grain lines
4. Cutting
5. Marking

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. What is a Grain line? (4)

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 1 point**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-10	Laying out garment components

1.10. Laying out garment components

INTRODACTION

Following the correct pattern layout will help ensure that your garment is cut out on grain Pinning and cutting your garment carefully will avoid wasting fabric.

• Information you need to layout, pins, and cut out your pattern pieces. You will first need to make sure the cut ends of your fabric are on-grain.

• Fabric Preparation to straighten the grain before preparing the fabric for pattern layout.

• Use the following guidelines when laying out your pattern pieces on your fabric.

• Sometimes a layout diagram will show a pattern piece that is placed halfway off the fabric. This piece will usually be accompanied with an asterisk. Find the symbol on your instruction sheet and follow the directions given.

This symbol generally means there is not enough room to place the pattern piece on the folded fabric.

The instructions will tell you to cut out all other pattern pieces.

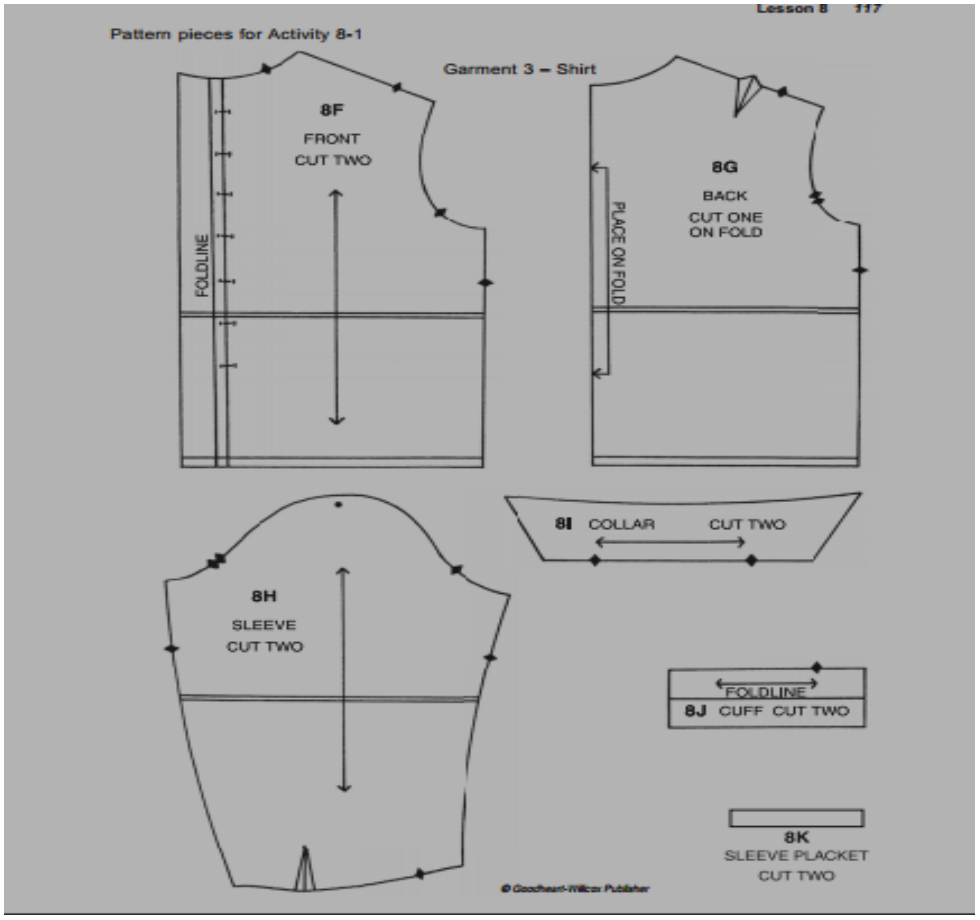
Then you should open the fabric to accommodate the piece that was placed partially off the fabric.

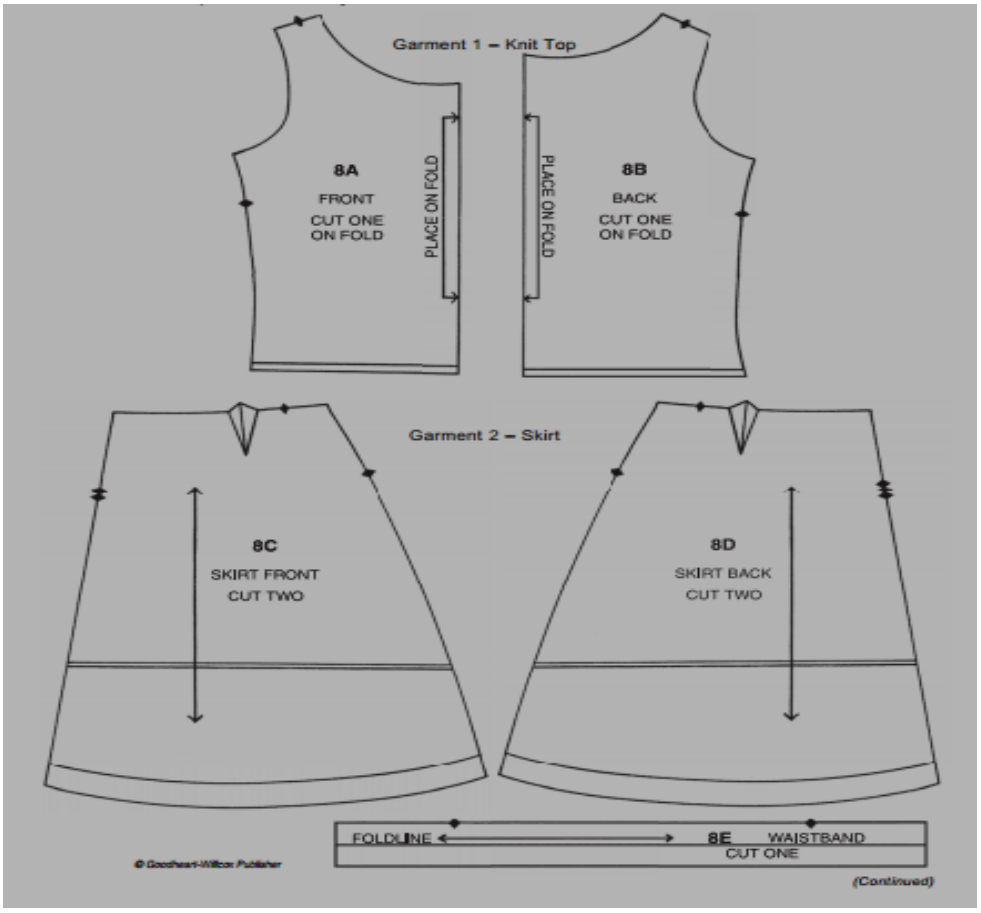
• Circle the correct layout diagram on your pattern instruction sheet. Choose the correct diagram according to the pattern view, size, and fabric width.

• Lay all pattern pieces on the fabric before pinning any of them in place. This will allow you to make sure that all pieces will fit on the fabric.

• Sometimes a layout diagram will show two pattern pieces with the same number. This indicates that the pattern piece will have to be cut out twice, such as when you need four cuff pieces. The pattern will only include one pattern piece. Therefore, simply relocate the pattern piece and cut it out a second time.

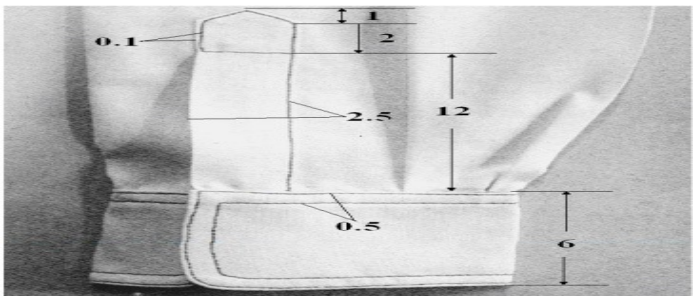
Pattern pieces for Activity 8-1





(Continued)

Sewing garment sleeve cuff and placket techniques



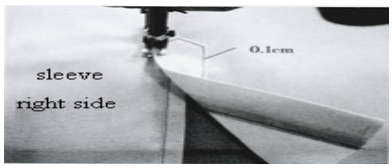
Procedure of operation

(1) Press cuff opening and sleeve placket

(2) Cutting slit

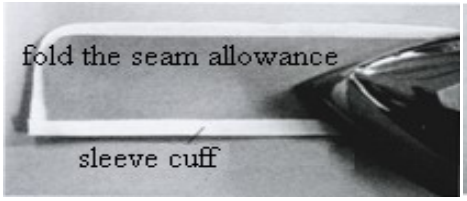
(3) Machine –stitch sleeve placket

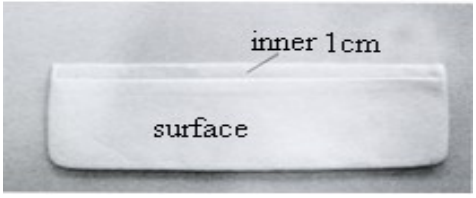
(a)



(c) (d)

(4) Machine-stitch sleeve cuff



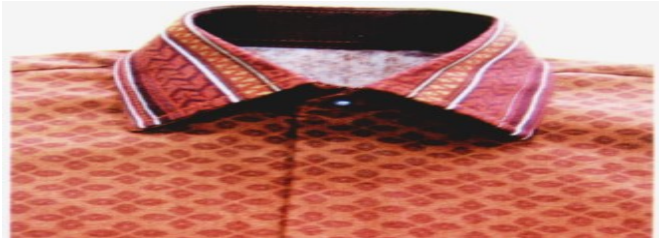


(a) (b)

(5)Installation sleeve cuff

(a) (b)

Sew Style of the stand lapel collar



Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe Laying out garment components? (3)
2. Describe laying out components shirt parts? (3)

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Basic apparel production

Level-I

Learning Guide -42

Unit of Competence: - Produce Simple Garments

Module Title: **-** Producing Simple Garments

LG Code: IND BAP1M14 LO1-LG-41 TTLM

TTLM Code: IND BAP1 M14 0919v1

LO2. Prepare workstation

Instruction Sheet	Learning Guide #-

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- OHS practice
- Setting up workbench and seating
- Cleaning and checking machine
- Setting up and adjusting machine
- Checking needles, attachments and parts
- Identifying and reporting or replacing worn needles or parts
- Checking regularly performance of machine
- Taking action on signs of faulty operation
- Identifying and preparing other equipment

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, **you will be able to –**

- Sett and workbench are set up according to ***OHS practices.***
- Cleaned and checked m***achine*** to ensure correct operation.
- Machine is ***set up*** and adjusted according to specifications.
- Needles, attachments and parts are checked and worn needles or parts are identified and reported or replaced.
- Checked performance of machine is regularly for signs of faulty operation and required action is taken according to defined procedures.
- Required ***other equipment*** for production is identified and prepared

Other equipment required for production is identified and prepared. **Learning Instructions:**

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 20.
3. Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” **in page -.**
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
6. If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.

Information Sheet-1	OHS practice

2.1. OHS practices

OHS Practices: You should apply safety and health regulations in the shop. Safety and health regulations in the shop, if properly observed and followed, will ensure added efficiency in the operation especially when orderliness in a small shop is maintained.

1) The “NO SMOKING” sign in the shop should be strictly enforced and the proper notice must be noticed.
2) Wear correct work clothes for comfort and protection.
3) Use non-flammable cleaning solutions such as a degreaser.
4) Use work table when servicing machines, do not work on the shop floor to avoid accident and loss of parts.
5) Close attention should be given when testing dangerous parts like needle to avoid finger fiercing.
6) Avoid eating inside the workshop to prevent food contamination. Factory (work shop) would have canteen for eating.
7) Check the machine belt guard when operating the machine for breakage protection.
8) The throat plate should be unobstructed when testing to avoid needle damage.
9) Switch off the machine when not in use. To prevent accidental tripping on.
10) Place dismantled parts in order for easy access when assembling.
11) Clean the table after every servicing done on the machine parts.
12) Spare parts and machine records should be correctly stored.
13) The work shop should be separated from the clerical section for proper accounting of spare parts and tools.
14) Idle machine for serving should be kept orderly.
15) Wash your hands after every servicing job done.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe OHS practices? (4)

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 2 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-2	Setting up workbench and seating

2.2. Setting up workbench and seating

Workstation and seating should be set up according to OHS practices and specifications for work.

It includes:

- standard operating safety procedures during developing patterns
- personal protective equipment ex. Wearing work wear
- safe materials handling ex. Use pin cushion for pins
- equipment or machine safety ex. Proper place for dummy
- **Personal responsibilities for safety**

Ergonomic arrangement of workplaces ex. drawing table should be 45^{o} inclined

- **Standard operating safety procedures**
  - Protection equipment: including personal protective equipment (PPE) for ears, eyes, face.
  - Protective clothing,
  - Protective shields and barriers shall be provided.
  - Before doing work that requires the use of PPE, the trainee must be trained.
- **Personal safety protective equipment**

Personal safety protections include:

- Eye and face protection
- Hearing protection
- Respiratory protection
- Wearing apparel

-wearing thimble at left hand fingers

- **Safe materials handling and storage**

-Keep the materials in well manner. Ex. Keep drawing tools and equipment's in drawer.

-Use the material as enough as required.

Clear and clean work area for safe working environment

- Every morning the trainees wipe and clean the equipment's.
- After work, they have to wipe, clean and cover the equipment's.

- **Personal responsibilities for safety**

➢ Observe all, before, safety precautions related to your work.
➢ Report unsafe conditions or any equipment or materials you think might be unsafe.
➢ Warn others about the hazards.
➢ Report any injury or ill
➢ Wear protective clothing
➢ Be safety consuls
➢ Always inspect equipment and associated attachments for damage before using.

- **Safety precautions concerning people**

➢ During working, wear appropriate protective clothing properly.

➢ Never remove safety device or safety covers from equipment

➢ Be careful of high clothes. Never touch switches with wet hands.

➢ When an accident occurs, it should be reported immediately to proper authority.

- **Safety precautions *concerning facilities***

➢ Facilities must be adequately illuminated, clean, neat and dry.

➢ Keep the area organized so that there are no obstacles lying around the floor.

➢ The equipment and floor should be free from dust and any chipping.

➢ Work benches must be strong.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write to OHS practices? (3).
2. Write Personal safety protective equipment? (3)
3.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-3	Cleaning and checking machine

2.3 Cleaning and checking machine

Cleaning is the process of removing unwanted physical substances such as dirt, infections agents and other impurities from an object or any machine or environment.

Sewing machine, like any other machine, requires regular maintenance in order to operate properly. By following these simple steps after every 8 to 10 hours of machine use, you will help ensure your machine's longevity and will be able to better enjoy your sewing experience.

Benefits of cleaning machine and equipment

- Improve machine and equipment performance
- Increase the life span of the machine
- Increase machine reliability
- Reduce service downtime

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Describe Cleaning and checking machine? (4).
2.

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 2 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-5	Checking needles, attachments and parts

2.5. Checking needles, attachments and parts

Needles

- Needles are available in different sizes with different points for different fabrics.
- The needle penetrates the fabric, taking the thread under the fabric and catching the bobbin thread to form stitches without causing any damage to the material.

Needle Parts and Sizes

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write to Needle Parts? (4).
2.

Note: **Satisfactory rating - 2 points** **Unsatisfactory - below 2 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-6	Identifying and reporting or replacing worn needles or parts

2.6. Identifying and reporting or replacing worn needles or parts

Selection of needles

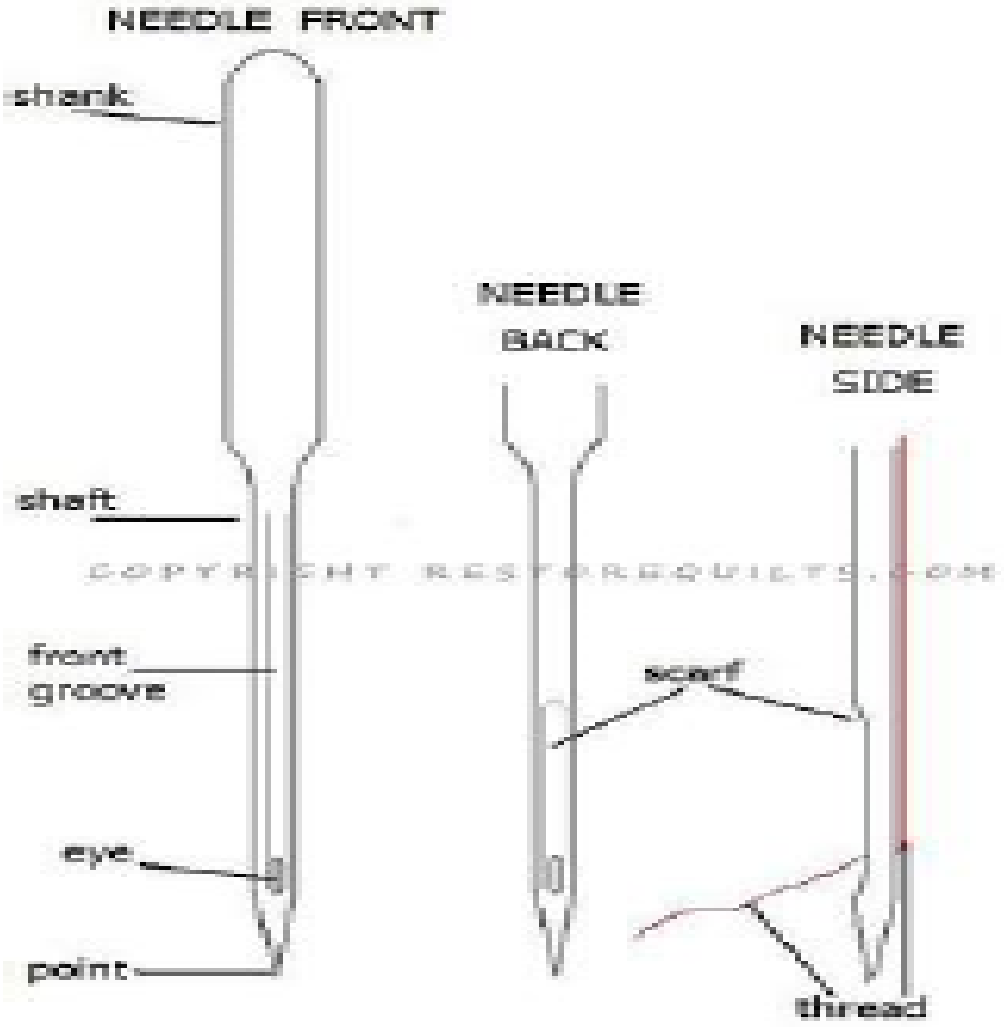
Machine needles are selected according to the weight and other characteristics of the fabric, as well as the thread type being used for construction. Generally, a needle should be fine enough to penetrate the fabric without damaging it and yet have an eye, which is big enough so that the thread does not fray or break. Needles come in various sizes, from very fine (size 9) for light weight fabrics to thick (size 18) for very heavy weight and dense fabrics.

NEEDLE SIZES AND PARTS

American	European	Fabric Weight
9	60	Lightweight, fine, chiffon, voile
10	70	Lightweight, silks, organza
11	75	Swim wear, fine cottons, lingerie
12	80	Cottons, lightweight woolen, polyester, velvets, General dressmaking
14	90	Wool crepes, coatings, heavier woolens, fleece, upholstery cottons
16	100	Thick denim, canvas, heavy brocade, heavyweight coatings
18	110	Upholstery, multilayers, heavyweight fabric
20	120	Heavyweights

Needle type

Needle Type	Fabric
Universal/multipurpose	Woven Fabrics, synthetics, knits
Embroidery	Machine embroidery, sewing with special or metallic threads
Ballpoint	Fleece, knits, double knits, stretch, ribbing, fake furs
Jeans	Heavyweight canvas, cottons, denim, tightly woven fabrics, faux suede and leathers
Leather	Leather, plastic, suede
Stretch	Two-way stretch fabrics, lycra, swimwear, lingerie, elastic
Quilting	Patchwork-quilting, multi layer
Twin	Works two layers of parallel stitching at the same time
Sharps micro fibers	Fine fabrics, silks, satins, voile, polyesters, micro fiber fabric


NEEDLE FRONT
shank
shaft
front groove
eye
point
NEEDLE BACK
NEEDLE SIDE
scarf
thread

Needle Points

Normal round point

Medium ball point

Slim set point

Heavy ball point

Stub point

Special ball point

Light ball point

Extra-heavy ball point

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (5).
2. Describe Needle Points? (3)

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 4 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (6).
2.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-8	Taking action on signs of faulty operation

2.8. Taking action on signs of faulty operation

Machine Problems Checklist

The Operator can often help himself/herself when the machine is not working properly. The following list shows solutions to common problems. Following the advice can many times save the time wasted waiting for the mechanic.

Problem	**Solution**
Upper thread keeps breaking	
Top thread tension is too tight	Loosen the tension by one turn
Machine is improperly threaded	Check for proper threading
Thread is not placed through tension rings	Check for proper threading
Thread is twisted in guide posts	Check for proper threading
Broken or bent tension spring	Inspect the action of spring
Thread is not placed through guides	Check for proper threading
Needle bent or burred	Try a new needle
Bad cone of thread	Try another con
Lower thread breaks	
Bobbin spring is too tight	Loosen tension
Bobbin is not threaded properly	Check proper threading
Bobbin is too tight or warped	Try another bobbin
Lint or threads in Bobbin case	Clean inside bobbin case
Lint or threads in hook	Clean inside hook
Warped bobbin case	Check bobbin case/Try another one
Skipped stitches	
Broken needle point	Try another needle
Needle is not located properly	Check needle placing
Thread is not place through guides	Check for proper threading

Thread is not place through tension rings	Check for proper threading

Irregular stitch formation

Knots on top	Tighten Bobbin tension or loosen upper (needle) tension
Knots on bottom	Tighten upper tension
Bobbin not placed properly	Replace bobbin
Bobbin thread slipped from under tension	Check for proper bobbin case threading
Lint or threads in top tension	Clean tension rings

Machine Adjustments

All the standard rates for operations are based on a machine that can do so many stitches per inch and can do them in a specified time. For this reason all machines for the same operation need to have the SPI's and RPM's adjusted to a specified value. Having machines adjusted differently will not be fair to the operators. A machine's SPI's need to be checked often as they change depending on fabric and number of plies and it is also easy for the operator to change. RPM's are not adjusted as often since they are a function of the pulley size and as long as the pulley is not changed the machine will remain within ±150 RPM. (although this may vary a little more depending on the belt)

Handling machine delays

To be able to control the company's costs it is necessary to identify them and identify the cause. For this reason the company keeps track of how much time the sewing machine delays the sewing time. This category is called Machine Delay (MD). During this time the operator is not able to work normally due to machine failure. For this reason the company will make sure he or she is not penalized in efficiency points.

To be able to manage this cost category more effectively we have a set procedure:

• The operator informs the supervisor that he/she is having trouble with the machine
• The supervisor checks the machine
• make any quick adjustments to the machine if possible
• Call the mechanic if necessary
• Take the employee to a temporary location either to another workstation where
• If this is not possible then

• to another area where he/she will wait for the machine and mark the production

• The mechanic repairs the machine

• The operator returns to his/her workstation

• The operator sews a specified number of garments in front of the mechanic

• If the machine is working properly then you mark the operator's production sheet and put him/her back on standard time

• The supervisor moves the work back from the temporary workstation

Other related considerations

• All workstations should be at (operator's) elbow level

• All machines should always be ready to start work:

• Threaded correctly

• Connected

• Covered

• Clean

• With Needle, bobbins, chairs and work-aids

• All work-aids should be as approved and in good condition (no exposed splinters, screws, nails).

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (5).
2. What To be able to manage this cost category more effectively we have a set procedure? (5)

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-9	Identifying and preparing other equipment

2.9. Identifying and preparing other equipment

Tape measure-A flexible 60-inch reversible tape used to take body measurements.
I8-inch dear plastic ruler-A 2-inch-wide ruler divided into i-inch grids. A clear ruler is perfect for measuring grain lines and adjusting the pattern at the alteration line. Available through C-thru Ruler Co.
Sewing gauge-A 6-inch gauge with a movable indicator used to measure areas that need a constant measurement such as hem widths, pleats, and tucks.
Clear plastic fashion ruler-A see-through plastic ruler made by Fashion tics, Ine. Its see-through curved lines allow you to adjust curved lines.
Hem marker-A device used to measure the distance from the floor to the bottom of a garment.
Straight pins-Stainless steel or brass silk or dressmaker pins with sharp tapering points that do not rust and are safe for use on all fabrics.
Hand sewing needles-A long, thin steel shaft with an eye at one end. Needles are available in a variety of sizes and types. It is a good idea to purchase a packet of assorted needles. Between needles-These needles are used to sew short, fine stitches for tailoring and hand work. Crewel needles-These needles have long oval eyes and can accommodate multiple strands of thread.
Thimble-A lightweight metal (brass or nickel) device with a closed top that snugly fits the middle finger of your sewing hand. It protects the finger as it pushes the needle through the fabric while hand sewing.
Pin cushion or pin dispenser-A sewing tool that keeps pins organized in a convenient place.
The most common pin cushion is in the shape of a tomato. However, there are other types and sizes available. Choose a pin cushion that would be easiest to use.
Emery cushion-A small bag filled with an abrasive material used to remove rust and sharpen needles.
Chalk pencils-Pencils available in pastel colors that are used to transfer markings from the pattern to the fabric. Markings are made on the wrong side of the fabric and do not show on

the correct side; they are washable.

Loop turner-A device used to turn bias tubing or belts.

Safety pins-Pins used for stringing cording or elastic, or for turning wider tubing.

Tracing paper-A washable, inked double coated paper, available in a variety of colors. You slip the paper between the wrong sides of two layers of fabric, and use a tracing wheel to transfer pattern markings to the fabric.

Tracing wheel-A serrated-edge circular wheel with a handle used with or without tracing paper to transfer markings from a pattern to fabric. The wheel portion must be sharp enough to leave an impression, but smooth so it will not snag the fabric.

Tailor's chalk-Washable chalk used to mark fabric at hemlines and other construction lines. Depending on the fabric, garments should be sewn with thread that exactly matches in color.

Spun polyester thread-A very strong thread that has give and should be used for stretch fabrics and wool fabrics.

Buttonhole twist-A thread that is made of polyester or silk and is used for top stitching, for hand-stitching buttonholes, and for sewing on buttons.

Quilting thread-A lustrous, strong thread made of pure cotton or cotton-wrapped polyester.

Scissors and shears-Shears are usually 4 to 8 inches long and made of steel; one handle on a pair of shears is larger than the other. Bent handled shears are excellent for easy and correct cutting. Scissors are usually smaller than shears, approximately 3 to 6 inches;

Buttonhole scissors-Small cutting scissors especially designed to cut buttonholes.

Pinking shears-Shears that cut a zigzag edge to
prevent fabric from fraying and to create a decorative edge on the seams.

Seam ripper-A small pointed device with a sharp blade. The point helps the sewer to pick up the unwanted stitches, and the blade cuts seam stitches and helps open seams.

Thread nippers-A specially designed nipper that is useful for cutting stray threads and clipping small areas.

Trimming scissors-Scissors that are usually 4 to 6 inches long, with sharp points, and used for clipping threads and trimming or clipping seams.

Ironing board-A sturdy surface with a narrow end; it is adjustable to various heights.
It should have a clean, finished surface, and is usually covered with an asbestos or a cotton ironing board cover.

Iron (steam and dry)-A steam and dry iron with a wide range of temperature controls, which is the most effective tool for pressing the many varieties of fashion fabrics.

Needle board-A small rectangular board covered with wire needles. This board is used while pressing napped or pile fabric such as velvet and corduroy. The needles prevent the pile

from matting.

Seam and seam roll-A small cylindrical, long, firmly padded cushion, covered with heavy cotton on one side and wool on the other. This tool is used to press long narrow seams in hard-to reach areas such as sleeve seams. The cotton side is used to press most fabrics and the wool side to press woolens.

Sleeve board-A small padded ironing board with different-sized ends. This board sits on top of a regular ironing board and is used to press sleeves and other small areas.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (6).
2.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Basic apparel production

Level-I

Learning Guide -43

Unit of Competence: - Produce Simple Garments

Module Title: **-** Producing Simple Garments

LG Code: IND BAP1M12 LO1-LG-41 TTLM

TTLM Code: IND BAP1 M12 0919v1

LO3. Assemble garment components

Instruction Sheet	Learning Guide #-

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Selecting pattern
- OHS practices
- Sewing operations
- Controlling machine speed
- Checking garment

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, **you will be able to –**

- Components are sewn according to OHS practices, garment requirements and accepted quality standards.
- Machine speed and work handling are controlled for type of ***sewing operations,*** fabrics and garment complexity.
- Checked garment for correct fit and assembly quality

Learning Instructions:

- Read the specific objectives of this Learning Guide.
- Follow the instructions described in number 3 to 20.
- Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
- Accomplish the “Self-check 1” **in page -.**
- Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
- If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.
- Submit your accomplished Self-check. This will form part of your training portfolio.

LO3. Assemble garment components

Information Sheet-1	OHS practices

3.1. OHS practices

OHS/OCCUPATIONAL HEALTH AND SAFETY/PRACTICE

It is the kind of job a person performed at his/her place of work. This jobs are describes in many ways. Some are pattern making, sewing, finishing etc…

OHS primarily seeks to maintain the working ability of the labor force as well as identify asses and prevent hazards within the working environment.

Ergonomics:-on the other hand combines all of these issues to improve workers efficiency and wellbeing and maintain industrial production through the design of an improvement work place.

OHS and Ergonomics application therefore work together to satisfy the needs of changing local people's attitudes, local work methods and/or traditional ways of doing things.

These issues are important for many developing countries, because the effect of poor health and lack of safety facilities and non-ergonomic conditions exists in various work place are hindrance/obstacle/to the national economy and social progress. Since implementing the full concept of OHS and Ergonomics application is a priority, understanding the meaning of the term related to OHS and Ergonomics applications are a major source of work place improvement

- **SAFETY PROCEDURE**

Protective equipment, including personal protective equipment/PPE/for ears, eyes, face, head and extremities, protective clothing, respiratory devices and protective shields and barriers, shall be provided, used inspected and maintained in a sanitary and reliable condition wherever it is necessary . By reason of protecting in a manner capable of causing injury or impairment in the faction of any part of the body through absorption, inhalation or physical contact.

Defective or damage personal protective equipment shall not be used. It shall be tagged, **DEFECTIVE DONOT USE''** or **''DAMAGED DO NOT USE''** and required manufacturer specification or disposed to prevent future use.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. DESCRIBE e OHS/OCCUPATIONAL HEALTH AND SAFETY/PRACTICE? (5).
2. WRITE SAFETY PROCEDURE? (3)
3.

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 4 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-2	Sewing operations

3.2. Sewing operations

Before starting on the machine

• Check the type of thread being used and check for proper threading

• Adequate thread and needle type for the operation

• Thread cone is placed properly (even level) over holder

• Thread guides don't produce any unusual friction to thread

• Guides threaded correctly

• All tensioning plates threaded correctly

• All needles/bobbins/loopers are threaded properly

• Needle point is not broken

Watch the machine and evaluate its operation

• Silently softly and firmly at the maximum RPM's

• Noisy, violently, vibrating at slow or high speeds

• Belts appropriately placed on machine pulley or motor pulley

• Belt tension is too tight or too loose

• Thread stuck on pulleys or belts

• Belt is broken or worn-out

• Belt is soaking in oil

• Machine or motor pulley is loose or damaged

Check lubrication

• Check oil gauges

• Check for leaks

Observe the operator's position when sewing

• Is the table's height appropriate (at elbow level)?

• Are the pedals in the right position?

Check the motor adjustments

• Clutch adjustments

• Pedal movement doesn't engage machine

• Machine engages too easily and abruptly (too little movement of the pedal

Before opening the machine:

• Verify that the needle is:

• Located properly

• Not bent

• Not broken (specially the tip)

• Not too sharp around the tip and eyelet

• Appropriate type for the thread and fabric being used

• Check the machine for appropriate threading

• Thread guides

• Thread pullers

• Tensioners

• Needles

• Loopers

• Spreaders

• Clean all thread and oil from the sewing area

• Check the appropriate movement of the needle

• Check the presser foot, throat plate and feeders to see if they are working correctly

• Check if the minor adjustments have improved the sewing problem

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Sewing operations? (6).
2.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-4	Checking garment

The garment should look attractive, even and appro priate, both on and off the body.
The garment fit should be becoming and reflect current fashion trends. Construction techniques should not be obvious nor distract from the total
garment.
Fabric, trim and construction techniques must work to-gether to create a professional looking garment.
The fabric should have the correct weight and drape for the design.
Finishing details should complement the fabric and the garment.
The garment should look attractive, even and appropriate, both on and off the body.
The garment fit should be becoming and reflect current fashion trends.
Construction techniques should not be obvious nor distract from the total
garment.

characteristics, style and coloring of the individual.

- Coordinate with one another in terms of design, color, weight and texture.
- Have a fiber content and texture suited to apparel design.
- Have a design that is matched, centered or balanced.
- Be used so that the nap runs in the same direction on all parts of a garment

Have proper waistline length and fit.

- Have darts and design details that are properly placed.
- Have neckline and armholes that fit the body without gapping or straining.

Buttons and Buttonholes

Well-constructed buttons should:

- Fit the purpose to which they are intended—
  functional or decorative.
- Be neat in appearance on the right and wrong sides of the garment.
- Be securely fastened with double thread and neat stitches.
- Be reinforced, according to use and fabric type, with interfacing and/or another button.
- Be spaced in good proportion between top and bottom opening.

- Be the appropriate size and style for the garment design and fabric.
- Sized in relation to the button size and thickness.

- The same length and width when the same size/shape button has been used.

Collar

- Be smooth and free from wrinkles.

  The outer edge seam should not be visible from the right side.
- Have smooth curves or sharp points (shape and length) depending on the type and style of collar.
- Have bulk properly distributed through grading/layering, notching, clipping and/or triming
- Fit the neckline area without unsightly gaps or wrinkles.
- Be interfaced properly to maintain shape.
- Be understitched on the outer seam edge to roll under the seam.
- Be well pressed.

Darts, Ease, Gathers, Pleats, Shirring,
Tucks

A well-constructed fitting dart should:

- Be directed toward the body curve.
- Usually end ½ to 1 inch from the fullest part of the body curve.
- Be tapered so it is smooth and free of puckers.
- Be even and smooth in appearance.
- Be pressed before being crossed by another line of stitching.
- Have threads secured at both ends by tying a knot, lock stitching or back-stitching (use only on medium to heavy fabric or in a seam line).

Waistband

A well-constructed waistband should:

• Be smooth, flat, and free from bulk and wrinkles.

• Be even in width according to the garment style.

• Be on-grain and reinforced or interfaced to maintain shape.

• Have under lap under the waistband and extend beyond the placket unless the pattern indicates differently; overlap should be even with the placket unless the pattern indicates differently.

• Have square corners at the ends of the waistband.

• Be securely stitched with smooth, even stitching.
• Have appropriate fasteners that are properly located and secured in place.

Sleeves

A well-constructed and correctly fitted set-in sleeve should:

• Have a smooth, rounded cap with no pleats or gathers unless they are a garment design feature.
• Be applied so that there is ease in the underarm area and in the sleeve cap area.
• Have a good armhole line resulting from straight, even stitching, and well-matched seam lines that conform to the body.
• Have a crosswise grain parallel to the floor, a lengthwise grain perpendicular to the floor, and no diagonal wrinkles.
• Have evenly distributed gathers in gathered set-in sleeves.
• Have seams finished appropriately for the fabric.

Hems

A well-made hem should:

• Be inconspicuous on the right side, except when it is a decorative part of the garment design.
• Be an appropriate distance from the floor.
• Be even in width and an appropriate depth for the fabric and garment design.
• Be free from bulk in seams that fall within the hem area.
• Have fullness eased in and evenly distributed for a smooth, flat appearance.
• Have an edge appropriately finished for the type and weight of fabric an

Hand Stitching

A well-made hand stitch will:

• Be composed of a thread type, weight/thickness and color suitable to the situation for which it is used**.**

Buttonhole twist is used for hand-worked buttonholes and can be used for sewing on buttons and for top stitching**.**

Heavier and decorative threads, such as embroidery and metallic, can be used for decorative stitching.

Use the same color, or slightly darker, when permanently stitching.

• Have a uniform stitch formation that is appropriate to the fabric and garment for which it is used.

• Have thread ends appropriately secured at the beginning and ending of the stitching. If a knot is used in permanent stitching, it should be out of sight against an inside layer of fabric.

Pressing

A well-pressed garment should:

• Maintain the original texture of the fabric.

• Show no shine or press marks on the right side of the fabric.

• Have no wrinkles or crinkled areas.

• Have seams and darts pressed smoothly on the stitching line, so that the fabric does not fold over the stitching line or look bubbled.

Edges of seam allowances and fold edges of darts do not form ridges on the right side of the garment.

• Have no water-spot or steam marks.

• Help create and maintain the proper shape and curve to the garment and the various garment segments (collar, sleeve, etc.).

Seams, Seam Finishes, Seam Treatments

A well-constructed seam should:

• Be smooth and even in appearance on the inside and outside of garment. Machine tension, stitch length and presser foot pressure are properly adjusted to suit the fabric and thread.

• Be pressed open (and with no puckers) or pressed properly according to the type of seam it is and the way it is used in garment construction.

• Be stitched with thread appropriate to the fabric type, fabric content and color. (Thread color should match or be slightly darker than the fabric.)

• Have consistent stitch length.

• Be flat and trimmed and/or graded, if needed, to reduce bulk.

• Match fabric designs such as plaids and stripes

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write characteristics checking opration? (5).
2. Write Checking garment? (3)

Note: **Satisfactory rating - 4 points** **Unsatisfactory - below 4 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Operation sheet	MAKING A BASIC SKIRT

UNIT: PRODUCE SIMPLE GARMENTS

READING: Iowa Home Economics Association. Unit Method of Clothing Construction, pp.101-106

LABORATORY WORK:

Supplies and Materials:

Qty	Unit	Description
1	lot	Skirt components
1	piece	Zipper, 8”
1	pair	Hook & eye
1	spool	Thread

Tools and Equipment:

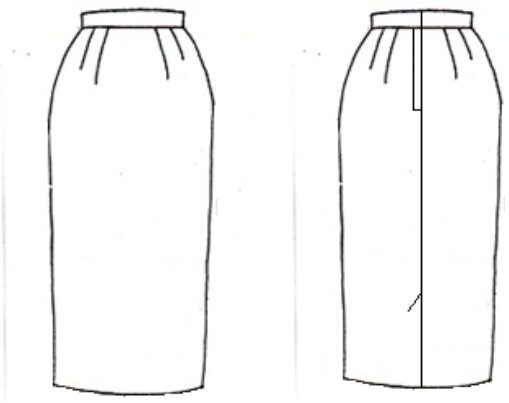
Qty	Unit	Description
1	unit	Lockstitch sewing machine
1	unit	Overlock sewing machine
1	unit	Pressing equipment
1	piece	Hand needle
1	pair	Scissors
1	piece	Tapemeasure

Job Specifications/Dimensions:

Straight-cut fitted skirt with conventional zipper placket and overlap slit/opening at center back. Hem is finished by hand stitches.

Measurement is as follows:
Waist = 26 inches
Hips = 36 inches
Length = 19 inches

Front **Back**



the

Procedure:

	Observation/ Demonstration	
	Yes	**No**
1. Overlock front and back skirt panel except waistline		
2. Sew darts.		
3. Join back skirt panel at the center back seam from the end of the zipper position down to the top of the slit opening.		
4. Attach zipper (conventional Zipper Placket)		
5. Make the overlap slit opening		
6. Join front and back skirt panel. Sew side seams		
7. Prepare waistband. Press		
8. Staystitch waistline then attach waistband. Press		
9. Attach hook and eye on the waistband		
10. Hem skit		
11. Press skirt		

Safety Precautions:

Make sure not to stitch directly on the metal bottom stop of the zipper when making the zipper placket for the needle may break.

EVALUATION:

1. Measurements like waist, hips and length are according to job specifications.
2. Seams are straight and/or smoothly curve as required.
3. Darts are correctly sewn with no bubbles at the tips.
4. Zipper is flat and secured.
5. Waistband is attached properly without twisting and even in width from end to end.
6. Hemline is even with inconspicuous hem-stitching.

Skirt is press, clean and free of unnecessary marks

Operation sheet	MAKING A BASIC SHIRT

UNIT: PRODUCE SIMPLE GARMENTS

READING: Iowa Home Economics Association. Unit Method of Clothing Construction, pp.101-106

LABORATORY WORK:

Supplies and Materials:

Qty	Unit	Description
1	lot	Shirt components
1	piece	Buttonhole
1	pair	Hook & eye
1	spool	Thread

Tools and Equipment:

Qty	Unit	Description
1	unit	Lockstitch sewing machine
1	unit	Overlock sewing machine
1	unit	Pressing equipment
1	piece	Hand needle
1	pair	Scissors
1	piece	Tapemeasure

Operation sheet	MAKING A BASIC SHIRT

UNIT: PRODUCE SIMPLE GARMENTS

READING: Iowa Home Economics Association. Unit Method of Clothing Construction, pp.101-106

LABORATORY WORK:

Operation Breakdown

Element description	Observing time(min)
Facing preparation	2.52
Attaching shoulder	0.833
Sleeve attaching	4.86
Closed side seam	2.4
Collar preparation	1.2
Turn and iron	0.5
Top stitch	2.09
Attaching collar with man panel	1.21
Top stitch	1.1
Bottom Heming	2.57
Button hole preparation	15
Attaching button	12

Pressing	3.5

Basic apparel production

Level-I

Learning Guide -44

Unit of Competence: - Produce Simple Garments

Module Title: - Producing Simple Garments

LG Code: IND BAP1M12 LO1-LG-41 TTLM

TTLM Code: IND BAP1 M12 0919v1

LO4. Complete work

Instruction Sheet	Learning Guide #-

This learning guide is developed to provide you the necessary information regarding the following **content coverage** and topics –

- Selecting pattern
- Undertaking any required hand sewing
- Inspecting sewn garment
- Identifying any faults
- Pressing garment

This guide will also assist you to attain the learning outcome stated in the cover page. Specifically, upon completion of this Learning Guide, **you will be able to –**

- Any required ***hand sewing*** is undertaken according to pattern requirements and accepted standards of sewing quality.
- Sewn garment is inspected, any faults identified and appropriate action taken to ensure it meets quality standards and pattern requirements.
- Pressed garment is according to fabric requirements and garment construction details.

Learning Instructions:

- Read the specific objectives of this Learning Guide.
- Follow the instructions described in number 3 to 20.
- Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
- Accomplish the “Self-check 1” **in page -.**
- Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-check 1).
- If you earned a satisfactory evaluation proceed to “Information Sheet 2”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity #1.

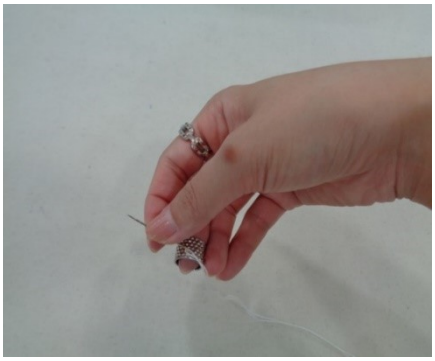
- Submit your accomplished Self-check. This will form part of your training portfolio.

Information Sheet-1	Undertaking any required hand sewing

Undertaking any required hand sewing

1. Using a Thimble

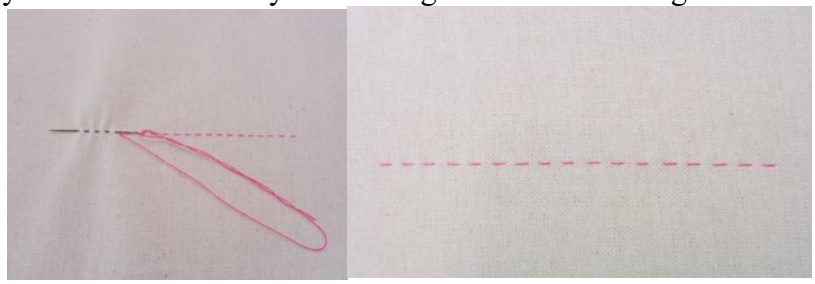
A thimble protects your finger from being pricking as you push the needle through layers of fabric. Choose a thimble those comfortable feet's the middle finger on the hand you use during hand sewing. It is made of metal or plastic.



- Place the thimble on the middle finger of your right hand if you're right handed and vice versa if you're a lefty.
- Hold your needle between your thumb and index finger.
- Insert the needle into the fabric and push it through with the side or end of the thimble

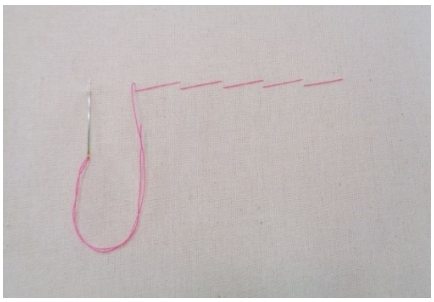
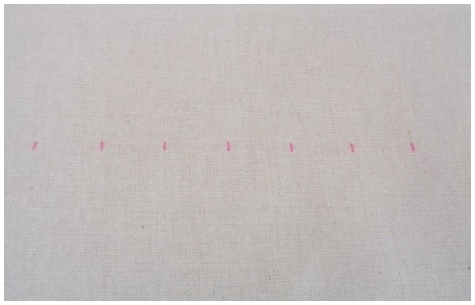
2. Running stitch

Running stitch is the simplest, quickest and most basic of all the hand stitches and is used to ease, gather, mend, baste and sew seams that are not subject to strain. It's used for basting because the stitches are easy to remove after they are no longer needed. Running



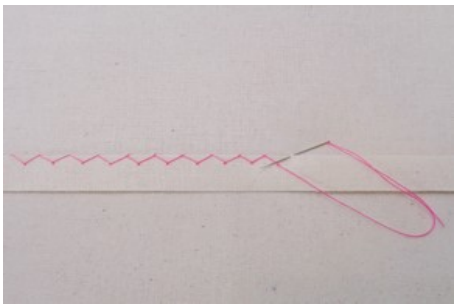
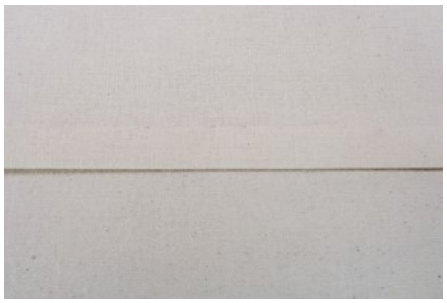
3. **Diagonal Basting**

Diagonal basting is a series of parallel, horizontal stitches that produce diagonal floats of thread on the top layer of fabric. This stitch is most often used in tailoring to hold fabric layers together (not along a stitching line). The stiches control the shifting of fabric during pressing, fitting and construction. Diagonal basting is perfect for holding a pocket in place, so it doesn't shift during stitching.

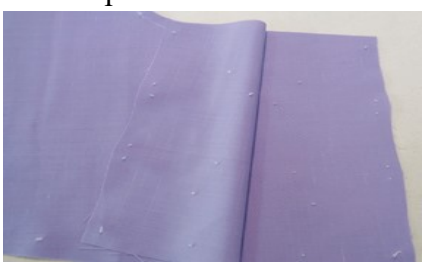
4. **Catch stitch**

Herringbone tends to be a decorative, rather than a structural, stitch. Think of it as doing two parallel row of backstitch where you alternate which row youre sewing with each stitch. Is very elastic. The working surface shows a zig-zag with an X at each point. The underside shows two parallel dashed lines.

5. **Tailor tack**

Tacks are hand-sewing stitches done during marking or construction. Weave loop thread to mark dots and symbols, but you must cut the loops before you remove the pattern. A basting stitch taken with a double thread through two pieces of fabric and then cut apart with large loops being left in each piece for marking seam lines and perforations.

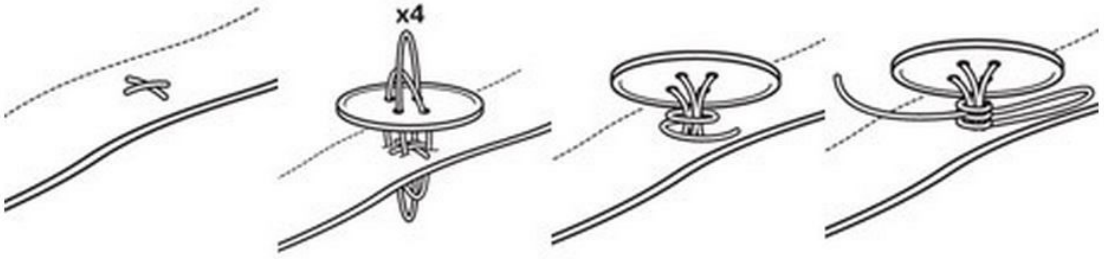
Buttons can be fascinating, functional, and fashionable. They are fascinating because of their many sizes, shapes, colors, and designs. They are factional because they are one of the major methods of opening and closing garments. Buttons are fashionable because they also decorate and enhance apparel &other items. Buttons are generally sewn on by hand, though they can also be zigzagged in place on the machine as well. Buttons are traditionally placed

2 Button

There are two basic kinds of buttons- sewing –thru buttons and shank buttons. Thru button

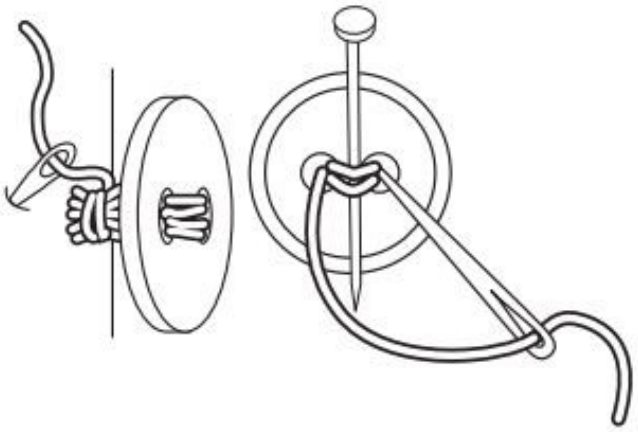
Is usually fiat with two or four hole. A shank button has a solid top and a built-in shank.

Hole Button

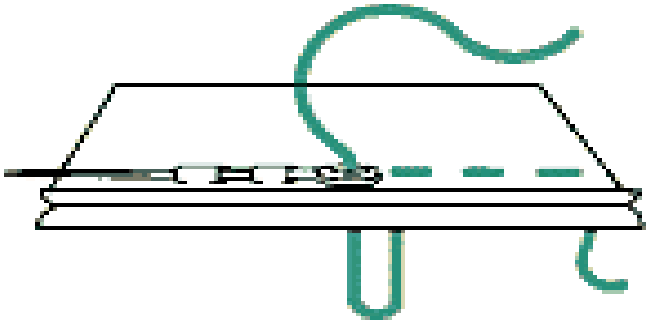


1 Take twelve inches of thread, knotted securely at one end, and thread your needle. Make a single s titch in the shirt in line with the row of buttons, about 0.3cm long. And then make another stitch p erpendicular to the first.
2 Hold the buttons, about 0.3cm away from the shirt and thread the needle up through one hole in t he button and down the diagonally opposite hole. Do the same with the other holes and then repe at four times.
3 Wrap the thread tightly around the 0.3cm shank that has been created between the button and the cloth create a tight pillar.
4 Push the needle through this pillar a few times and cut the thread close to it.
5 Button up.

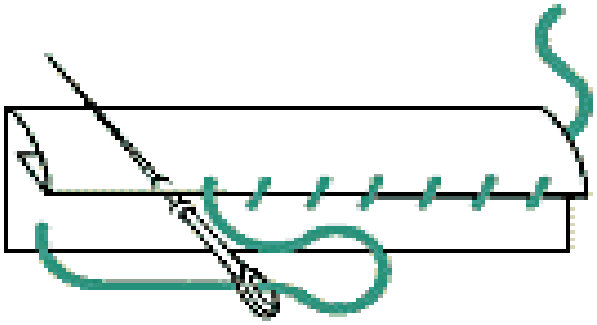
Hole Button



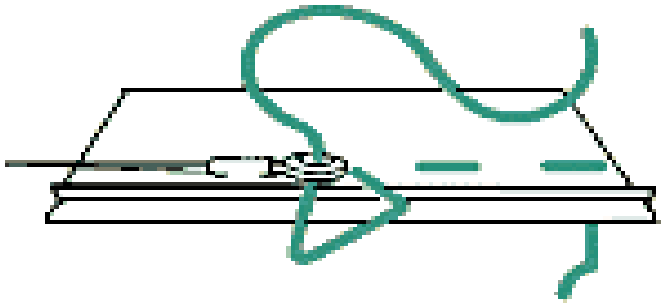
- Thread needle with to match button. Take a small stitch where button is to be placed. Poke nee dle through button hole holed button in place over small stitch.
- Place straight pin across top of holes. Sew with thread going over top of pin and down in opp osite hole. Do this at least 6 times.
- Remove pin
- Poke needle so thread comes out under button, but on top of fabric so you can TIGHTLY wr ap threads around the middle of the stitches 4 times. This creates a thread shank
- Poke needle to back of fabric. Stitch in place3 times to make a secure knot. Trim thread.



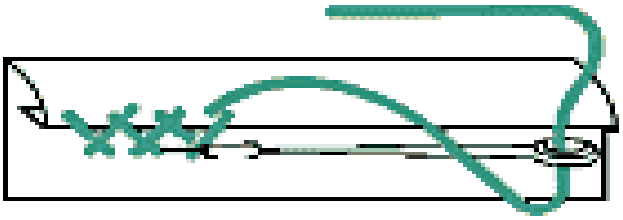
running stitch



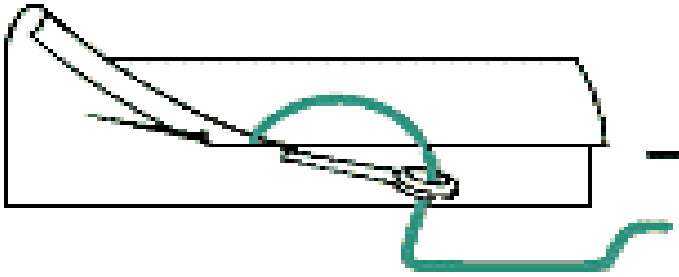
hemming stitch



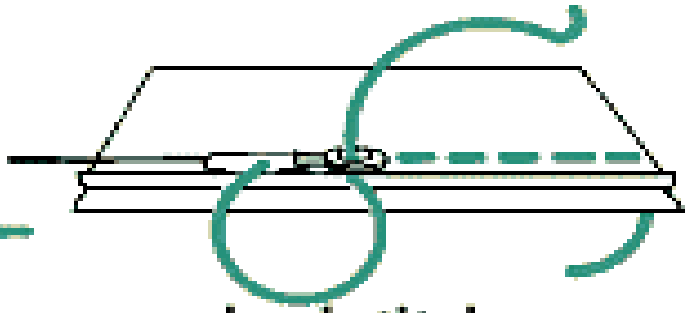
basting stitch



catch stitch

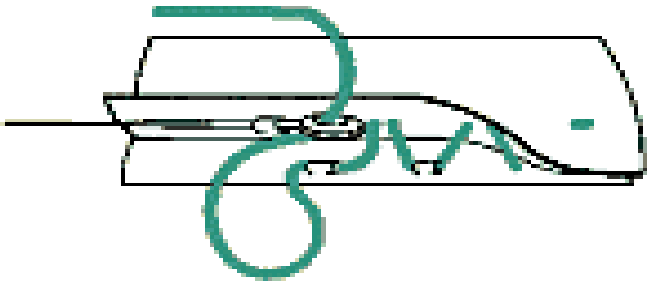


slip stitch



backstitch

overcast stitch



invisible stitch

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (5).
2. Describe stitch types? (5)

Note: **Satisfactory rating - 5 points** **Unsatisfactory - below 5 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions

Information Sheet-2	Inspecting sewn garment

- The various Steps of Garments manufacturing where in-process inspection and quality control
- Quality may be defined as the level of acceptance of goods or services. are done are

- In Sample making section
- In- Marker making section
- Inspection in fabric spreading section
- Inspection in fabric cutting section
- Inspection in fabric sewn section

Inspection in pressing & finishing section

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write inspecting sewn garment? (4).

Note: **Satisfactory rating – 2 points** **Unsatisfactory - below 2 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

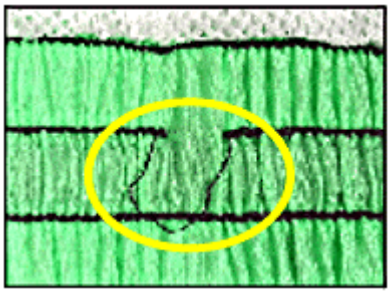
Short Answer Questions

Information Sheet-3	Identifying any faults

1. Puckering
2. Seam grin
3. Seam slippage
4. Skipped stitches
5. Unbalanced stitches
6. Uneven SPI

Skipped Stitches /Broken / Drop

DESCRIPTION: Where the stitch length is inconsistent, possibly appearing as double the normal stitch length; or where you can see that the threads in the stitch are not properly connected together



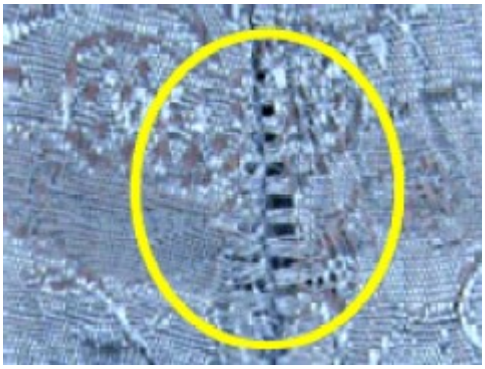
Causes	Solutions
Failure of hook, looper, or needle to enter the thread loop at correct time	➢ Check machines clearances and timing. ➢ Check needle is inserted and aligned correctly ➢ Use needle with deeper scarf.
Thread loop failure	➢ Change needle size/style ➢ Check thread take-up and check loop formation

Flagging of fabric due to poor presser foot control or too large a throat plate hole	➢ **Adjust presser foot pressure** ➢ **Change throat plate to match needle**
Needle deflections or bent needles	➢ **Use a reinforced needle** ➢ **Check needle clearance and reset needle guard**
Incorrect sewing tension in needle or under thread	➢ **Adjust thread tension**
Poor loop formation	➢ **Check loop formation** ➢ **Verify thread selection** ➢ **Check thread twist and thickness**

Skipped Stitches /Broken / Drop

Seam Slippage

DESCRIPTION: Where the yarns in the fabric pull out of the seam from the edge. This often occurs on fabrics constructed of continuous filament yarns that are very smooth and have a slick surface. Also caused by loosely constructed fabrics.



Seam Slippage

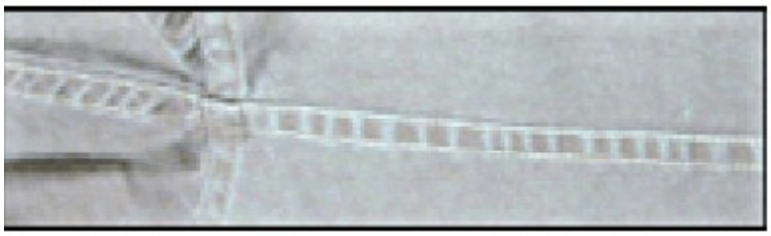
A fabric related issue.

- Happens mainly when:
  - Fabrics are with low no. of warp & weft yarns.
  - The fabric on either side of the seam distorts as the fabric yarns slide away resulting in a permanent gap.
- Corrective Actions
  - Increase seam allowance
  - Use a higher stitch density
  - Opt for a lapped fell seam

Seam Puckering

Undesirable uneven surface or gathering of fabric on a garment.

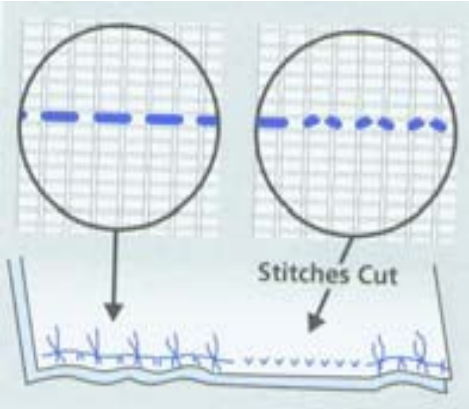
- Tension pucker
- Feed pucker
- Shrinkage pucker
- Inherent pucker
- Fabric flagging



Tension Pucker

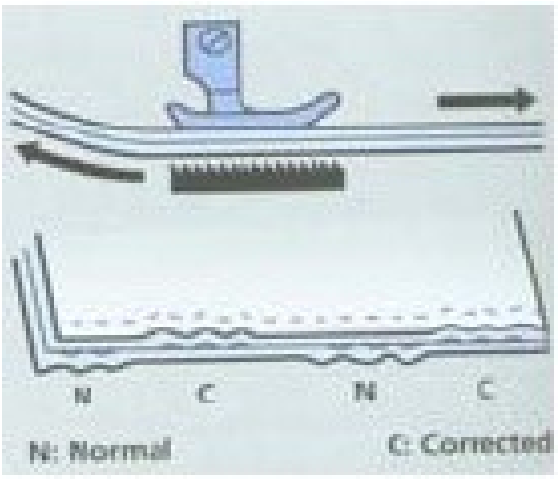
- Caused by high thread tension during sewing.
- More pronounced when synthetic threads are used.
- These threads on account of high stretch properties elongate more during sewing.
- After sewing the threads recover from the stretched

state pulling the fabric with it.



Feed Pucker

- Encountered when sewing very fine fabrics.
- The plies of fabric tend to slip over each other resulting in uneven feed leading to pucker.

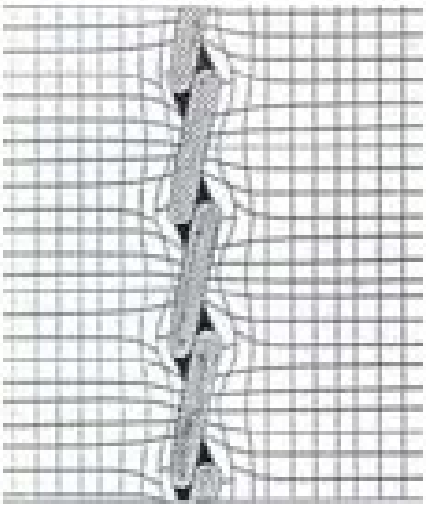


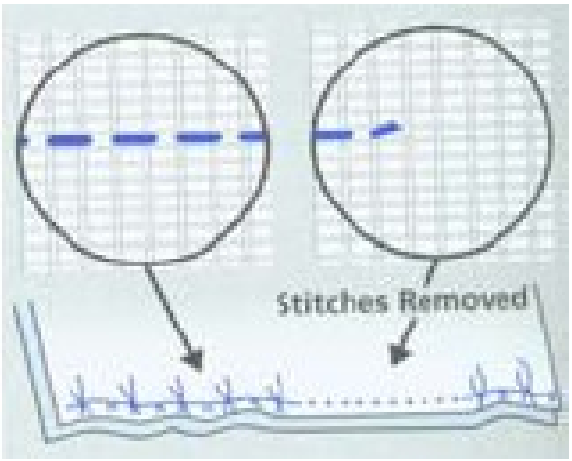
Shrinkage Pucker

- Wash pucker - during the wash process the thread in the seam shrinks, pulling the fabric with it.
- Ironing pucker - normally happens when synthetic threads are used. The heat destabilizes the molecular structure of the thread causing it to contract.

Inherent Pucker

- Normally seen when sewing densely woven materials.
- This occurs because the needle forcibly displaces the Warp & weft ends of the dense weave to a significant extent.
- These displaced ends are pushed upwards to the surface of the fabric and appear as pucker.

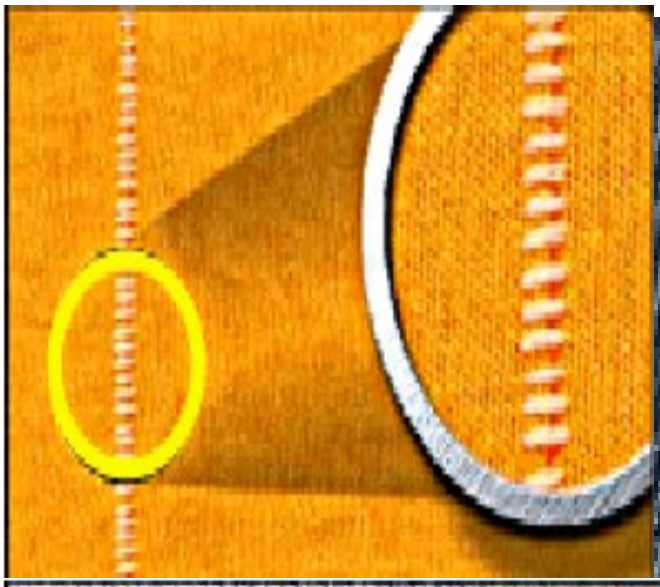


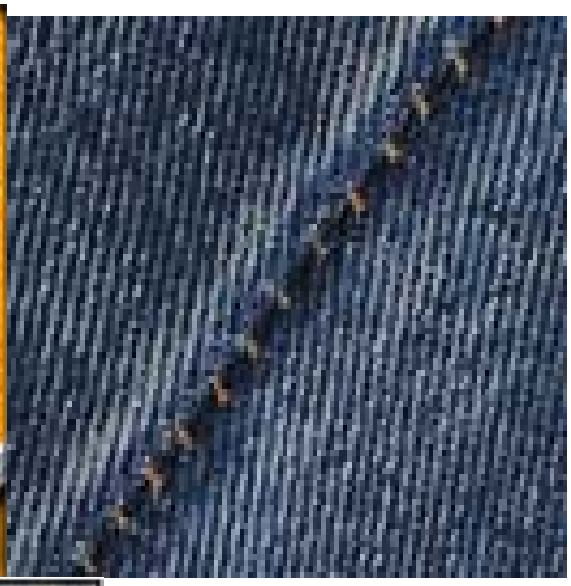


Seam Grin

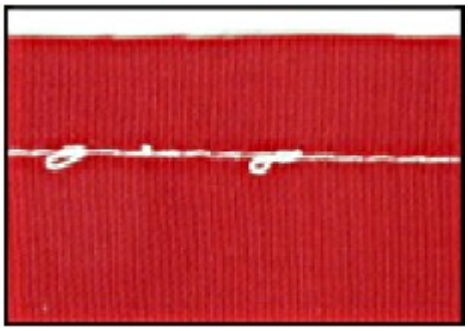
- When two pieces of fabric are pulled at right angles to the seam, a gap is revealed between the two pieces of fabric revealing the thread in this gap
- Corrective actions
  - Increase stitching tensions

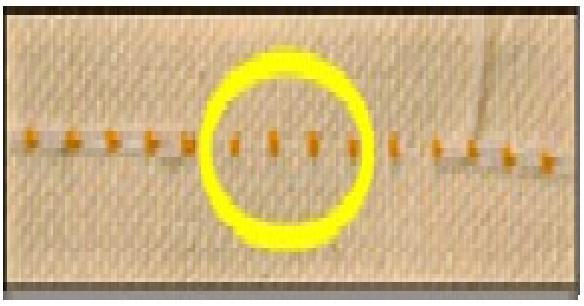
- Use a higher stitch rating





. Unbalanced or Variable stitches





Overrun Stitch

- Overrun stitch is any stitching on a seam or hem that has overrun into the garment, or into an area that is not supposed to be stitched.

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (6).
2.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

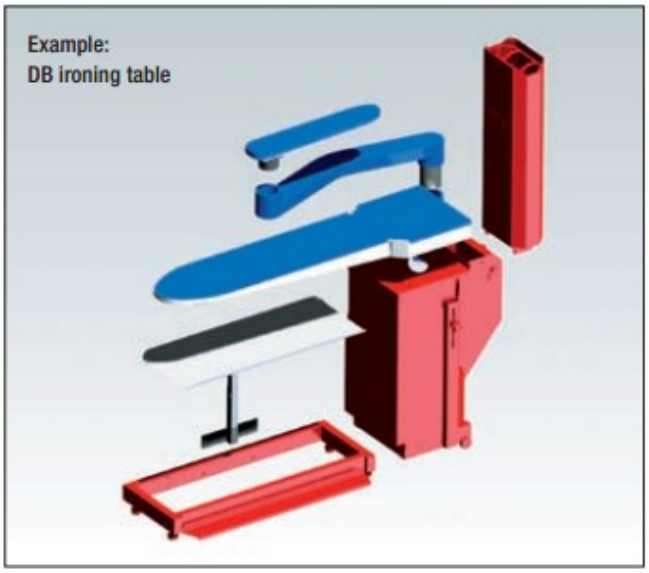
Short Answer Questions

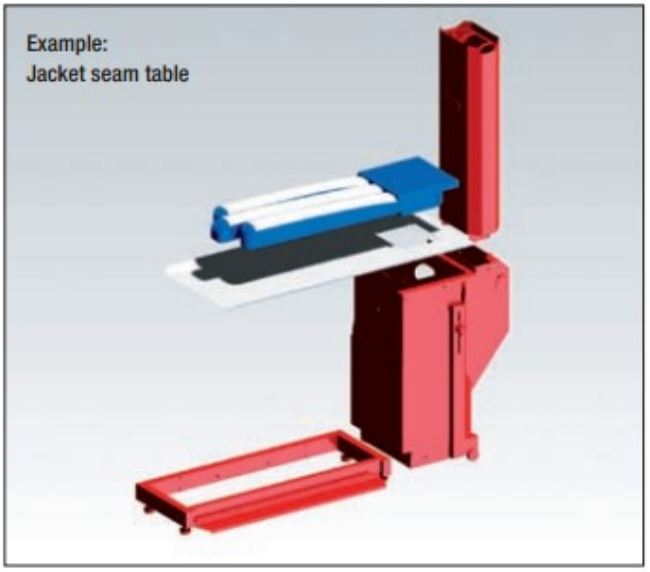
Information Sheet-4	Pressing garment

4.1. Pressing garment

Good pressing is different from ironing. Most pressing should be done by lowering and lifting the iron
rather than moving it over the cloth as you do when ironing. This “lower and lift” motion applies pressure where
needed and helps to avoid stretching the fabric. Almost
all pressing is done from the wrong side of the fabric.
When pressing is done on the right side of the fabric,
always use a press cloth or a special iron attachment to
prevent fabric shininess.

The Building Block System of VEIT Ironing Tables





Selecting Pressing Temperature

The correct iron temperature depends on the garment Fabric its fiber content and finish.

An easy way to check the most effective temperature is to press a scrap of the fabric before using the iron on the garment. Compare the pressed surface of the scrap with the UN pressed fabric. Too much heat, steam or pressure may dull or flatten the fabric surface.

The temperature setting guide on most irons indicates the heat setting suitable for a variety of fabrics.

Set the iron according to the chart for best results.

Then follow these general pressing suggestions for popular fabrics:

Acetate—Use a press cloth when using steam. Place paper under seam allowances and darts to prevent imprints.

Blends—set the iron according to the fiber requiring lowest temperature. Press on wrong side or use press cloth on right side.

Cotton—Press on either side with steam or after fabric is dampened with sponge or by sprinkling. If fabric shine occurs, use a press cloth.

Linen—highest setting on iron is used along with dampened press cloth or steam. Press on wrong side to prevent shine.

Polyester—Press on wrong side or with press cloth. Use steam and dampened press cloth to smooth seams and set creases.

Rayon—Use a moderately warm iron with press cloth; do not use steam directly on the fabric.

Silk—for sheer fabric, use dry iron only; for heavier fabric, use light steam and press cloth.

Wool—Iron should not be placed directly on fabric; use steam and press cloth. A damp press cloth may be used to help shrink out ease in sleeve cap, curved seams and hem edges.

- Garment finishing can be used for various applications, like shirts, trousers or t-shirts, but majority of the effects are most popular for casual wear and denim.
- It makes garments attractive, comfortable & finishing can incorporate desirable properties. (wet finishing process)

Spot Removal

- Spot removing is one of the special inspections which are done after initial quality check.

Process flow of Garment Finishing

Finishing input (style, color & size wise)

↓

Initial quality check

↓

Spot Removing

↓

Ironing/Pressing

↓

Inspection

↓

Hang tag

↓

Bar code (buyer wise sticker)

↓

Metal check

↓

Folding

↓

Poly

↓

Cartooning/Packaging

↓

Final Inspection by buyer

Pressing/Ironing

- Pressing is a finishing process done by a cloth to heat and pressure with or without steam to remove creases and to impart a flat appearance to the cloth or garments.
- After completing pressing the garments have to be folded.

Folding

- After completing pressing, the garments are folded with a predetermine area. Garments are folded according to the buyer's direction, requirements in a standard area.

Packing

- After folding, garments are packed in the polythene packets. Specially, it is needed to ensure the placement of sticker in proper place.

Barcode

- Barcode is a specially Buyer wise sticker.

Assortment

- After completing the packing of garments, the garments are placed in a predetermined pack according to the size and color. This process is called assortment.

Metal Check

- Checking the metal type component into the garments or with its accessories like button, zipper etc. is called metal check.

Cartooning

- At last cartooning or packing the garments according to Buyer comment.
- The process of packing of inner boxes entered into the carton is called cartooning.

The cartoon is properly warped by the scotch tape. Some information like carton box no, size, shipping mark and the destination are printed on the carton

Final Inspection

- Final inspection is made by buyer. He checks the garments according some rules like AQL (Acceptance quality level).

Self-Check -2	Written Test

Directions: Answer all the questions listed below. Use the Answer sheet provided in the next page:

1. Write Laying out and pinning or tacking pattern Pieces steps? (5).
2.

Note: **Satisfactory rating - 3 points** **Unsatisfactory - below 3 points**

Answer Sheet

Score = _____

Rating: _____

Name: _____ Date: _____

Short Answer Questions