

Fashion design

Level-II

Based on March 2022, Curriculum Version 1



Module Title: - Developing and applying embellishment on garment

Module code: IND FAD2 M10 0322

Nominal duration: 40 Hour

Prepared by: Ministry of Labor and Skill

August, 2022

Addis Ababa, Ethiopia

Table of Content

Table of Content	1
Acknowledgment	3
Introduction to the Module	4
Unit one: Interpreting design brief or specifications	5
1.1. Identifying type of embellishment required for garment.	8
1.1.2 Different Types of Embellishment Techniques:	8
1.1.3. Fabric Surface Embellishment.....	9
1.2 Identifying methods of embellishing by hand or machine.	9
1.2.1 Fabric Surface Embellishment Techniques:	9
1.3 Identifying type of embroidery required.....	15
1.4.1 Main points of embroidery file review in machine	18
1.5. Identifying methods of embroidery by hand	19
1.5.1. Tools of hand embroidery.....	20
1.6. Identifying criteria for selection of threads	22
Self-Check -1	26
Operation sheet-1	27
Lap test -1.....	29
Unit Two: Preparing work pieces and workstation	30
2.1. Laying out work pieces.	31
2.2. Setting up equipment and materials	32
2.2.1 Embroidery Tools	32
2.2.2. Embroidery Materials	33
2.3. Performing routine minor maintenance.....	34
2.4. Reporting and recording any problems	35
Self-Check -2.....	36
Operation Sheet 2.1.....	37
Operation Sheet 2.2.....	39
LAP Test.....	40
Unit Three: Placing embroidery on garment	41
3.1. Following OHS practices	42
3.1.1. Equipment and material safety	43
3.1.2. Safety procedures	43
3.2. Completing hand embroidery.....	44

3.3. Assessing work.....	44
Self-Check -3.1	46
Operation sheet 3.2	47
LAP Test.....	49
Unit Four: Selecting appropriate embellishment components	50
4.1. Identifying criteria for selection of threads.	51
4.2. Attaching types of decorations to be identifying.....	51
Self-Check -4.....	54
Operation sheet-4	55
Lap test -4.....	56
Unit Five: Embellishing garment or piece.....	57
5.1. Assessing work with quality standards and production.....	58
5.2. Adjusting machine to ensure optimum performance.....	58
Self-check-5.....	59
Operation sheet -5-.....	60
Practical demonstration	60
Unit Six: Dispatching completed work.....	61
6.1. Checking garments quality standards.....	62
6.2. Recording and Completing work documentation.	64
6.3. Completing garments to next operation.	65
Self-Check -6.....	66
Operation Sheet -6	67
LAP Test -6.....	68
Reference	69

Acknowledgment

Ministry of Labor and Skills wish to extend thanks and appreciation to the many representatives of TVET instructors and respective industry experts who donated their time and expertise to the development of this Teaching, Training and Learning Materials (TTLM)

Introduction to the Module

This module covers the knowledge; skills and attitude required to embellish a garment using hand or machine techniques and applying embroidery on garments/articles, either at the completion of production, or during the production stage.

This module covers the units:

- Interpreting design brief or specifications
- Preparing work pieces and workstation
- Placing embroidery on garment
- Selecting appropriate embellishment components
- Embellishing garment or piece
- Dispatching completed work

Learning Objective of the Module

- Interpret design brief or specifications
- Prepare work pieces and workstation
- Embroidery on garment /article or piece
- Select appropriate embellishment components
- Embellish garment or piece
- Dispatch completed work

Module Instruction

For effective use this modules trainees are expected to follow the following module instruction:

Read the information written in each unit

Accomplish the Self-checks at the end of each unit

Perform Operation Sheets which were provided at the end of units

Do the “LAP test” giver at the end of each unit and

Read the identified reference book for Examples and exercise

Page 4 of 72	Ministry of Labor and Skills Author/Copyright	Developing and applying embellishment on garment	Version -1
			April, 2022

Unit one: Interpreting design brief or specifications

This unit is developed to provide you the necessary information regarding the following content coverage and topics:

- Identifying type of embellishment required for garment.
- Determining the requirement of embellishment specifications used for garments.
- Identifying garment considerations based on specification.
- Identifying methods of embellishing by hand or machine.
- Identifying type of embroidery required.
- Determining embroidery specifications.
- Identifying methods of embroidery by hand.
- Identifying criteria for selection of threads.

This unit will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Identify type of embellishment required for garment.
- Embellishment specifications are determined used for garment.
- Garment considerations are identified.
- Methods of embellishing by hand or machine are identified.
- Identify type of embroidery required.
- Embroidery specifications are determined..
- Methods of embroidery by hand are identified.
- Criteria for selection of threads are identified.

Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described in number 3 to 15.
3. Read the information written in the “Information Sheets 1”. Try to understand what are being discussed. Ask you trainer for assistance if you have hard time understanding them.
4. Accomplish the “Self-check 1” in page 07.
5. Ask from your trainer the key to correction (key answers) or you can request your trainer 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 trainer for further instructions or go back to Learning Activity #1.
7. Submit your accomplished Self-check. This will form part of your training portfolio.
8. Read the information written in the “Information Sheet 2”. Try to understand what are being discussed. Ask you trainer for assistance if you have hard time understanding them.
9. Accomplish the “Self-check 2” in page 15.
10. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 2).
11. Read the information written in the “Information Sheets 3. Try to understand what are being discussed. Ask you trainer for assistance if you have hard time understanding them.
12. Accomplish the “Self-check 3” in page 21.
13. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).

14. Read the information written in the “Information Sheets 4. Try to understand what are being discussed. Ask you trainer for assistance if you have hard time understanding them.
15. Accomplish the “Self-check 4” in page 54.
16. Ask from your trainer the key to correction (key answers) or you can request your trainer to correct your work. (You are to get the key answer only after you finished answering the Self-check 3).
17. If you earned a satisfactory evaluation proceed to “Operation Sheet 1” in page 58. However, if your rating is unsatisfactory, see your trainer for further instructions or go back to Learning Activity #1.
18. Do the “LAP test” in page 63 (if you are ready). Request your trainer to evaluate your performance and outputs. Your trainer will give you feedback and the evaluation will be either satisfactory or unsatisfactory. If unsatisfactory, your trainer shall advice you on additional work. But if satisfactory you can proceed to Learning Guide

1.1. Identifying type of embellishment required for garment.

1.1.2 Different Types of Embellishment Techniques:

A. Surface embellishment techniques:

Surface embellishment is an important component of free form; it is a great way of bringing your personality, style and skills to your work and putting your own stamp on your project. In fashion designing, there are 1000's of ways to embellish fabrics, garments and any other items.

B. Textile embellishment techniques:

Textile embellishment can take many forms, with pattern work following the suggestion of nature, the geometrical abstract, fonts and lettering. It can be perceived as a subtlety, the changing of color, line and texture, or it can be much bolder, using large-scale shapes and patterns. Whatever the technique or suggestion for composition, the end result is always nearly the same, to make something more than it was, to add decoration to enhance its attraction to the individual.

C. Embellishment in decorative arts:

Embellishment techniques are not only applied on the surface of fabric and textiles, it is also applying any kind of decorative items. Ceramics, glass, metal, wood in fact all the major and minor decorative arts, used embellishment, as a legitimate tool in which to decoratively enhance their results.

The first step in embroidered custom decorated apparel is having an acceptable and accurate art file to work from. All digital files are redrawn as virtual stitches to communicate the design to the embroidery machine. The process for redrawing a design or logo as stitches is called digitizing. The cleanest files produce the perfect embroidery.

Embellishment refers to the process of adding color, pattern, texture or design to fabric through the use of outside mediums such as thread, ribbon, sequins, yarns, buttons, buttonholes and more. Common examples of embellishment in sewing and crafts. Appliqué Embroidery, done either by machine or by hand. An embellishment is a decoration added to something to make it seem more attractive or interesting.

1.1.2. Embellishment

Embellishment or ornamentation or decoration is anything that enhances the appearance of garments or fashion accessories and adds more value in terms of money that are normally added or attached to fabrics without actually having any functional purpose. In sewing and crafts an embellishment is the action of adding anything decorative items through the use of the visual arts. There are various methods and techniques for embellishment of fabric or garment.

1.1.3. Fabric Surface Embellishment

Fabric embellishments are the ornamentation that normally added to fabrics to make them more beautiful and gorgeous, because of the nature of decorative patterns, which they create. Different kinds of surface design techniques are used for embellishing the fabric. Most common materials that can be used for this process include fringe, boutiques, beads, and buttons.

In addition to the multitude of construction and finishing techniques used, the fabric can also be worked upon or embellished in a variety of ways to enhance its surface. Most embellishing methods, such as embroidery, quilting, applique and bead-work are age-old techniques of decorating fabric and are still largely executed by hand. A specialized industrial sector in trimmings, lacework, embroidery and other embellishments has also developed that uses innovative technology to recreate the hand-worked effects on an industrial scale and pace.

1.2 Identifying methods of embellishing by hand or machine.

Hand embroidery is any type of needlework that is done without a machine. Hand embroidered pieces are usually made on a piece of material with a pattern outlined on it. Some people may embroider freestyle, using material that doesn't have a printed pattern.

Hand embroidery involves stitching embroidery designs by hand onto the fabric. This process is time-consuming and particular, but produces amazing results.

1.2.1 Fabric Surface Embellishment Techniques:

A few fabric and garment embellishment techniques are briefly discussed in below:

1. Embroidery:

Fabric embellishment with stitches in yarn or thread, using a needle, is one of the oldest forms of art. While the library of embroidery includes hundreds of varieties of stitches, they can be categorized broadly into four main techniques raised work or stump-work where raised effects

are created by stitching over pads of wool and cotton; couched work creating a pattern with cords by sewing them onto the base fabric; flat running and filling stitches of which there are hundreds; and counted thread embroidery, e.g. needlepoint and cross stitch, where the stitches are placed over a counted number of threads of the base fabric. Schiffli embroidery is an example of machine embroidery made on the ‘Schiffli’ machine that works sideways with a thousand needles. This machine embroiders with a top, decorative and a back, binding yarn, and is used for making laces and sheer curtain fabrics. Many embroidery stitches can now be produced in digitized embroidery machines which, for large scale production, have multiple heads to produce a number of identical designs simultaneously using an embroidery software program.



Figure 1.1: Embroidery

2. Quilting:

Quilting is the technique of embellishing fabrics stitching together, by hand or machine, multiple layers of fabric with a filling of cotton, foam or polyester batting in between the layers. Quilting is widely used for making bedspreads, quilts, comforters etc. Single-needle, hand-guided quilting machines are used for making outline quilting, where the stitching lines follow the outlines of the print design, vermicelli, which uses free motion all-over stitching patterns, and tarpon to or Italian quilting, a form of ‘couching’ where a cord inserted and stitched between the fabric layers creates a raised pattern. In mass-scale automated production, multiple-needle machine quilting is used to make simple geometric patterns. In stitch-less quilting, multiple layers of fabric are fused together thermally or by an adhesive, creating the appearance of being stitched.



Figure 1.2: Quilting

3. Applique:

In applique, small pieces of fabric or other material are couched or stitched onto a base fabric. In reverse appliqué, the base fabric is on top of the stitched fabric and the top fabric is cut out to reveal the applied fabric underneath.



Figure 1.3: Applique

4. Patchwork:

Patchwork, used mostly for making bed quilts and cushions, is the technique of creating a fabric layer by joining small pieces of fabric (traditionally scraps of old clothes or textiles) in geometric or abstract patterns. Being a hand-worked technique, it is mostly produced on a small scale.



Figure 1.4: Patchwork

5. Trimming:

Two types of trimmings are most popularly applied on fabric or garments for decoration. Such as:

Fringe trim: Fringe is an ornamental textile trim, applied to an edge of an item, such as drapery, dress ends, a flag, epaulettes, or decorative tassel, etc.

Sewing trim: sewing Trim or trimming in clothing and home decorating is applied to ornament or Embellishing fabrics such as gimp, ribbon, ruffles, button, bias tape, etc.



Figure 1.5: Trimmings

6. Lacework:

Lace is an openwork fabric, patterned with open holes in the work, made by machine or by hand. Lace is another Embellishing items on fabric. It is the very common and ancient craft to Embellishing fabrics.



Figure 1.6: Lacework

7. Piping:

Piping is a type of trim or embellishment, which is used to Embellishing fabrics for making different style line. Usually the fabric strip is cut on the bias, and often it is folded over a cord. It may be made from either self-fabric (the same fabric as the object to be ornamented) or contrasting fabric, or of leather.



Figure 1.7: Piping on dress

8. Beads:

Beads are other types of embellishment. Beadwork is made by needle and thread to stitch beads to Embellishing fabrics, suede, or leather.



Figure 1.8: Beads on dress

9. Batik:

Batik is a cloth that is traditionally made using a manual wax-resist dyeing technique. For Embellishing fabrics batik is the very popular embellishment technique.



Figure 1.9: Batik on pillow

10. Smocking work:

Smocking is an embroidery technique, used to gather fabric so that it can stretch. Before elastic, smocking was commonly used in cuffs, bodices, and necklines in garments, where buttons were undesirable.



Figure 1.10: Canadian smocking design

Fabric Manipulation:

There are different types of fabric manipulation techniques. They include: Embellishment through addition, Beads and beading, embellishment through subtraction and construction techniques.

Embroidery and Fabric Manipulation:

Gathering

Tucking

Shirring

Smocking

Pleating

Quilting

1.3 Identifying type of embroidery required.

Embroidery is an art form where the fabric or alternative materials are decorated using needle and thread (or yarn). There are multiple different types of hand embroidery stitches that are used when embroidering art onto a chosen fabric. Here is a list of 8 different types of embroidery stitches you need to know.

1. Backstich

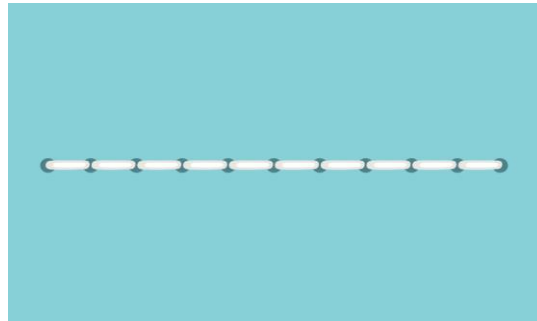


Figure 1.11: Backstich

A backstitch is one of the easiest stitches to master. Mostly used for outlining as it creates a beautiful solid line. This stitch is created when the needle is pulled up and through the fabric creating a stitch forward, then from underneath you space the needle out the desired length, pull up through, and bring the needle back through the end of the previous stitch.

2. Split Stich

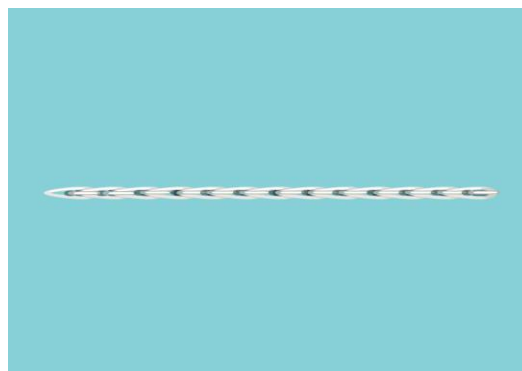


Figure 1.12: Split stich

A split stitch is similar to a backstitch as it is a solid line, however, it has an almost braided texture. Another option that is popular for texts and outlines, whilst also working well for filling in designs. This stitch is created when the needle is pulled through the fabric and one straight stitch is created. With the needle and thread on the underside, the thread is brought up through the center of the stitch just created. It is then stitched forward the same length as the initial stitch.

3. Stem Stich

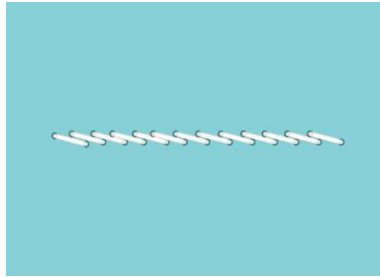


Figure 1.13: Stem stich

This stitch is popular when creating flower stems and vines. It is a beautiful option when creating designs that have curves. Like the split stitch start by creating a straight stitch forward. Then bring the needle up underneath the fabric, but instead of threading it through the centre of the first stitch, go to the side of the stitch.

4. Satin Stich

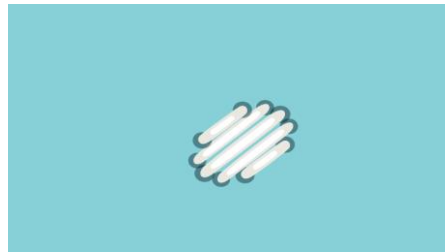


Figure 1.14: Satin stich

When filling in the design and wanting to create a smooth appearance out of all the different types of embroidery stitches this is the perfect stitch. With the needle create one stitch that extends from one end of the chosen shape to the other. Then the needle is brought up again just next to the opposite side of the initial stitch. The stitches are kept close to one another in order to fill the pattern seamlessly.

5. Running Stich

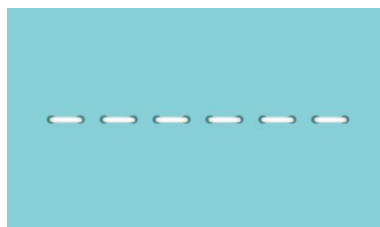


Figure 1.15: Running stich

A running stitch is a simple stitch that is perfect for making dashed outlines as well as small details. The length and spacing of these stitches can be adjusted as required. The needle is brought through the fabric and a single straight stitch is created. Then a gap is made and the needle is brought back through the fabric again to create a separate stitch. This stitch is along the same line but they are not attached.

6. French Knots

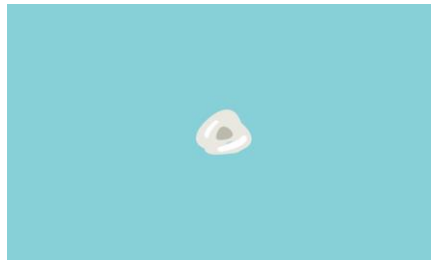


Figure 1.16: French stitch

Out of all the different types of embroidery stitches, the French knots is one of the more intricate of stitches. This creates a pretty accent design throughout. With the thread held taught at one end and bring the needle down next to the space where it came through the fabric. You must ensure that the thread is taut as the needle is pulled through. The size can be varied by wrapping the floss around the needle anywhere between one to three times.

7. Chain Stich

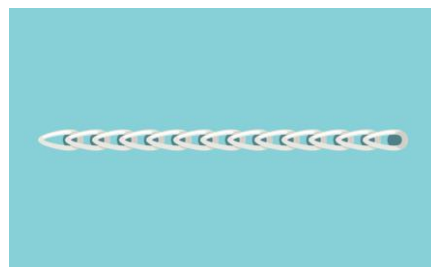


Figure 1.17: Chain stitch

One of the most complicated stitches it is great for outlining as well as framing around a specific pattern or design. Firstly the needle is pulled through the fabric then brought down beside where it was first brought up. It is important that the thread is not pulled all the way through so that a loop can be formed. Then the needle needs to be brought through that loop and pulled. In order to continue the stitch, the needle should be placed in the hole just stitched or very close to it, then simply pull through to create an additional loop. This process is repeated to continue the chain.

8. Feather Stitch

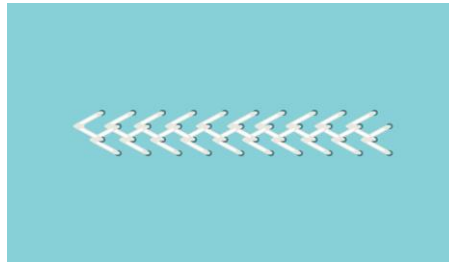


Figure 1.18: Feather stitch

Ideal for when you want to cover a larger surface area. Simply bring the needle through the fabric and create a straight stitch. Making sure not to pull the thread all the way though allow a loop to form. Bring the needle up through this loop. Then make sure to space the next stitch over in the opposite direction from the previous stitch. Create another loop by not bringing the thread all the way through, pull the needle through and repeat on the opposite side.

9. Bonus Stitch – Tatami Stitch



Figure 1.19: Bonus Stitch

A stitch we are particularly fond of is the beautiful tatami stitch. A tatami stitch is similar to a satin stitch and is preferable as the chances of the embroidery getting snagged are decreased. It simply consists of rows of run stitches and is perfect for filling large shapes. So when an object is larger than 1 cm, the tatami stitch is the right option to choose.

1.4.1 Main points of embroidery file review in machine

Letter Size Letters can be no smaller than .25" or they will not embroider well.

Detail Super fine detail will likely be compromised. Most embroidered logos are small by nature, thread is a fixed width and the fabric adds an element of compromise.

Gradients Complicated gradients can sew very well. Keep in mind, however, that stitches do not blend, so the gradient will be less smooth in appearance than what you see on your computer screen.

Preferred format

Vector files (ai, eps, pdf) with fonts converted to outlines. This format produces the highest quality embroidery.

Acceptable format

Raster files (jpg, tif, gif, png, eps) at a minimum of 150dpi at the final image size.

These images, designs, or logos are composed of pixels rather than paths. When zoomed in it is more difficult to see detail and where shapes begin and end. For this reason a digitizer must do some creative estimating. Your end embroidery may not be as exact as you would like it to be.

1.5. Identifying methods of embroidery by hand

Hand embroidery is any type of needlework that is done without a machine. Hand embroidered pieces are usually made on a piece of material with a pattern outlined on it. Some people may embroider freestyle, using material that doesn't have a printed pattern.

Hand embroidery involves stitching embroidery designs by hand onto the fabric. This process is time-consuming and particular, but produces amazing results.

Hand embroidery is basically embellishing the cloth with colorful threads and beautiful beads. It is an art that is made with help of needles and thread creating beautiful patterns of design on the fabric. The embroidery designs are delicate and influenced by Mughal designs.

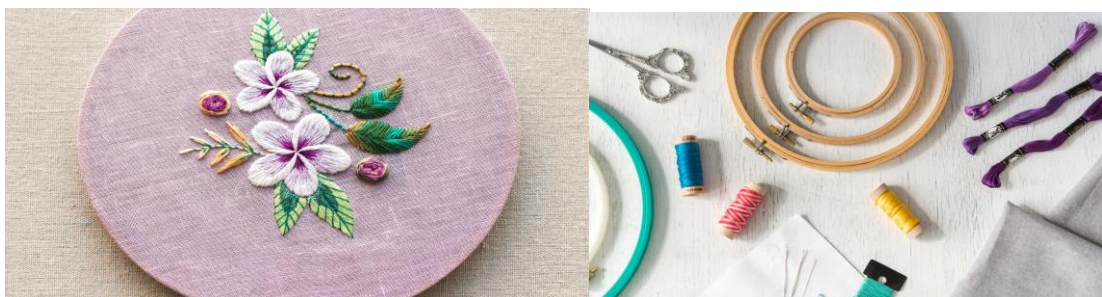


Figure 1.20: Embroidery Design

As with most crafts, getting started on hand embroidery can seem daunting when you consider the huge array of available hoops, frames, needles, thread cutters ... whew, you get the picture. But don't be fooled! The list of actual hand embroidery tools is refreshingly short. We recommend these tools to get started.

1.5.1. Tools of hand embroidery

1. Needles



Figure 1.21: Needle

Any needle can draw a piece of thread through fabric, but certain types do certain jobs better. Using the right needle for the job will not only make embroidery less frustrating for newbies, but it's also way more likely to deliver better results. These are the three we recommend starting out with to cover your bases many come in assortment packages, meaning you can get them in a range of sizes so you can play around with each to see which you like best.

Crewel Needle

The crewel needle is a sharp-tipped needle with a medium-long eye slightly larger than the shaft of the needle. It's the basic one used for hand embroidery. Crewel needles come in sizes 1 through 12, with 1 being the largest and 12 being the smallest.

Tapestry Needle

The tapestry needle has a shorter shaft than a crewel needle, but it has a much longer eye and a blunt tip. It's commonly used in counted cross stitch and needlepoint, because the blunt tip does not pierce the ground fabric, instead allowing the needle to pass easily into the open holes within the weave. That blunt tip also makes it ideal for surface embroidery that involves whipping or lacing, as it helps keep the needle from snagging other stitches.

Tapestry needles are available in sizes 13 through 28, with 13 being the largest and 28 being exceptionally fine. Tapestry needles are also available in standard and petite lengths — as you can imagine, petites are much shorter, allowing the stitcher to get as much use out of their embroidery thread as possible.

Milliner Needle

The milliner needle aka the straw needle has a shorter, almost-round eye, a very long shaft and a sharp tip. The eye and the shaft are the same size, making it perfect for working any wrapped stitches like bullion knots, French knots or cast-on stitches.

2. Hoops and Frames



Figure 1.22: hoop and frames

An embroidery hoop keeps fabric taut, so your stitching doesn't pucker the fabric and your embroidery doesn't come out warped. It's not essential for every type of stitching, but in general it's best for beginners who are still getting the hang of things.

Plastic or inexpensive wooden hoops work well when you're learning, but as you become more experienced, you may want to graduate to a higher-quality wooden hoop. Unlike the cheaper varieties, better-quality ones will have sturdy brass hardware that can be tightened with a screw driver, the two rings will fit together perfectly, and the wood will feel very strong in-hand.

Side note: You may also see a variety of embroidery frames at the craft store, including stretcher bar, slate and scroll frames. All of these also hold fabric taut, but generally a hoop is less expensive and more portable, making it ideal for newbies.

3. Embroidery Scissors



Figure 1.23: Embroidery scissor

Embroidery scissors are different from regular craft scissors. They have smaller and usually thinner blades that are extremely sharp, and they normally come to a very pointy point. Most are around 3.5 to 4" in length, with blades that range from 1 to 2.5" long. The main reason to use them: they can get really close to the ground fabric to cleanly cut those threads.

4. Light and Magnification

It's a fact: good lighting is essential for transferring embroidery designs. You'll find lots of options at craft and sewing stores, but so long as you have a sunny window you can make it work for free.

A magnifier, on the other hand, can help you enjoy needlework without straining your eyes. Available at local needle work stores, it's especially great for detail work, miniature embroidery and needle painting, so you can nail every single stitch with ease.

5. Smart Storage



Figure 1.24: Smart storage

Keeping your supplies organized is key for when you want to be able to pick up projects at a moment's notice. Light, transportable containers are a smart option, as are zippered mesh bags for hoops, instructions and threads. Be sure to slide pointy scissors into a sheath to protect their sharpness and your other supplies and store needles in a small needle book with felt pages that you can tuck into a project bag.

1.6. Identifying criteria for selection of threads

Like the selection of fabric, needle and style of design, it is important to learn about the selection of thread used for embroidering a particular design. The factors to keep in mind while selecting a thread are color, texture, length, thickness and suitability to the final effect of the embroidery pattern. Threads are one of the basic materials needed for embroidery. The most commonly used threads are stranded cotton threads. These threads have mostly six separate strands which can be used together, or separated and used singly or in groups. These threads, often referred to as 'stranded silk' though they are actually mercerized cotton, are lustrous and suitable for most types of embroidery.

The benefit of stranded cotton thread is that the strands can be separated and recombined in any number to achieve differing thickness and effects.

Pearl cotton

This type of thread is very commonly used for hand embroidery. It is a highly mercerised and twisted thread. It is a smooth, single ply embroidery thread with a shiny and lustrous look. Pearl cotton threads are available in skein or a ball with differing thickness, colour and shade. They are available in different weights. The higher the number, the finer would be the thread.



Figure 1.25: Pearl cotton

Metallic threads

This category of threads is an innovation in embroidery work. The use of metallic threads adds shine and glamour to the embroidery work. These are available in the market in colours like gold, silver, platinum, copper and antique or aged versions. Metallic threads are quite durable and require less care.



Figure 1.26: Metallic thread

Satin and rayon threads

It is a term used for synthetic threads which give a brighter and shimmery look in the embroidery. These threads have a satin-like shine and are usually packaged as floss that can be separated in different ply.



Figure 1.27: Satin and rayon threads

Over dyed threads

These are shaded threads. These threads have more than one colour in a single strand. They can be hand dyed or mass produced in cotton or silk embroidery floss.

These threads are available in different weights. Using these over dyed threads gives the embroidery pattern a totally different look because of changes of colour at short intervals.



Figure 1.28: Over dyed thread

Wool threads

These are used in some special embroidery forms where a thick woollen look is required in the embroidery. These threads are available in a variety of weights and colours. These threads are most commonly used in counted thread work.

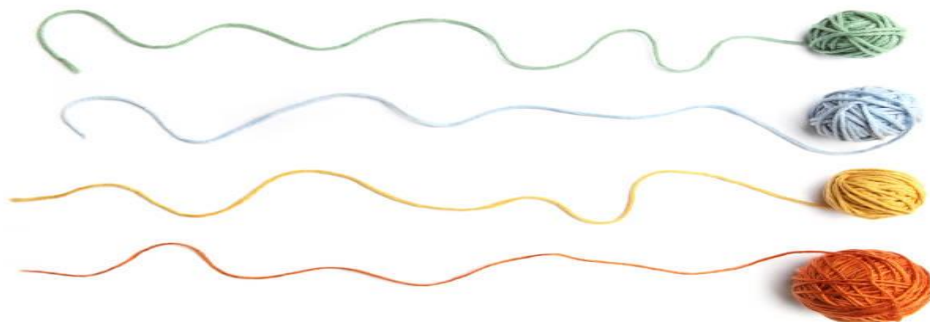


Figure 1.29. Wool threads

(vi) Novelty threads

These include a wide range of styles, textures and material. Novelty threads can be fuzzy, metallic textured, leather, plastic, etc. They are used to give the embroidery pattern a special look.



Figure 1.30. Novelty threads

(vii) Pure silk sewing thread

Embroidering on fine fabrics such as silk, a silk sewing thread can be used for fine embroidery such as faggoting, pin stitch and hem stitch, etc. Many other types of threads with special characteristics are available in the market with different brand names. These threads can be selected according to the suitability of the fabric, design, liking of the user, etc.



Figure 1.30: Pure silk sewing threads

Self-Check -1	Written Test
----------------------	---------------------

Directions: Answer all the questions listed below.

I. Explain the question

1. The stranded embroidery thread has mostly _____ strands.
2. List and explain at list five embroidery thread.
3. What is wool threads used in embroidery?

II. Choose the best answers

1. Which one is preferred format Vector files for embroidery?
A. ai B. eps C. A&B D. all
2. _____ Threads adds shine and glamour to the embroidery work.
A. Metallic B. Wool threads C. Novelty threads

III. Say true or false

1. Over dyed threads have more than one colour in a single strand.
2. The crewel needle is a sharp-tipped needle with a medium-long eye slightly larger than the shaft of the needle
3. Pearl cotton thread is very commonly used for hand embroidery.

Operation sheet-1	Identifying type of embellishment required for garment.
--------------------------	--

Procedure

1. Search and collect pictures of different types of tool and raw material used for hand embroidery.
2. Draw the figure of the tools if a picture is not available.
3. Label the tools and raw materials.
4. Make a chart depicting the tools and material that you think may be required for the hand embroidery process.
5. Display the chart in the classroom or the laboratory.

Material Required

1. A3 size sheet or practical file
2. Coloured pens and pencils
3. Ruler
4. Pencil
5. Eraser
6. Samples of different types of trimming Procedure
 1. Search and collect different types of trimming.
 2. Put the samples of trimming in transparent pouches.
 3. Attach the pouches on the sheet or in the practical file.
 4. Label the names of the trimming.
 5. Decorate the sheet or practical file using coloured pens or pencils.

Task 1- **Embellishment through Addition:**

Applique/ Applied works

Couching

Stitching/ Hand stitching

Beads and Beading

Embellishment through Subtraction:

Decoupe/ Reverse technique

Cutwork

Drawn thread

Pulled work

Beads and Beading:

Tambour work

Hand beading

French beading

Construction Techniques:

Patchwork

Applied patchwork

Long cabin patchwork

Crazy patchwork

Lap test -1	Practical Demonstration
--------------------	--------------------------------

Make a chart of the tools and raw materials used for the hand embroidery process.

Material Required

1. Chart paper
2. Colored pens and pencils
3. Ruler
4. Pencil
5. Eraser
6. Pictures of different tools and raw materials used for hand embroidery

Unit Two: Preparing work pieces and workstation

This unit to provide you the necessary information regarding the following content coverage and topics:

- Laying out work pieces.
- Setting up equipment and materials
- Performing routine minor maintenance.
- Reporting and recording any problems

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Work pieces are laid out.
- Work area is set up according to OHS practices.
- Equipment and materials are set up and adjusted to specifications for work.
- Routine minor maintenance is performed according to manufacturer specifications.
- Any problems are reported and recorded.

2.1. Laying out work pieces.

Once you have put together a complete embroidery kit, decided on the fabric, design and colors' for the embroidery threads, you are ready to begin. Before starting the embroidery, remember to wash and wipe your hands. This would help in keeping your embroidery clean and fresh. If your hands have a tendency to perspire, you may wash your hands repeatedly. While working on the embroidery you may notice that the thread twists and knots. In this case you can turn the needle in the opposite direction till the thread is smooth. In case the thread does not run smoothly, it will be better to use a fresh length of thread. Always start embroidery with a back stitch. Never start your work with a knot.

A continuous workflow in an embroidery shop, independent of its size, depends on many details. The workflow can get stuck due to inconspicuous factors, such as habits, irregular working processes and poor job planning.

The complete textiles and all the accessories are then entered in the queue of the embroidery orders.



Figure 2.1: Embroidery layout

Frames hang to hand on the wall near the framing device (left) – in front: an adhesive spray, fixed to the wall with a clamp; the cap-drive is attached below the ceiling directly over the machine (right)

The next station is the job preparation. Here, the textiles are prepared for embroidery. Elements such as ruler, tools for marking, embroidery backings, framing devices and frames are stored here, ready to be used.

2.2. Setting up equipment and materials

An embroidery hoop seems like a pretty basic piece of equipment, doesn't it? Something that doesn't necessarily require explanation? But setting up an embroidery hoop correctly is often the key to better end results in your embroidery, so I think it's worth covering!

Embroidery Hoops-Embroidery hoops is a must-have because they help to keep the fabric tight while you stitch on it.

Needles.

Embroidery stabilizers and fabric markers.

Embroidery thread.

Embroidery fabric.

Embroidery Floss.

Stranded Cotton.

Embroidery or Crewel Needles.

Scissors.

Fabric Marking Pens

2.2.1 Embroidery Tools



Crewel or tapestry needles: A pointed tip works for sewing any fabric. A blunt tip needle is good for using on cross stitch fabric. I like size 20 or larger.

Embroidery scissors: A small scissors makes for easier and more detailed snipping and cutting.

Figure 2.2: Embroidery tool

Floss bobbins

These are inexpensive cardboard or plastic holders for your floss or thread. If you work from the hanks you buy, you will find that your thread will tangle easily. The ends will be floating all over your storage container and become a tangled mess. By winding your thread on a bobbin right away, you can keep your threads at the ready and organized.

Thimbles

this is an optional tool to protect your fingers from becoming calloused or poked. A small metal piece keeps the needle from passing through the skin.

A small plier

when stitching with thick fabrics or when many stitches pass through the same area over and over, the needle just doesn't seem to want to glide through the fabric. Because the needle is small, it's hard to get a good grip at times. Keep small needle nose pliers handy to grip the needle and pull it through.

Embroidery Hoop



Figure 2.3. Plastic Hoop/Wooden Hoop

2.2.2. Embroidery Materials

The fabrics and yarns used in traditional embroidery vary from place to place. Wool, linen, and silk have been in use for thousands of years for both fabric and yarn. Today, embroidery thread is manufactured in cotton, rayon, and novelty yarns as well as in traditional wool, linen, and silk. Ribbon embroidery uses narrow ribbon in silk or silk/organza blend ribbon, most commonly to create floral motifs.

Embroidery Thread

Parle Cotton does not fray easily, creates a bold line, and comes in a wide variety of colors. Use size 5 for most work but use size 3 for detailed work or for light black outlines. Embroidery Floss can be split into 6 strands. It has a nice sheen and comes in an infinite number of colors from matte to metallic



Figure 2.4. Embroidery Thread

Fabric

most woven fabrics with some body can be embroidered. Many are better than others. It is good to work on linen. Its open, flexible weave makes stitching a breeze. The needle slides in and out like butter. If you make a mistake, the weave will correct itself and with a little manipulation, the hole created by the wrong stitch disappears.

Working on recycled, felted woven wool stitches like a charm, and the lanolin in the wool actually polishes your needle. Mistakes are hard to correct on some fabrics and you have to be



Figure 2.5. Embroidery fabric

2.3. Performing routine minor maintenance.

- At the very least, with average use, sewing and embroidery machines should be serviced every two or three years. Your warranty spells out how often you must have your machine serviced by a qualified technician.
- Clean your machine.
- Cover your thread.
- Wipe down your machine after use.
- Cover your embroidery machine.
- Turn off your machine when you are not using it.
- Use the correct weight of embroidery thread.
- Change your needles regularly.

- Oil your machine or don't oil your machine.

2.4. Reporting and recording any problems

Knots are really not necessary in any embroidery project because you can secure the ends of the threads in other ways. What's more, knots can make the back side of a project untidy and bumpy and you can often feel them on the front side of the piece. Knots usually have a bit of a tail, which can show through on the front side of an embroidered project.

Worse yet, knots can actually be harmful to a project, as they can unravel with use or laundering. As a result, precious stitches are lost over time.

Problem

Possible Cause

Flat or hidden stitches	1. Tension too tight
	2. Nap or pile fabric tends to hide thread
Needle holes in garment	1. Material loose in hoop
	2. Thin material
	3. Too many stitches for point of cut
	4. Burred needle

Self-Check -2	Written Test
----------------------	---------------------

Directions: Answer all the questions listed below.

I. Explain the following question

1. What is the main function of laying out work pieces?
2. List and explain materials and equipment used for hand embroidery.

II. Choose the best answer

1. Which one is the embroidery tools and equipment
 - A. Thimbles
 - B. small plier
 - C. Embroidery Hoop
 - D. All
2. Which one is true about service of embroidery machines?.
 - A. Use the correct weight of embroidery thread.
 - B. Change your needles regularly.
 - C. Oil your machine or don't oil your machine.
 - D. All

Operation Sheet 2.1

Carbon transfer paper

Purpose:

The most common transfer method is with your run-of-the-mill "carbon transfer paper."

Instructions

Keep in mind, when transferring your design whether it's on light or dark fabric. Carbon paper comes in different colors, and one of them is white. Using white carbon paper on black fabric with ensure your design comes through nice and clear

Tools and Materials:

Fabric for embroidery works

Masking tape

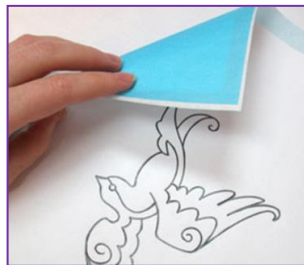
Carbon paper

Pencil or stylus

Design printed on regular paper

Procedure:

Step1. Take that carbon paper and place it carbon side down onto your fabric, then place your printed design on top of it. Keep in mind when you're placing your image that you need enough room around it to be able to hoop the fabric, so don't put it too close to an edge.



Step2. Use a pencil, stylus, or anything firm and vaguely pointy to trace over your design. Don't use anything too sharp, or you might punch right through your fabric, and take extra care not to let your design move while you're tracing it..



Step3. Taking care not to shift your design, pull it back now and then to make sure your design is transferring properly. If you can't see your design well enough, trace over it again.



Safety Precaution: Do not use too sharp pencil for it may damage the fabric

Quality Criteria:

Color of carbon paper used is appropriate for the fabric

Fabric without damage.

Transferred design is clear and neat

Operation Sheet 2.2

backstitch

Purpose:

The backstitch is great for outlining when you have a lot to do, but since the stitches tend to be longer than others, it's not quite as good around tight corners.

Instructions

The embroidery thread inserted on the needle should only be elbow-length to maximum. This is to avoid entangling.

Tools and Materials:

- Fabric with outline of the design
- Crewel needle
- Embroidery scissors
- Embroidery thread
- Hoop

Procedure:

Make a knot at the end of the thread.

From the back of your fabric pull your needle up at (1).

Insert it back at (2) according to the desired length of stitch.

Bring it back up at (3) about a stitch length away from the first entry point.

Push your needle down again at (4).

Bring it up at (5), and so on.

Safety Precaution: Use thimble to prevent pricking your fingers.

Quality Criteria:

Backstitches are of the same length following the outline.

Stitches are relaxed not too tight.

No puckering on the fabric



LAP Test	Practical Demonstration
----------	-------------------------

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within -1-- hour.

Hand Stitching/Practical Demonstration/

Project title:-Running Stitch & back stitch



Do properly hand work steam stitch & back stitch

Task 1. Ironing the fabric

Task 2.Assume the steam stitch& back stitch space

Task 3.Cut properly

Task 4.Pass the needle through the fabric several times so steam stitch & back stitch appeared.

Task 5.Pass the needle through the fabric several times to have equal space stitch .

Task 6. Tie & remaining the end

Task 7. Ironing

Quality control:

- -Neatness
- -Sharpness
- -Sleep age
- -Sharp Ironing

Safety Precaution

- -Keep your hands, fingers & feet always Clean& dry
- -Avoid excessive oil on your hair
- -Protect your hand from seizer, needle

Unit Three: Placing embroidery on garment

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

- Following OHS practices
- Completing hand embroidery
- Assessing work

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- OHS practices are followed.
- Hand embroidery is completed in accordance with job order and workplace procedures.
- Work is assessed for compliance with quality standards and production specifications.

3.1. Following OHS practices

Teachers must take particular care to ensure that health and safety requirements are met and safety procedures followed when students are involved in practical activities. Students must be made aware of any health or safety hazards that might be connected with the activities in which they are engaged and must be coached in the proper use of safety equipment, such as fire extinguishers

Personal safety

Exposure control means here the full range of precautionary measures to be taken during the use of dangerous, classified substances and preparations needed in order to minimize worker exposure.

Engineering measures should always precede personal protection. Information about system design, such as the need to enclose the process, which completes that already given under item should be included here.

Where personal protection is needed, specify the type of equipment that provides adequate and suitable protection:

For respiratory protection specify adequate masks and the filter type

For eye protection specify the type of protective equipment, such as safety glasses, safety goggles and face shield

For hand protection specify the type and material of gloves to be worn when handling the substance or preparation.

For skin protection specify the type and quality of equipment required, such as an apron, boots or full protective suit.

First aid measures

Describe the first aid measures, i.e. the actions to be taken immediately in case of overexposure to the chemical. If immediate medical attention is required, it should be specified here.

Subdivide the information according to the different routes of exposure under different subheadings:

- exposure by inhalation
- exposure by skin and eye contact
- ingestion

For some substances or preparations, special means should be available at the workplace to provide specific and immediate treatment. This should be mentioned under this heading. For example, workplaces handling hydrogen sulfide should have protective equipment in case of an emergency. Equipment for first aid treatment should be available and there should be training in its use.

3.1.1. Equipment and material safety

Consider precautions to ensure safe handling and to advise on technical measures, such as local and general ventilation, measures to prevent aerosol and dust formation, procedures or equipment which are prohibited or recommended, and, if possible, give a brief description of such procedures and/or equipment as electrical grounding of containers for flammable liquids.

Consider also the conditions for safe storage, such as incompatible materials, storage temperature and humidity limit/range, light, inert gas and others. Pay attention to special electrical equipment and prevention of static electricity, and specific design for storage rooms or vessels.

Give advice if needed on quantity limits for storage (compare with the list of chemicals with the potential to cause major hazards and the threshold quantities suggested there). In particular, indicate any special requirements such as the type of material to be used for the packing/container.

3.1.2. Safety procedures

Workplace safety is a category of management responsibility in places of employment.

To ensure the safety and health of workers, managers establish a focus on safety that can include elements such as:

- ✓ management leadership and commitment
- ✓ employee engagement
- ✓ accountability
- ✓ ensuring all task are carried out safely and efficiently
- ✓ safety programs, policies, and plans
- ✓ safety processes, procedures, and practices
- ✓ safety goals and objectives
- ✓ safety inspections for workplace hazards

- ✓ safety program audits
- ✓ safety tracking & metrics
- ✓ hazard identification and control
- ✓ safety committees to promote employee involvement
- ✓ safety education and training
- ✓ safety communications to maintain a high level of awareness on safety

3.2. Completing hand embroidery

To end a thread without making a knot, use this method:

Take your threaded needle to the back of your fabric with your last stitch. Run your needle under the last couple of stitches. For extra security, you might weave through the last few stitches, going under the first, over the second, under the third.

General, a matter that should be taken seriously.

This is where we secure our thread in the beginning and end of our projects, so for the work to withstand the test of time, to not get disarranged and for stitches to not come loose, we need to ensure that the stitches are secured properly.

Hand embroidery is hard work; we put a lot of effort and emotions into our project, that's why it's better to pay special attention to the backside.

At the same time, we need to take into account if our backside is proper enough for any finishing work you might be planning to do: mounting, framing your embroidery or using it as an embellishment for garments/accessories.

Will the dark threads show through the fine fabric? Even the most beautiful embroidery can actually be spoiled by messy backside.

Let's take a look at two most common situations when you need to finish your thread. The first one would be finishing thread on a line or few stitches situated quite closely. The second situation would be when there is a whole area filled with long & short stitch or satin stitch.

3.3. Assessing work

Where threads are left on the embroidery pattern between images or lettering. Thread trims are digitized when changing colors and when moving from one location to other using “jump” stitches.

Generally, can be corrected by:

Page 44 of 72	Ministry of Labor and Skills Author/Copyright	Developing and applying embellishment on garment	Version -1 April, 2022
---------------	--	---	---------------------------

- 1) Digitizing properly (Using appropriate number of trims, using appropriate tie off stitches, or replacing trimming knives when necessary); and
- 2) Hand trimming missed trims using trimming snips.

Where the corners of lettering or shapes are not sharp and crisp but are bunched up or distorted. Usually caused by too much thread in the corners due to poor digitizing.

This includes:

- 1) Not using appropriate stitch selection,
- 2) Not using “Short” stitches in corner, and
- 3) Poor stitch balance – thread too loose.

Generally, can be corrected by digitizing properly:

- 1) Using appropriate stitch selection, and
- 2) Using “short” stitch cornering, and
- 3) Correcting stitch balance.

Where the fabric is damaged around the corners of the embroidery. Caused by:

- 1) Not using the correct type and size of needle;
- 2) Putting too many stitches in the same location; and
- 3) Not tearing tear away backing properly, allowing the fabric to be damaged as the stitches are pulled out.

Generally, can be corrected by:

- 1) Digitizing properly;
- 2) Reducing the stitch count in the corners;
- 3) Using the correct type and size of needle; and
- 3) Using a ball point needle as small as possible.

Self-Check -3.1	Written Test
-----------------	--------------

Directions: Answer all the questions listed below.

1. Which is personal safety?
 - a) Keep your nails, always short & well-trimmed
 - b) Keep the materials in well manner
 - c) Use the materials as enough as required
2. Which is materials safety?
 - a) Keep your nails, always short & well-trimmed
 - b) Keep the materials in well manner
 - c) Use the machine as enough as required

Discuss above questions

3. What happen without making a knot, when to complete embroidery?
4. How to asses our work?

Operation sheet 3.2

How to make French knot

Purpose:

This stitch is called the French knot, and it takes a little bit of practice to get the hang of. French knots are great for little details like eyes, or do a whole bunch in an area for an amazing textured fill.

Instructions

The embroidery thread inserted on the needle should only be elbow-length to maximum. This is to avoid entangling. To start, be sure you have a knot at the back.

Tools and Materials:

Fabric with outline of the design Embroidery threads Hoop Crewel needle
Embroidery scissors

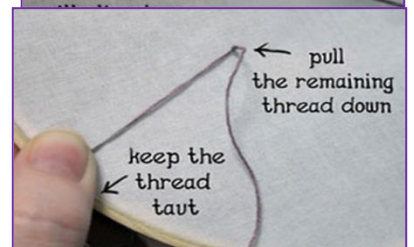
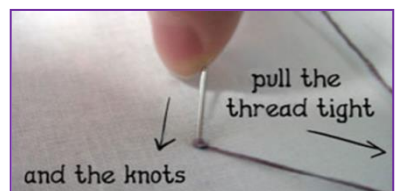
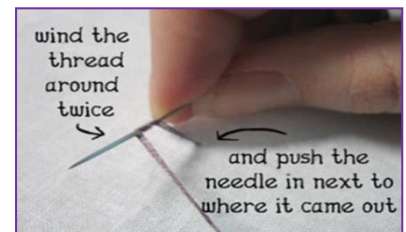
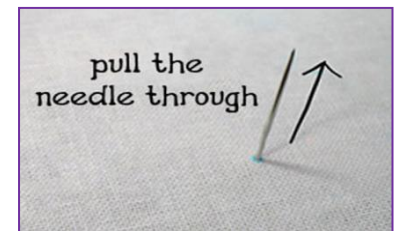
Procedure:

Step1. With a knot in the back, and pull your needle through. Once you've pulled your thread through, grab a few inches above where it comes out of the fabric, and pull it taut so you can control it better

Step2. Wind the thread around your needle twice for a nice large knot. Keep tugging gently at the thread to keep it wound around your needle, and re-insert the tip of the needle right next to where it came out. Do NOT place it exactly where it came out, or you might pull your stitch out completely when you pull the thread through. Keep it as close as possible to your marked dot, though, so you get a nice neat stitch.

Step3. Once the tip of your needle is in the fabric, tug on the thread that's wound around the needle. The knots will slip down the needle to form a small little knot at the bottom. Don't relax the thread yet; keep tugging at it gently so the knots don't loosen.

step4. Now pull your needle all the way through your fabric, but keep the thread holding the knots firmly but gently held as long as possible. You'll have to let go eventually to let the last of your thread go through your fabric.



Note:

The more you can control the tension on the thread, the less likely it will be that your knots will loosen as you're finishing the stitch.

Step5. Once you've pulled your thread all the way though, you're done!!

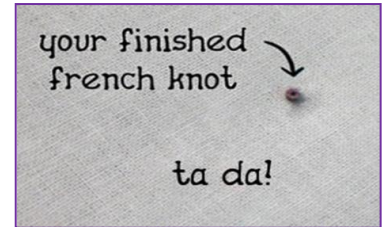
Your little neat French knot is finished

Safety Precaution: Use thimble to prevent pricking your fingers.

Quality Criteria:

French knot is done very close to the dot of the fabric.

French knot is neatly done and does not loosen.



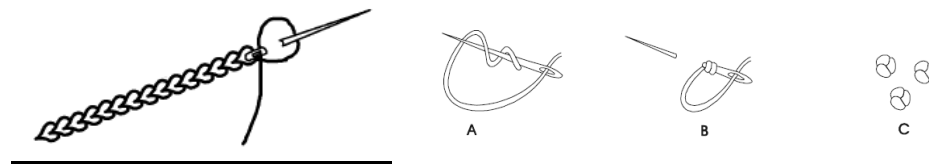
LAP Test	Practical Demonstration
----------	-------------------------

Name: _____ Date: _____

Time started: _____ Time finished: _____

Instructions: Given necessary templates, tools and materials you are required to perform the following tasks within --- hour.

PROJECT TITLE: - Hand work **French knot Stitching& Chain Stitching**



Do properly hand work French knot Stitching& Chain Stitching

Task 1. Ironing the fabric

Task 2. Drawing the design of French knot Stitching& Chain Stitching

Task 3. Cut properly

Task 4. Draw up the needle so a chain and steam is formed at the surface of the fabric.

Task 5. Repeat keeping stitches even & each chain and steam exactly on the design

Task 6. Tie & remaining the end

Task 7. Ironing

Quality control:

- -Neatness
- -Sharpness
- -Sleep age
- -Sharp Ironing

Safety Precaution

- -Keep your hands, fingers & feet always Clean& dry
- -Avoid excessive oil on your hair
- -Protect your hand from seizer, needle

Unit Four: Selecting appropriate embellishment components

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

Identifying criteria for selection of threads.

Attaching types of decorations to be identifying

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

Criteria for selection of threads are identified.

Types of decorations to be attached are identified.

4.1. Identifying criteria for selection of threads.

The higher the thread-weight number, the finer and thinner the thread. Alternately, a low thread-weight number means a thicker, heavier thread. To compare, typical sewing thread measures in at 50 wt. Standard embroidery threads are somewhat finer, most often 40 wt., although 30 wt. is not uncommon.

Embroidery floss or stranded cotton is a loosely twisted, 6-strand thread, usually of cotton but also made from metallic, silk, linen, and rayon. Cotton floss is most common, comes in a gazillion colors (including variegated) and is available in any fine thread shop or craft store.

Matte embroidery cotton or French cottons à border is a matte-finish (not glossy) twisted 5-ply thread. Parle cotton, pearl cotton, or French cotton parley is an S-twisted, 2-ply thread with high sheen, sold in five sizes or weights, 3, 5, 8, 12 and 16. 3 are the heaviest and 16 is the finest.

Crewel yarn is a fine 2-ply yarn of wool or, less often, a wool-like acrylic.

Persian yarn is a loosely twisted 3-strand yarn of wool or acrylic, often used for needlepoint.

Tapestry yarn or tapestry wool is a tightly twisted 4-ply yarn.

4.2. Attaching types of decorations to be identifying

No one can deny that most people love clothing with tasteful embellishments. They are eye-catching and of course, elegant. In today's fashion world, the tasteful embellishing of clothing is very popular. And often a tasteful embellishment makes the difference and causes us to have a second look at a garment in a shop, so they can definitely add a lot of value.



Figure 4.1: Sewing embroidery

The kind of embellishment that one likes on their clothes also often tells us the personality of the wearer. Embellishments add that extra glamor and are a statement which can either make your clothing look subtle and sweet, or it can make your outfit project a bold and adventurous statement. As we all know, there

are many kinds of embellishments that we can choose from. To mention a few, we can make use of buttons, beads, ribbons, yarns, lace, embroidery, sequins, appliques, and much more.



Figure 4.2: Applique

Although embellishments look pretty and increase the visual attractiveness of our outfits, we have to consider several factors which would affect what and how we would want to wear these pretty add-ons to our clothing. To further give you a guide, we have identified these areas that you really need to consider when placing embellishments.

Why Are Embellishments Important?

Embellishments are pretty features of a garment. Adding an aesthetic feature to your clothing also depends on its fabric type. Embellishments don't mean merely a kind of decoration. There are several kinds of them which are actually both functional and decorative. Buttons, for example, can be used both as a closure to a clothing and to decorate it. Choose a button that is suitable for your garment style. There are many styles, colors, and designs of buttons that look lovely when used on clothing.



Figure 4.3: Example of embellishments buttons

Embellishments are practical, easy to make, and a less expensive way to express yourself through the fashion that you wear. Tasteful clothing embellishments increase your clothing's aesthetic value and add to your self-confidence. Just remember to maintain a balanced look and don't overdo it.



Figure 4.4: Embellishments of garment

Self-Check -4	Written Test
----------------------	---------------------

I. Directions: Answer all the questions listed below.

1. What is a garment embellishment?
2. Why Are Embellishments Important?
3. Discuss and write criteria of thread selection.

II. Choose the best answers.

1. _____are pretty features of a garment.
 - A. Embellishment
 - B. Embroidery
 - C. Printing garment
 - D. All
2. _____add that extra glamor and are a statement which can either make your clothing look subtle and sweet, or it can make your outfit project a bold and adventurous statement.
 - A. Pressing
 - B. Ironing garment
 - C. Embellishment
 - D. None

III. Say true or false

1. Embellishments don't mean merely a kind of decoration.

Operation sheet-4

Selecting appropriate embellishment components

Task 1-step by step selecting components

Step1- Choose Your Garment:

First, decide if you want to add embellishment to a garment that you already own, or create the entire look from start to finish. Using a garment you already have is a great way to upcycle, or breathe life into something that has lost its spark.

Step 2 – Choose Your Trim

When choosing your embellishments, make sure to consider the weight of your garment and fabric. You want to be confident in knowing that your garment will be able to support the area you are going to embellish. The key to working quickly is choosing embellishments that cover a large area instead of small individual pieces. Try using brooches, trim tape, and appliques that have multiply stones and beads.

Step 3 – Try a Few Different Layout Options

Before sewing down your trims, test out a few different layout options. Arrange the larger pieces first, then fill in the empty spaces with smaller individual stones if needed. Once you feel pleased with the look of your layout, carefully sew on your embellishments. Search the internet or fashion magazines for tons of inspiration. Pinterest is still a great tool to help get you going.

Step 4 – Finish and Style Your Garment

Now that you’ve completed your one-of-a-kind hand-embellished garment, it’s time to take it out for a test run. Pair your statement piece with simple solid coordinating colors.

Lap test -4

Practical Demonstration

Selecting tools to make components?

Check fabric to use for embellishments or embroidery?

What kind of textiles and garments are tested for Durability?

Identifying properly fabric for embellishments?

Unit Five: Embellishing garment or piece

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

- Assessing work with quality standards and production.
- Checking and adjusting machine to ensure optimum performance.

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Work is assessed for compliance with quality standards and production specifications.
- Machine is checked and adjusted to ensure optimum performance.

5.1. Assessing work with quality standards and production.

There are several markers of high-quality embroidery. Many shops manage a couple of points of the best execution, but the highest-quality embroidery will fulfill all of the following categories:

Technical execution: The design has no outwardly visible flaws in its execution. There should be no outlines out of registration, no underlay stitching visible, no closed counters in lettering, no gaps between elements that should meet, and there should not be excessive color from the ground material showing through the filled areas. Edges of elements should be mostly smooth and avoid.

Artistic interpretation: The embroidery should be attractive and precise, properly representing the art provided by the customer in the best way possible for the medium. The embroidery makes the best use of the qualities of thread to create interesting surface treatments where applicable.

Proper use of materials/digitizing for the needs of the garment and use: The design should not use excessive stabilizer, particularly to compensate for digitizing or mechanical failings. The garment should not be rippled or puckered around the design, and the design should be flexible and as comfortable to wear as possible, maintaining as much of the natural hand of the garment on which it is stitched.

Proper placement: The design should be properly placed for each garment and size so as to be in the proper position when worn. The design should not be angled or crooked.

Clean finishing/packaging: Though this is not a decoration issue, I think it is integral to the perceived quality of the finished product. The finished garment is cleanly trimmed of any connecting stitches long enough to need trimming, any marks left by the hoop are steamed or pressed out of the garment, and the garment is neatly packaged in agreement with the customer's needs.

5.2. Adjusting machine to ensure optimum performance.

Adjusting the machine is most beneficial when done in tandem with the correct threading techniques, thread and needle selection for the fabric, and sewing technique being performed. Machine settings alone won't create the perfect project, but they will greatly increase the likelihood that the garment is successful.

Self-check-5

Written exam

Directions: Answer all the questions listed below.

I. Define the following question

There are several markers of high-quality embroidery.

1. Technical execution:
2. Artistic interpretation
3. Proper use of materials/digitizing for the needs of the garment and use:
4. Proper placement:
5. Clean finishing/packaging

Operation sheet- 5

Practical demonstration

Procedure

Adjusting Embroidery Machine Tension

Step 1 Poor thread tension leads to puckering, loops, missed stitches and even plain messy stitching. If you are seeing any of these symptoms, then it might be time to check your thread tension.

Step 2 Correct thread tension should have equal tension on both upper and lower (bobbin) thread. The easiest way to check is if you stitch a normal run of about 6” in length (Pro Tip, Stitch on white or a light-colored fabric and use two different colour threads. For example, using Red on top and Blue at the bottom.) If both sides of the run look the same tension wise, then you are all set.

Step 3 Before we jump in and start adjusting screws and knobs, it is best to do a little more investigation first. The last thing you want is to have spent hours adjusting just to find out that a faulty or worn-out needle is the culprit. So, here is a short list of things to check first:

Step 4 Diagrams on the machine helps you guide the thread through all the hooks and holes needed to feed it correctly, one missing step here can be disastrous, so be sure to double check.

Step 5 Check the thread itself, as with all things in life, thread has a shelf life. Though it does not have an expiry date, thread can become brittle or fray as it goes through all the hooks and holes when it gets old. Keep your thread away from sunlight and store them in a cool cupboard to extend its life.

Step 6 Change your needle, often a change in needles can make a huge difference. Needles wear out too, check for a burr on the tip and make sure you have installed it the right way.

If you are using metal bobbins and might have dropped it in the past, this too can lead to some issues on its own. Damage can be invisible to the eye so it is always a good idea to keep a spare one to try and see if it will solve your problem.

Unit Six: Dispatching completed work

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

- Checking garments quality standards.
- Recording and reporting faults.
- Completing garments to next operation.
- Completing work documentation.

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Garments or articles are checked against quality standards.
- Any faults identified are reported and recorded.
- Completed garments or articles are directed to next operation.
- Work documentation is completed as required

6.1. Checking garments quality standards.

A garment quality control checklist provides a clear outline of all the quality standards and product specifications expected of sampled garments prior to bulk production. Also called an inspection criteria sheet (ICS), the garment quality control checklist can be used by quality control inspectors of both the supplier and manufacturer to minimize laborious rework that leads to waste and financial loss.

This garment quality control checklist can be used by quality control inspectors of suppliers and manufacturers to ensure that the quality standards and product specifications expected of the finished product are met.

Assign important tasks to responsible people and easily track the status of their actions

Add comments or notes on items that need clarification

Take or attach photo evidence of supporting documents

Use a barcode scanner to easily identify items and keep track of their individual quality checks

Sign-off with electronic signatures

Share reports by exporting as PDF, Word, Excel or Web Link

5 Red flags to look out for during garments quality control

Reworks, due to garment defects and quality control issues, have been quite usual for the garment manufacturing industry. These result to manufacturers and suppliers wasting valuable time and money due to red flags that could have been caught early on.

When creating garments quality control checklists, here are 5 red flags quality control officers should watch out for to ensure a streamlined garments quality control process:

Communication Gaps

To perform a pest inspection you'll need a few tools. Items such as flashlights, flushing agents or aerosols, magnifying glass and a pen and paper to record your findings during the inspection.

What to do: Garment suppliers and manufacturers should constantly communicate and collaborate to ensure that everyone has the same level of understanding of product and packing requirements. Addressing communication gaps early on will help address any issue that may arise in a timely manner and avoid delays that hamper manufacturing timelines.

Insufficient Information

Garment quality officers should keep a keen eye on every detail of garment quality control processes. Incomplete tech packs (a design blueprint) and incoherent statement of quality standards is warnings that should be immediately rectified to avoid misinterpretation, frustration, and additional production costs.

What to do: A detailed and comprehensible garment quality control checklist will play a crucial role in how the finished garment meets the required specifications. Clarify requirements for testing procedures, desired sample size, testing schedules, and the garment quality control professional who is assigned to conduct the tests.

Lack of staff training

If checkers do not have a complete understanding of the level of quality expected of the products, low-quality garments would most likely end up on the sales floor, resulting in unsatisfied customers.

What to do: Quality inspectors play an important role in ensuring that only high-quality garments reach customers. It is important that they receive appropriate job training in order for them to properly carry out the garment quality control checklist.

Faulty garment machinery and equipment

Apart from being aware of potential communication and training gaps, garment quality officers should also pay attention to garment manufacturing hardware. There may be faulty machinery that may not have been maintained for years which can result to cutting, sewing, needling, and pressing garment defects.

What to do: Inspection of garment machinery and equipment can be included in a garment quality control checklist to ensure that no malfunctioning machines are in the line.

Frequent changes in production planning

There may be designers or buyers that will send instructions to suddenly revise the design even when production is about to start. Abrupt changes, big or small, can significantly affect the production timeline and cause major delays and low-quality garments.

What to do: To address this red flag, the garment quality control checklist can be used to stipulate deadlines and the maximum frequency for changes in the design or production process. Stakeholders must agree to abide by the terms to maintain a smooth production timeline.

6.2. Recording and Completing work documentation.

Documentation of the employment relationship provides a written record that may be necessary to support such actions as employee promotion, employee pay raises, and disciplinary action including employment termination. Documentation about employees, when necessary, is generally both positive and negative.

A document is a piece of writing that contains information whereas a record is a document that can be used as evidence. Both documents and records provide information, but records also serve as evidence. This is the main difference between documents.

A QC file is quality control file in garments manufacturing also known as Trim Card or Garments swatch card, have all items what used in garments, Fabrics-trims for specific color and style, instruct what color and code number thread/label/zipper will be used for specific style and color.

Quality Reporting Responsibilities in the Apparel Industry: Garments quality controlling work throughout a garments factory, very sensitive work to maintain export garments quality. Reporting is the first job of Garments quality department rather than working; need to maintain lots of documents as their working reference.

Table 6.1. Fault Analysis Card

FAULT	APPEARANCE	CAUSE	EFFECT	RESPONSIBILITY	ACTION	PREVENTION
Split Stitch on Linking	Half stitch or part Of stitch	Failure to place whole stitch on point	Weak part in seam which under pressure will break away	Operative	Remove fabric from points and run on	Check each stitch is on a constructive point when fabric is run on

6.3. Completing garments to next operation.

As a garment maker, garment factories normally purchase fabric from various fabric suppliers. Prior to sourcing the fabric, there are some pre-production processes handled by the factory merchandiser.

Following steps are involved in the pre-production stage.

- Pattern making,
- Garment sampling,
- Fabric development,
- Fabrics and trims approvals,
- Fabric and trims sourcing,
- Pre-Production meeting
- The garment stitching process involved the following sub-processes.
- Part preparation
- Marking
- Folding and pressing
- Stitching/assembling
- Quality checking

Self-Check -6	Written Test
----------------------	---------------------

Direction I: Explain.

1. What is a quality fault?
2. Explain about the 5 Red flags to look out for during garments quality control
3. Write steps of the pre-production stage.

II. Matching the following questions

A

B

- | | |
|-------------------|---|
| 1. Fault | A. Half stitch or part Of stitch |
| 2. Appearance | B. Split Stitch on Linking |
| 3. Cause | C. Operative |
| 4. Effect | D. Failure to place whole stitch on point |
| 5. Responsibility | E. Weak part in seam which under pressure will break away |
| | F. Remove fabric from points and run on |

Operation Sheet -6	Dispatching completed work
---------------------------	-----------------------------------

Step by step guide to garment production

- Pre-production
- Fabric and trim
- Sourcing
- Pattern making
- Production planning
- Cutting process
- Manufacturing and quality control

Procedure of Taking Corrective Action Process

Step 1: Communicate and assign responsibility

Supervisor

Quality Assurance

Management

Step 2: corrective action

Document all corrective actions identified during investigation.

Select the corrective action that will eliminate or greatly reduce the recurrence of the nonconformity

LAP Test -6	Practical Demonstration
--------------------	--------------------------------

Name: _____

Date: _____

Time started: _____

Time finished: _____

Instruction I: Given necessary templates, tools and materials you are required to perform the following tasks within 10 hours. Your trainer will develop a scenario for you.

Task 1: Fault Analysis Card

Reference

1. Mascet Project Report, Ellis Developments Ltd, 1997
2. http://content.abt.com/documents/28966/DR5020_use.pdf
3. http://euratex.eu/fileadmin/user_upload/images/ongoing_
4. Innes R, Medical Textiles 99 Textile Horizons, October 1999 p 9
5. <http://www.eatdrinkstitch.com/>
6. https://www.coats.com/-/media/Coats/Information-Hub/Embroidery-Solutions/Machine-embroidery_tcm35-192034.jpg?rev=8dd1352407ea475ea12ac2ffe113d2a3
7. Professional Sewing Techniques for Designers by J. Cole and S. Czachor, Fairchild Publications Inc., New York, 2009
8. New Complete Guide to Sewing: Step by Step Techniques for Making Clothes and Home Accessories (Readers Digest (25 July 2003)

Participants of this Module (training material) preparation

No	Name	Qualification (Level)	Field of Study	Organization/Institution	Mobile number	E-mail
1	Yosef Abebe Getachew	B- level	Fashion design and Textile Engineering	Mary Help College	0923684937	josephabebe5@gmail.com
2	Endreyas Miftah Ahimed	B-level	Garment Engineering	Burayu Polytechnic College	0912636386	miftahendrias2005@gmail.com
3	Muluembet Admassu Abebe	A-level	Garment Technology	Hawasa Polytechnic College	0985131178	muluembetadmassu06@gmail.com
4	Biniyam Genet Chekol	B-level	Garment Technology	Tilili Tvet College	0922440120	biniyamgetnet@gmail.com
5	Abdusemed Adem	A-level	Fashion design and Garment Technology	Diredewa Polytechnic Collage	0910075389	adamabdusamad7@gmail.com

