



CHAPTER-4



Elements of Garment Making

Objective

The objective of the unit is to provide students with an understanding on the role and importance of garment making in fashion designing. It introduces students to the basic skill of sewing which is essential to convert the design on paper into a garment. The unit essentially aims to prepare students to achieve the following for further application in the industry:

1. To introduce the students to garment making
2. To familiarize them with sewing machine & its parts
3. To familiarize them with use of other sewing aids
4. To teach them basic hand and machine stitches
5. To teach them simple machine operations

Learning Outcome

After finishing the course students shall be able to do the following:

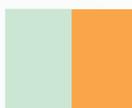
1. To work proficiently on the sewing machine
2. To rectify simple problems of the machine
3. To stitch different seams on the machine
4. To finish edges with hand stitches
5. To make gathers, pleats and tucks on the fabric

Teaching Pedagogy

1. Illustrated class lectures and practical demonstrations
2. Class-room quiz
3. Presentations both by faculty and students followed by discussions in class
4. Review and feedback on assignments

Mode of Assessment and Evaluation

1. Written test to assess and evaluate knowledge and understanding





2. Practical assignments to assess and evaluate application and skills
3. Presentations to assess and evaluate content and presentation skills

References

1. Encyclopedia of Dressmaking, by Marshall Cavendish
2. Readers Digest book of Sewing
3. Encyclopedia of Sewing

Content

4.1 Introduction to Garment Making

- 4.1.1 Elements of Garment Making
- 4.1.2 Sewing Machine
- 4.1.3 Lockstitch Machine
- 4.1.4 Types of Lockstitch Machines
- 4.1.5 Parts of Sewing Machine:
- 4.1.6 Threading the machine
- 4.1.7 Filling in the bobbin/bobbin winding
- 4.1.8 Lower threading
- 4.1.9 Raising the bobbin thread
- 4.1.10 Stitch tension
- 4.1.11 Pressure and feed

4.2 Sewing tools and Safety rules

- 4.2.1 Needles
- 4.2.2 Thread
- 4.2.3 Stitch Per Inch (SPI)
- 4.2.4 Safety Rules



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4.2.5 Sewing Aids

4.3 Common Machine Problems

4.3.1 Bobbin

4.3.2 Fabric

4.3.3 Machine

4.3.4 Needle

4.3.5 Stitches

4.3.6 Thread

4.4 Operating Power Machines

4.4.1 Exercise - 1

4.4.2 Exercise - 1

4.5 Hand Stitches

4.5.1 Backstitch

4.5.2 Basting

4.5.3 Blanket stitch

4.5.4 Hemming stitch

4.5.5 Catch stitch

4.5.6 Overcast stitch

4.5.7 Slip stitch

4.5.8 Tacks

4.6 Seams

4.6.1 Plain seam

4.6.2 Curved seam

4.6.3 Cornered seam



- 4.6.4 Seam finishes
 - 4.6.4.1 Stitched & Pinked seam
 - 4.6.4.2 Turned and Stitched seam
- 4.6.5 Self enclosed seams
 - 4.6.5.1 French seam
 - 4.6.5.2 Flat fell seam
 - 4.6.5.3 Mock French seam
- 4.6.6 Top stitching seams
- 4.6.7 Double top stitched seam
- 4.6.8 Mock flat seam
- 4.6.9 Seam with fullness
- 4.6.10 Eased seam
- 4.6.11 Gathered seam
- 4.6.12 Pleats
- 4.6.13 Tucks

Scheme of Chapterization

Section 4.1 aims at inculcating the understanding of basic sewing machine, its handling and its usability in garment making.

4.1 Elements of Garment Making

- Section 4.1.1 Sewing Machine
- Section 4.1.2 Lockstitch Machine
- Section 4.1.3 Types of Lockstitch Machines
- Section 4.1.4 Parts of Sewing Machine
- Section 4.1.5 Threading the machine



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- Section 4.1.6 Filling in the bobbin/bobbin winding
- Section 4.1.7 Lower threading
- Section 4.1.8 Raising the bobbin thread
- Section 4.1.9 Stitch tension
- Section 4.1.10 Pressure and feed

Exercise given

1. Visit the market and identify various sewing machines from different brands and note their prices. Correlate the prices with functions that a machine can perform. Prepare a short report of about 5-6 pages.
2. List differences between industrial sewing machine and domestic sewing machine based on your survey of the market.

Teachers Role

Students should be asked to maintain a practical note book to make notes on the exercises given during the classes. On completion of the exercises there should be class discussion in order to encourage sharing of information and holistic learning. The teacher should be able to make the students understand the importance of the exercises and application of the same in the industry.

Fill in the blanks:

- a) Sewing can be defined as a **craft** of **attaching** or **fastening** fabrics or other materials with help of **needle** and **thread**.
- b) **Isaac Singer** designed a machine with a foot treadle.
- c) The lockstitch is formed with the **needle** thread that feeds from a **spool** at the top and a **bobbin** thread that feeds from a **bobbin** at the bottom.
- d) Feed Dog is a small **metaldevice** under the **presserfoot** that has teeth which carries the material **along** as it is stitched.
- e) **Throat Plate** is a semicircular disc with a hole to allow needle to pass through it.
- f) The amount of pressure needed depends on the **weight** and **thickness** of the material.



Scheme of Chapterization

Section 4.2 aims at inculcating the understanding of various tools and aids required for sewing. This section also explains the rules that students must follow in order to maintain complete safety in the sewing room.

4.2 Sewing Tools and Safety Rules

Section 4.2.1 Needles

Section 4.2.2 Thread

Section 4.2.3 Stitch Per Inch (SPI)

Section 4.2.4 Safety Rules

Section 4.2.5 Sewing Aids

Exercise given

1. Prepare a safety chart for your Machine Room. Use pictures or drawings to highlight the important safety rules.

Teachers Role

Students should be asked to illustrate the safety rules on a half imperial sheet and give a presentation. They should be encouraged to sketch/ colour the illustrations, thematic cartoons may be used to make the chart interesting.

Fill in the blanks:

- a) Three different types of tips in needles are Regular sharp needle, Ball-point needle and Wedge point needle.
- b) Needles size 7 is used for light weight fabrics and size 18 is used for very heavy weight and dense fabrics.
- c) Higher the number, finer is the thread and smaller the number, coarser is the thread.
- d) Dress form is a standardized duplication of a human torso, padded with cotton and covered with canvas.



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- e) As a safety measure, **unplug** the machine at the end of the day.
- f) SPI stands for **stitchperinch**.

Scheme of Chapterization

Section 4.3 aims at inculcating the understanding of common machine problems and ways of solving them.

4.3 Common Machine Problems

- 4.3.1 Bobbin
- 4.3.2 Fabric
- 4.3.3 Machine
- 4.3.4 Needle
- 4.3.5 Stitches
- 4.3.6 Thread

Exercise given:

1. Interview three people in your family/friends who use sewing machine and identify the common machine problems they face. List ways by which you can help them resolve those problems.

Teachers Role

Students should be asked to include the interview notes along with their recommendations in their note books. The ways suggested by students to resolve the machine problems may be discussed in the class.

Fill in the blanks:

- a) Bobbin may wind unevenly if the **thread** is not properly **inserted** in the thread guide.
- b) Stitches may skip here and there if the **needle** is blunt or **bent**.
- c) Needle may break if it is **inserted** incorrectly.
- d) Machine runs noisily if it probably needs **oiling** and / or **cleaning**.
- e) Motor does not run if **cord** is not plugged in.



Scheme of Chapterization

Section 4.4 aims at inculcating the practical understanding of operating power sewing machine.

4.4 Operating Power Machines

4.4.3 Exercise - 1

4.4.4 Exercise - 1

Teachers role Students should be supervised while doing the practical exercises. Teacher should give a demonstration to the students before they start using the machine.

Scheme of Chapterization

Section 4.5 aims at inculcating the understanding of hand stitches used in construction of garments.

4.5 Hand Stitches

4.5.1 Backstitch

4.5.2 Basting

4.5.3 Blanket stitch

4.5.4 Hemming stitch

4.5.5 Catch stitch

4.5.6 Overcast stitch

4.5.7 Slip stitch

4.5.8 Tacks

Exercise given:

Make five samples of different hand stitches on muslin or poplin fabric.

Teachers role Students should be asked to get 2 layers of 10" x 10" muslin or poplin fabric to make the samples. Wherever hem finishing or seam finishing stitch is required, the students may be asked to sew 2 fabrics 10" x 6" and then make necessary hand stitches. This will help them to understand the application of the stitches taught. Teacher should give demonstration of each hand stitch.



Fill in the blanks:

- a) **Banket** stitch is traditionally used in embroidery.
- b) Hand **basting** is used to temporarily hold together two or more fabric layers during fitting and construction.
- c) Slip stitch is an **invisible** stitch formed by slipping the thread under a fold of fabric.

Scheme of Chapterization

Section 4.6 aims at inculcating the practical understanding of various seams, seam finishes, gathering, pleats and tucks.

4.6 Seams

- 4.6.1 Plain seam
- 4.6.2 Curved seam
- 4.6.3 Cornered seam
- 4.6.4 Seam finishes
 - 4.6.4.1 Stitched & Pinked seam
 - 4.6.4.2 Turned and Stitched seam
- 4.6.5 Self enclosed seams
 - 4.6.5.1 French seam
 - 4.6.5.2 Flat fell seam
 - 4.6.5.3 Mock French seam
- 4.6.6 Top stitching seams
- 4.6.7 Double top stitched seam
- 4.6.8 Mock flat seam
- 4.6.9 Seam with fullness
- 4.6.10 Eased seam
- 4.6.11 Gathered seam



4.6.12 Pleats

4.6.13 Tucks

Exercise given:

Visit garment retail shops. Identify and list the 3 most commonly used seams each in menswear, womens wear and Kids wear garments.

Teachers role Students should be given demonstration of the above mentioned seams, seam finishes, pleats, gathers and tucks. They should then make their own samples keeping the ready size of 10"x10". The purpose of the exercise should be to enable students to understand the application of the seams learnt in the class in different types of garment categories i.e. menswear, womens wear and kids wear. The students should be asked to make visual presentation to share the information collected.

Fill in the blanks:

- Tucks are **parallel folds** of fabric used for a decorative effect on the right side of the fabric.
- Three types of pleats are **Side pleats, Box pleats** and **Inverted pleats**.
- Gathering** is the process of drawing fullness into a much smaller area by means of two rows of machine basting.
- French** seam is suitable for thin/sheer fabric such as voile, organdy, georgette.
- A **seam allowance** is the distance from the fabric edge to the stitching line, farthest from the edge.
- Self-enclosed** seams are those in which all seam allowances are contained within the finished seam, thus avoiding the necessity of a separate seam finish.