Practical No. 1.
Body Measurements & Basic terms used in Stitching.

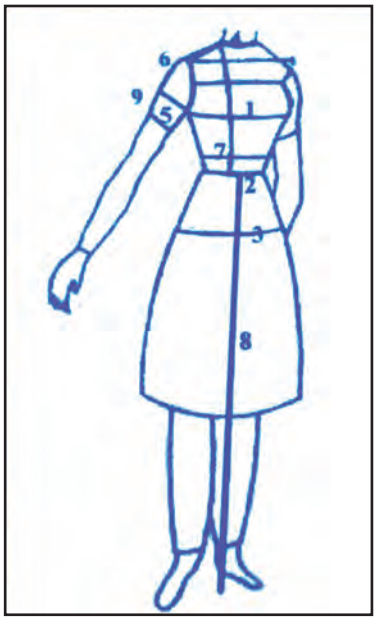
Body Measurements : When you intend to stitch any garment for some particular person, you need to take his / her body measurements so that the garment is a perfect fit. Taking accurate measurements is a necessary skill that you must practice and acquire.

Materials Required : Measuring tape, a pen and paper. If you are taking your own measurements, standing in front of a full length mirror will help.

The basic measurements required for stitching any garment can be divided into two broad categories – Horizontal Measurements and Vertical Measurements.

Horizontal Measurements :

- **Neck** – Measure all the way around the neck above the collar bone.
- **Shoulder** – Measure from one shoulder bone to the other.
- **Bust** – This is the measurement around the body across the fullest part of the bust. Make sure you keep the measuring tape straight as you record the number so that it doesn't dip at the back.
- **Waist** – This is the measurement around the body at the narrowest part of the torso.
- **Hip** – The hip measurement is taken around the body at the fullest point of the hips/bottom.
- **Arm** Girth – This is the measurement around your arm above the elbow. Depending upon the type of garment you are stitching and the person's comfort level, you can keep the measurement exact or keep it loose.



Pic. No. 1.1 Body Measurements

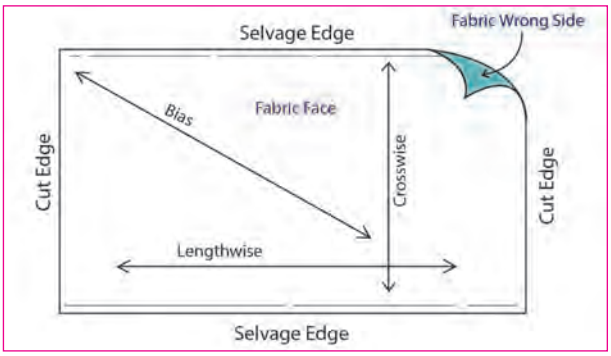
- **Wrist** – Measure around the wrist just above your hand. It is useful to know this measurement when you are stitching a full sleeved garment.
- **Thigh – This is the measurement around the thigh – midway between waist and knee.**
- **Knee – This is the measurement around the knee.**
- **Ankle – This is the measurement around the ankle.**
- **Vertical Measurements :**
- **Upper body –** Start from the point your shoulder meets your neck and go down depending upon the type of garment you are stitching. For tops and blouses - you measure up to waist, for shirts – measure up to the hips and for kameez – measure up to knee.

- **Waist to knee** – Measure from the waist up to the knee. Helpful for making skirts, frocks, uniforms etc.
- **Waist to ankle –** Measure from the waist up to the ankle. Useful for making pants, salwar, churidar, jeans, gowns, long skirts etc.
- **Inside leg** – Measure from the crotch to the ankle. Useful for sewing pants.
- **Arm Length –** Measure from the shoulder bone up to the length desired for the sleeves.

Practical Work : Students should make pairs and take each other's measurements and note it down in their journal.

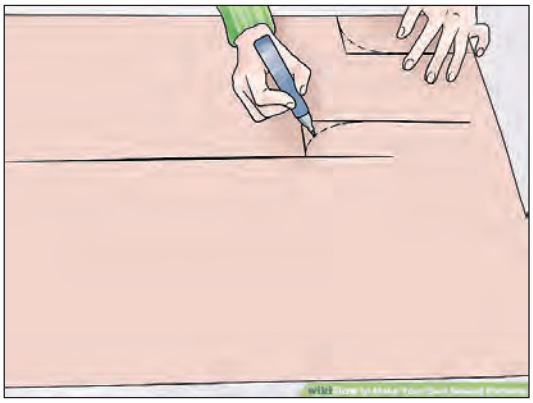
Basic Terms used in Stitching :

- **Warp** – The lengthwise yarns inside a fabric are known as Warp yarns. You can find the warp yarns in a fabric by looking at the selvedge. The warp yarns will be in the direction of selvedge.
- **Weft** – The yarns at right (90^0) angle with warp yarns are known as Weft yarns. They are in the direction of width.
- **Bias** – When a fabric is folded or cut at 45^0angle, it is called Bias. For making a bias match the selvedge to the width wise edge of the fabric.



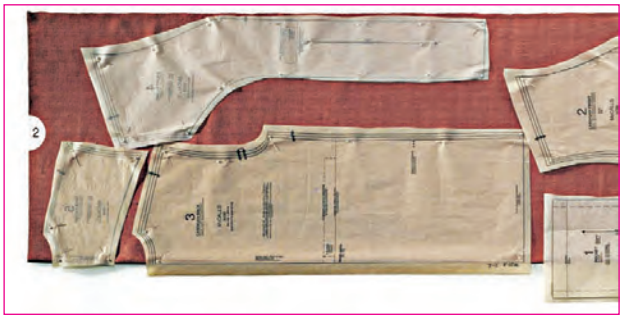
Pic. No. 1.2 Bias

- **Selvedge** – The machine made edges on both the length wise ends of a fabric are known as selvedge. Threads do not come out from these edges. There are two selvedge in a fabric parallel to each other. For stitching purpose, the selvedge help us to determine the length of the fabrics.
- **Drafting** – Drafting is the process of creating paper patterns from which garment pieces are cut before stitching together to make garments.



Pic. No. 1.3 Drafting

- **Layout** – Layout means putting all the pieces of drafting on the fabric in order to cut the fabric in the desired shapes.

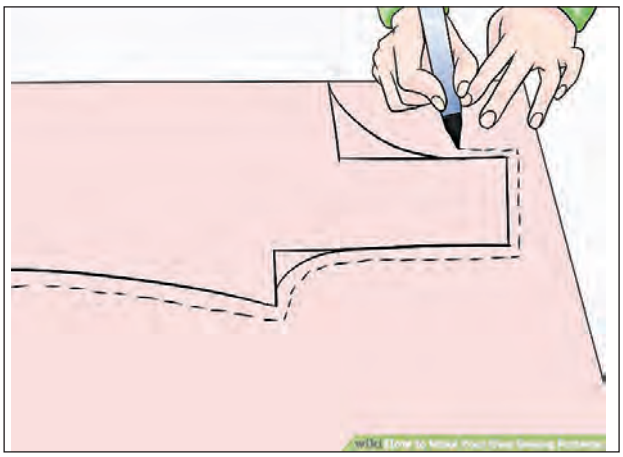


Pic. No. 1.4 Layout

Layout should always be done keeping in mind the grain or length of fabric. The fabric can be folded length wise or can be spread open.

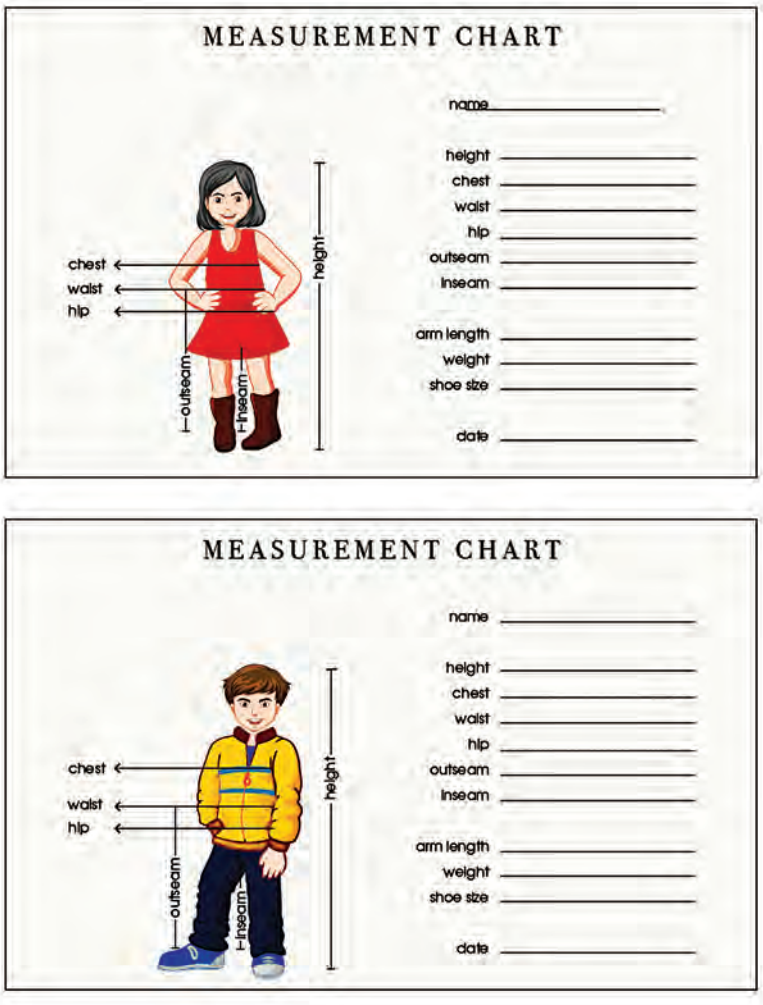
- **Cutting** – The fabric is marked with a tailoring chalk or pencil as per the drafting pattern. Seam allowance is also marked and then the fabric is cut on the seam allowance lines.

- **Seam Allowance** – It is the margin or extra fabric kept beyond the boundaries of drafting patterns on the fabric. This extra margin is used up in stitching. If this allowance is not kept in mind, the garment will turn out to be smaller than the measurements.
- **Ease Allowance** – Even the most fitting garments can not be stitched exactly as per body measurements. In order to make a garment which is easy to put on and take off, some extra margin is always kept while making drafting pattern.



Pic. No. 1.5 Seam Allowance

Body Measurement Chart For Children



Practical No. 2
Placket and Fasteners

A placket is an opening in a garment which makes putting on and taking off the garment easier.

PLAIN PLACKET:

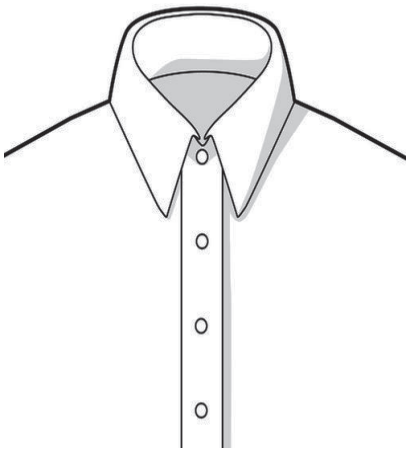
This placket is used for the garments which are full open like shirts, saree blouses, etc. two separate strips are cut to finish this type of opening. One side, usually the right side is folded halfway, extending beyond the garment. The left side is fully folded and overlaps the extended side which is the under lap.

Material Required : Plain poplin material of light colour, matching thread, measuring tape, scissors, tailor's chalk etc.

Method : The material is spread out on a table and two pieces were marked and cut in the direction of length. The size of both the pieces

Length - 15 cm

Width - 8 cm



Pic. No. 2.1 Plain Placket

These pieces were marked as Right and Left as if they are sides of a shirt.

Two strips were also marked and cut in the direction of length. The Right strip to be attached to the Right piece was cut 15 cm long and 5 cm wide. The Left strip was cut 15 cm long and 3 cm wide.

The right strip was attached to the Right piece with their right sides facing each other. The strip was then folded halfway so that it remains extended and finished.

The left strip was attached to the Left piece with their right sides facing each other. The strip was then completly folded on the wrong side like a facing and finished.

FASTNERS: Fasteners are important because the opening made by the placket has to be closed once the garment is put on and opened when it is to be put on or taken off.

Fasteners are of different types.

- **Buttons:-** These are most commonly used. They are of two or four holes. They should be positioned in such a way that top edge and lower edge of the garment are evenly aligned. when doing by hand, the needle should pass through the four holes of the button in such a way that a + sign is formed. The two hole button usually are stitched with a = sign.

  Button holes can be made by hand or by machine. Its size should be correct for the button.

Pic. No. 2.2 Buttons

- **Hook and eye:** This is a metal fastener, used as an invisible closing at the point of strain on the Garment. E.g. ends of neck, waist band, waist lines etc.

  The hook is attached to the wrong side of the overlap by hand using simple whip stitches. The two rounds of the hook is secured with stitches and then 2 – 3 stitches are taken to secure the longer hook part.

  The eye can be round or bar shaped. It can be metal bar or a thread eye can be made. Several straight stiches are taken to make a thread eye. Then it is finished with blanket stitches.

Pic. No. 2.3 Hook & Eye

Some Other Fasteners

Practical No. 3
Apron

Material required : Brown paper, Measuring tape, ruler, pencil, scissors etc.

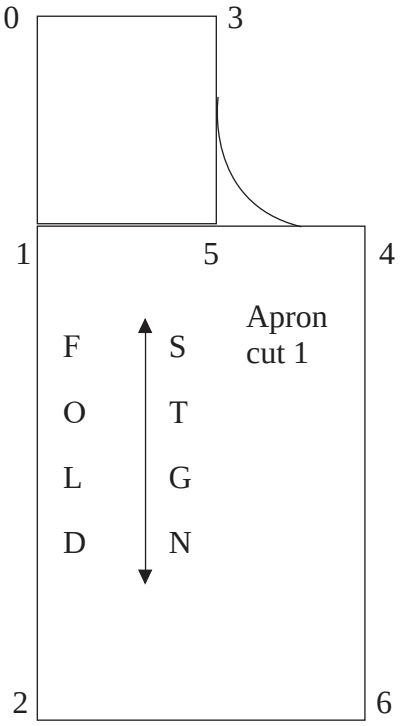
Measurements :

Round chest – 88 cms.

Round waist – 72 cms.

Length of bib – 25 cms.

Length of skirt – 60 cms.



Drafting Instructions :

Fold the brown paper length wise. Mark the drafting points on the brown paper in the following manner –

0-1 = length of bib
= 25 cms.

0-2 = length of bib + length of skirt
= 25 cms. + 60 cms. = 85 cms.

0-3 = 1/8 of chest
= 11 cms.

1-4 = 1/4 waist + 4 cms.
= 18 cms. + 4 cms. = 22 cms.

1-5 = 0-3
= 11 cms.

Join 3-5 with a straight line.

2-6 = 1-4
= 22 cms.

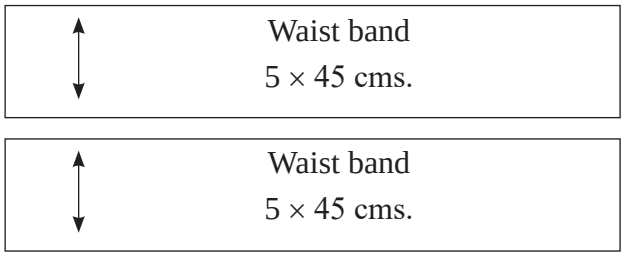
Join 4-6 with a straight line.

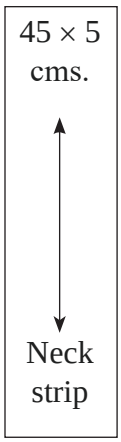
Give curve shape for a bib as shown in figure.

Cutting line : 0, 3, 4, 6, 2.

Cut two horizontal strips to be attached at waist – 5cms. × 45 cms.

Cut one vertical strip to be attached for neck – 40 cms. × 5 cms.





Practical No. 4
Romper

Material required : Brown paper, measuring tape, ruler, pencil, scissors etc.

Measurements : Full length - 50 cm.
Round chest - 60 cm.
Round neck - 30 cm.
Shoulders – 25 cm.

Method : Fold the brown paper with two folds, making four layers of the paper.

Draft in the length wise direction as given below:

0-1 : Full length (on the length wise fold) = 50 cm.

0-2 : 1/4th of chest + 5 cm.

= 20 cm.

1-3 : same as 0-2 = 20 cm.

Join 0-2, 2-3 and 1-3 with straight lines to make a rectangle.

0-4 : 1/4th of chest + 2cm.

= 17 cm.

0-5 : 1/2 of shoulder + 1 cm.

= 13 cm.

4-6 : same as 0-5 = 13 cm.

Join 5-6 with a straight line.

6-7 : 4 cm.

0-8 : 1/6th of neck + 1 cm.

= 6 cm.

5-9 : 2 cm.

Join 8-9 with a straight line for shoulder.

10 is mid-point of 9-6. Join 10-7 with a curve for armhole.

0-11 : 3 cm.

0-12 : 6 cm.

Join 8-11 with a curve for back neck.

Join 8-12 with a curve for front neck.

1-13 : 6 cm.

1-14 : 4 cm.

1-15 : 2 cm.

Join 14-13 with a curve for front crotch.

Join 15-13 with a curve for back crotch.

3-16 : 8 cm.

Join 7-16 with a straight line.

Join 13-16 with a straight line.

17 is mid-point of 13-16.

17-17A : 1.5 cm.

17-17B : 2.5 cm.

Join 13-17A-16 with a curve for front leg opening.

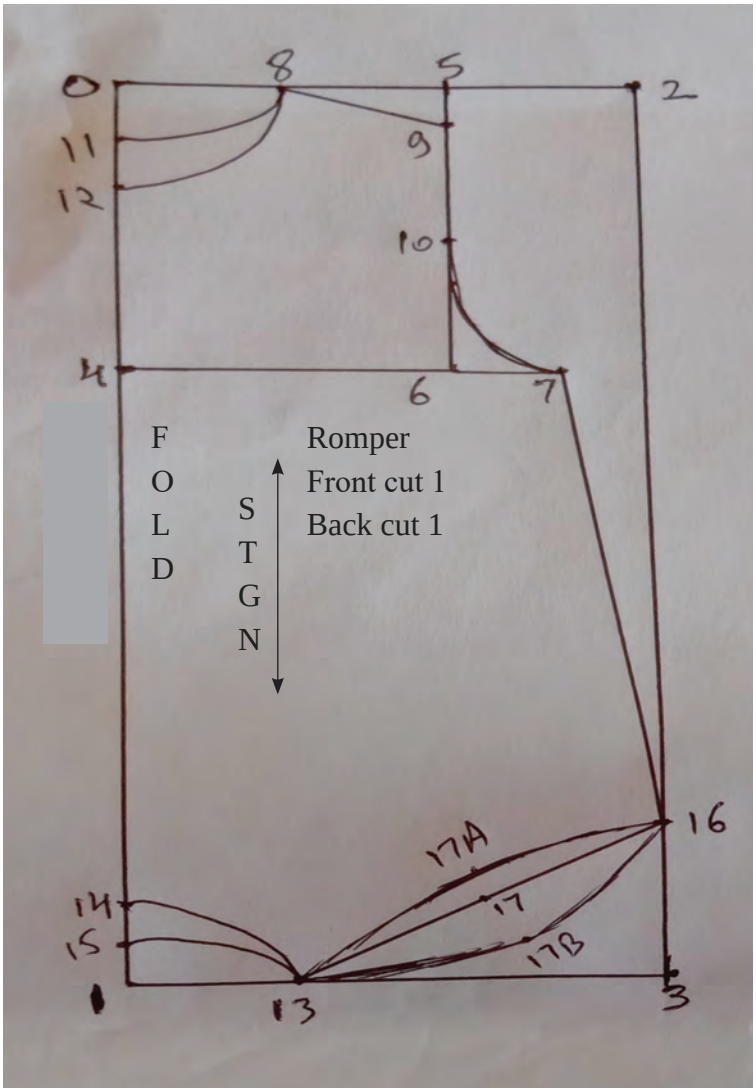
Join 13-17B-16 with a curve for back leg opening.

Cutting line for back : 11- 8- 9- 10- 7- 16 – 17B- 13 – 15. (all four layers)

Remove the back part of the romper and then cut the front.

Cutting line for front : 12 – 8. 14 – 13. 13 – 17A –16.

12 – 8 – 9 – 10 – 7 – 16 – 17A – 13 – 14.


0
8
5
2
11
9
12
10
4
6
7
FOLD
STGN
Romper
Front cut 1
Back cut 1
16
17A
17
17B
14
15
1
13
3

Practical No. 5
Weave identification and making paper weave samples

Weaves are the patterns formed on the surface of fabric due to interlacing of warp and weft yarns.

There are three basic weaves :

1. **Simple or Plain weave** – also known as 1 up and 1down weave. No design is formed on the surface of fabric.
2. **Twill weave** – Diagonal lines are formed on the surface of fabric.
3. **Satin weave** – Long floats of warp yarns are seen on the surface of the fabric.

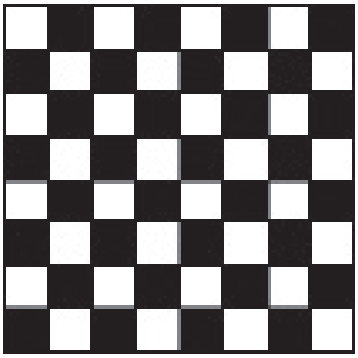


Diagram No. 5.1 Plain weave

Paper Weave making :

Material Required : Marble papers of two contrast colours, ruler, pencil, scissors.

Method : One of the marble paper is used for making the weave frame of 10 cm x 10 cm. A boundary of 1 cm is left on all four sides and warp frame is made by marking and cutting 1 cm wide warp yarns keeping the ends intact.

Weft strips are cut from the other marble paper of 10 cm x 1 cm size.

Three such frames have to be prepared for making samples of the three basic weaves.

For each frame, 7-8 weft strips are cut.

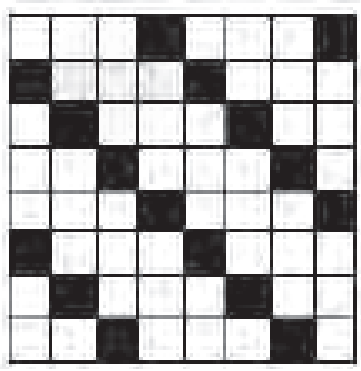


Diagram No. 5.2 Twill weave

The Simple weave sample: is made by interlacing the weft strips in the frame in 1 up 1 down manner.

The Twill weave sample: is made by interlacing the weft strips in the frame in such a manner that diagonal lines are seen on the surface. The weave can be even or uneven.

The Satin weave sample: is made by interlacing the weft strips in the frame in such a manner that long floats of warp are seen on the surface.

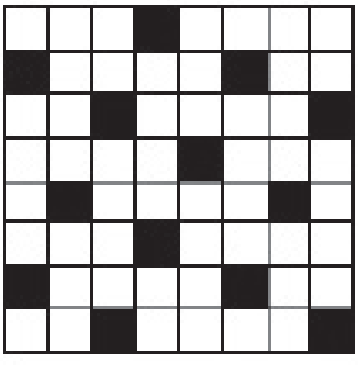


Diagram No. 5.3 Satin weave

WEAVE INDENTIFICATION:

1) Students should collect and stick fabric samples made of different weaves and observe the characteristics carefully.

2) Students should use pick-glass to observe each sample.

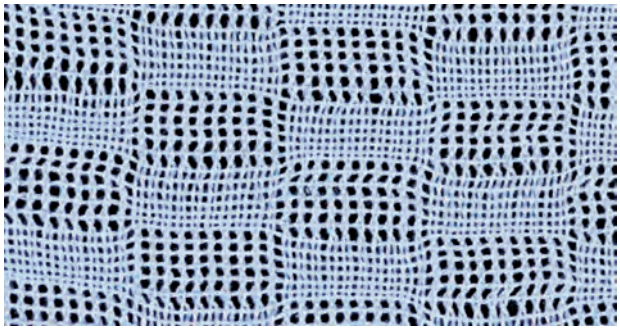
Characteristics of Novelty weaves

Cut Pile Weave

- 3-dimensional effect
- Yarns project out on the surface

Uncut Pile Weave

- 3-dimensional effect
- Loops are seen on the surface

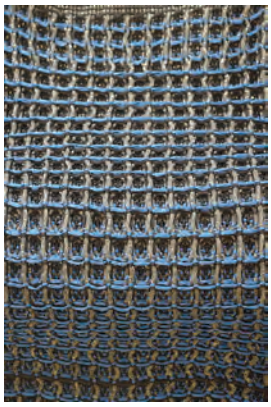


Leno Weave

- Open mesh effect
- Net like fabric

Honeycomb Weave

- Hollows and ridges.
- cell like, honey comb appearance



Practical No. 6
Identification of fibres by Microscopic Test

The microscopic test is a technical test that involves identifying the fibres with the help of a microscope. With microscopic evaluation of fibres, it is possible to be quite specific in identification of some fibres. The test reveals the inner structures of fibres which are remarkably different from each other.

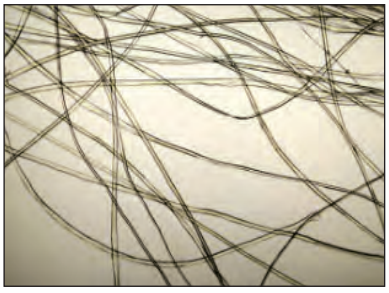
Note :- This test is carried out by teacher on demonstration basis only.

A) Microscopic Test of Wool fiber :

Picture No. 6.1 Wool fiber

1. Uneven in diameter
2. Scales are seen

B) Microscopic test of silk fiber :



Picture No. 6.2 Silk fiber

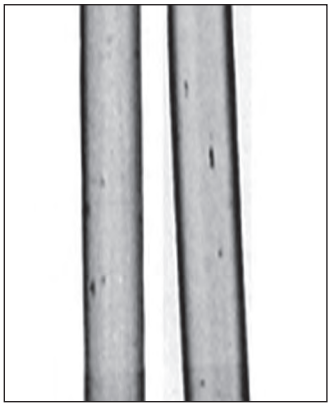
1. Smooth in appearance
2. Transparent
3. Gummy spot are seen.
4. Very fine fibers.

C) Microscopic test of Viscose Rayon fiber

Picture No. 6.3 Viscose Rayon

1. Even in diameter
2. Vertical lines or striations are seen

D) Microscopic test of Polyester fiber



Picture No. 6.4 Polyester fiber

1. Even in diameter
2. Transparent glass rod like
3. Grainy, pitted appearance can be seen if fibres are delustered.

Practical No. 7
Identification of fibers by Burning Test

Qualitative identification of fibers is difficult and may require several tests. The burning test can be used to identify the general chemical composition of fiber such as cellulose, protein, mineral or man made fiber.

❖ Test Procedure :

Step : 1. Unravel a yarn from the fabric sample.

Step : 2. Untwist yarns so the fibers are in loose mass.

Step : 3. Hold the loosened fibers in forceps or tweezers, and move them towards the flame form the side.

Step : 4. Notice the odour given by the fiber during burning.

Step : 5. Observe the ash or residue formed.

Table 7.1

Burning Characteristics of fibers

Fiber	Approaching the flame	In the flame	Removed from the flame	Odour	Residue
Wool and silk	curls away from the flame	Burns slowly	self-extinguishing	Similar to burning hair	Crushable bead
Viscose Rayon	Does not shrink away, Ignites on contact	Burns quickly	continues burning, After glow	similar to burning paper	light fluffy residue
Polyester	Fuses, melts & shrink away from flame	Burns slowly and continues to melt	Self extinguishing	Chemical odour	Uncrushable bead

Practical No. 8
Tie-and-Dye

Tie-and-Dye is a type of resist dyeing technique used since ancient times. It is still popular in the modern context. In India ***Bandhani, Leheriya, Bandhej, Chungdi*** are examples of traditional tie-n-dye technique.

Material Required : white cotton dupatta, commercial dye powder, tub, water, wooden ladle, threads to tie, small bowl, spoon, salt.

Method : The dupatta is washed thoroughly, dried and ironed. It is then folded according to pre determined pattern and tiny portions of all layers of the material are picked by finger nails and tied with threads or rubber bands. Once the desired no. of threads are tied, the dye bath is prepared by taking half a tub of plain, clean water.

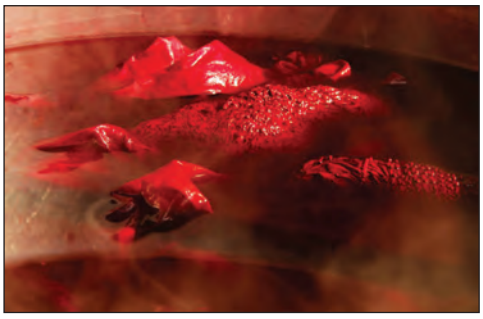
The dye powder is mixed in a little amount of water in the small bowl and then the solution is added to the tub containing water. The tied dupatta is put in the dye bath and allowed to take up colour for 30 -40 mins. It is stirred occasionally with the wooden ladle.

Once the fabric has taken up the desired intensity of colour, the dupatta is taken out from the dye bath and rinsed thoroughly. Salt is added in the rinse for better fixation of the dye. The dupatta is squeezed lightly and allowed to dry in the tied state.

Once the dupatta is dried, all the knots are opened and the dupatta is ironed.

Pic. No. 8.1 Preparation of material

Pic. No. 8.2 Tied material



Pic. No. 8.3 Material being dyed

Pic. No. 8.4 Final Product

Practical No. 9
Block Printing / Stencil Printing

Printing of textiles to decorate them is a very ancient art. There are many methods of printing. Block Printing and Stencil Printing are two of the oldest methods used for printing which are still popular today.

Block Printing : It is the oldest method of textile printing. Wooden blocks on which the desired pattern have been engraved, are used. Dye paste is applied on them and the patterns are transferred to the fabric simply by pressing the block on the fabric. For every repeat pattern, the same procedure has to be repeated. It is a time taking, laborious process but the results are beautiful.

Material Required : Textile product to be printed – any one of the following –

T-shirt	cushion cover
kurti	pillow cover
dupatta	table cloth
Shirt	hand bag

Engraved wooden blocks, fabric colours, paint brush, rough cloth, old newspaper.

Method : The garment or household article to be printed is washed, dried and ironed. It is spread over the rough cloth which serves as back support. Alternately, old news papers can be spread out and the article to be printed is spread over it single layered i.e. if it's a T-shirt or kurti, the back support of rough cloth or news papers should be in between the front and back of the garment.

Fabric colour is applied on the engraved part of the wooden block with the help of paint brush and then it is pressed on the desired part of the article so that the colour and the pattern gets transferred on the fabric. The process is repeated as desired. Colours or wooden blocks can be changed. The colour on the fabric is allowed to dry and the article becomes ready for use.

Pic. No. 9.1 engraved wooden block

Pic. No. 9.2 Block printing

Stencil Printing : It is also one of the oldest methods of textile printing. Here a stencil is prepared by cutting a pattern on a card paper or thin metal sheet. The stencil is fixed on the surface to be printed. Dye is applied on the stencil which allows the colour to reach the fabric only on parts which have been cut. The stencil is removed carefully and put on another part of the fabric as desired.

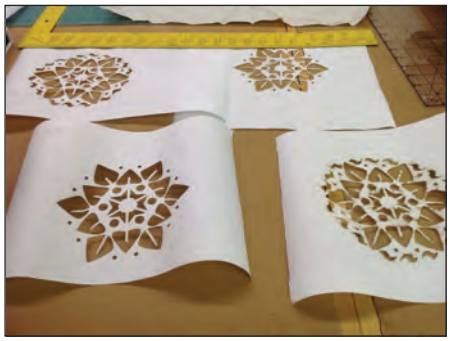
Material Required : Textile product to be printed – any one of the following –

T-shirt	cushion cover
kurti	pillow cover
dupatta	table cloth
Shirt	hand bag

Acrylic sheets, sharp knife or paper cutter / ready made stencils, fabric colours, paint brush or sponge, rough cloth, old news paper, U pins ,weights.

Method : The garment or household article to be printed is washed, dried and ironed. It is spread over the rough cloth which serves as back support. Alternately, old news papers can be spread out and the article to be printed is spread over it single layered i.e. if it's a T-shirt or kurti, the back support of rough cloth or news papers should be in between the front and back of the garment.

The stencil can be made by cutting a pattern on the acrylic sheet with a cutter or a ready made stencil can be used. The stencil is placed carefully on the surface of fabric and secured with U pins or some kind of weight is put on the corners so that the stencil stays in place. The colour is applied on the cut parts of stencil with the help of paint brush or sponge. The stencil is then carefully removed, wiped clean and can be used again. The colour is allowed to dye and the article is ready to use.



Pic. No. 9.3 Stencil

Pic. No. 9.4 Stencil Printing

Practical No. 10
Basic Body Block variations & use of Colour Schemes

Fashion illustration is the art of conveying fashion ideas in a visual form.

Materials required : paper, croquis stencil, pencils, eraser, crayons or coloured pencils.

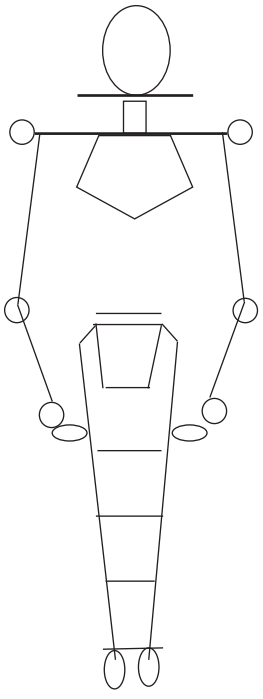
Method :

For Variations in Necklines, Sleeves and skirts –

Make an outline of the basic croquis with the help of croquis stencil on four papers.

On the first paper make a basic bodice (top) and skirt .

On the other three papers make variations in necklines, sleeves and skirts as per your imagination.

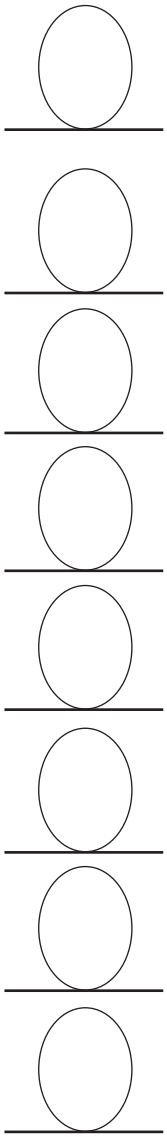


For Colour Schemes :

Make an outline of the basic croquis of any garment with the help of croquis stencil on three papers.

Choose three different colour schemes and fill colours accordingly to the garment drawn on the paper.

Basic Croquis drawing



1. Top of head to chin
2. Chin to mid-chest
3. Mid-chest to natural waist
4. Natural waist to bottom of pelvis
5. Bottom of pelvis to mid-thigh
6. Mid- thigh to knees
7. Knees to mid- calf
8. Mid- calf to feet

Practical No. 11
Maintenance of journal

❖ Students should maintain journal and write all the practicals serially as per the syllabus.

Practical 12 Project Work

The students are supposed to do one project work during the academic year. This project should be based on the syllabus. The suggesed topics are listed after every chapter. The student can choose any one of them or can find out a new topic for project subject to teacher's approval. The format of the project i.e. how it is to be presented is given below.

Format of the Project

Title page - Title of the project, Name of the student, Class, Division. Roll No./Seat No. Name of the College.

Acknowledgement

Index /Table of Contents

Introduction

Main body of the Project with suitable photographs, illustration, tables, graphs, diagrams etc.

Conclusion

Bibliography

Annexure

Websites