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

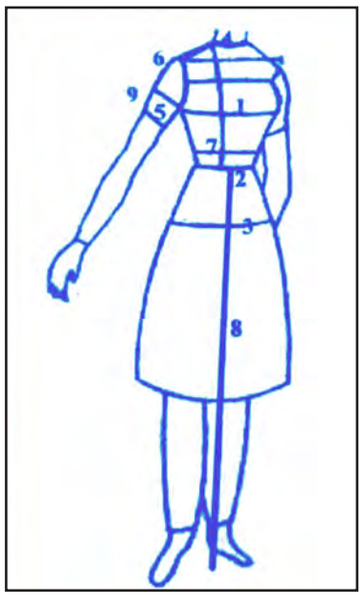
Body Measurements : When you intend to stitch any garment for some particular person, you need to take his / her body measurements so that the garment is a perfect fit. Taking accurate measurements is a necessary skill that you must practice and acquire.

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

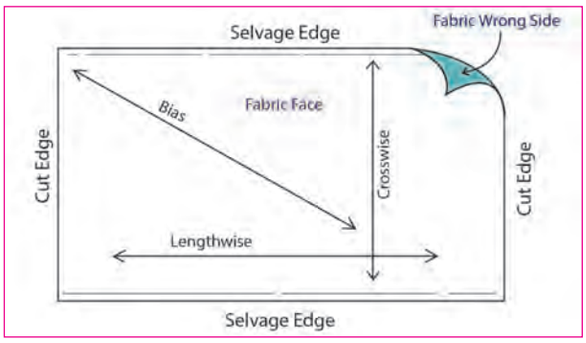
- **Wrist –** Measure around the wrist just above your hand. It is useful to know this measurement when you are stitching a full sleeved garment.
- **Thigh – This is the measurement around the thigh – midway between waist and knee.**
- **Knee – This is the measurement around the knee.**
- **Ankle – This 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.

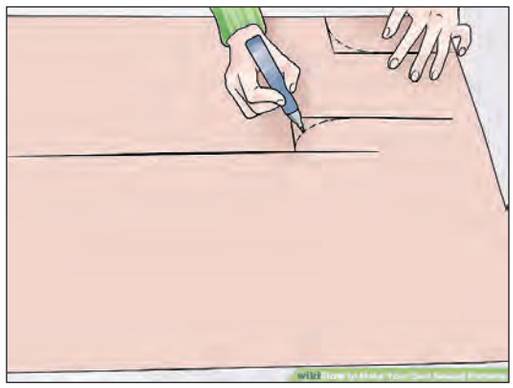
Basic Terms used in Stitching :

- **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.



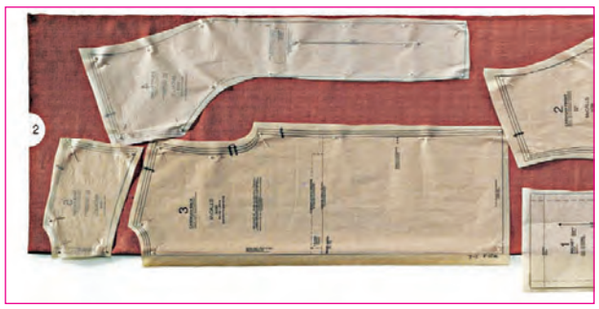
Pic. No. 1.2 Bias

- **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.

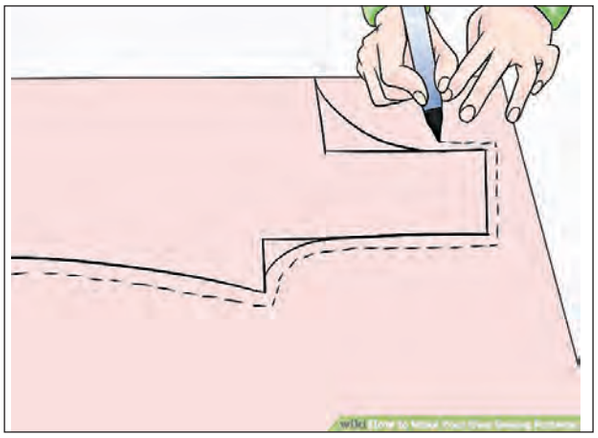


Pic. No. 1.4 Layout

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.

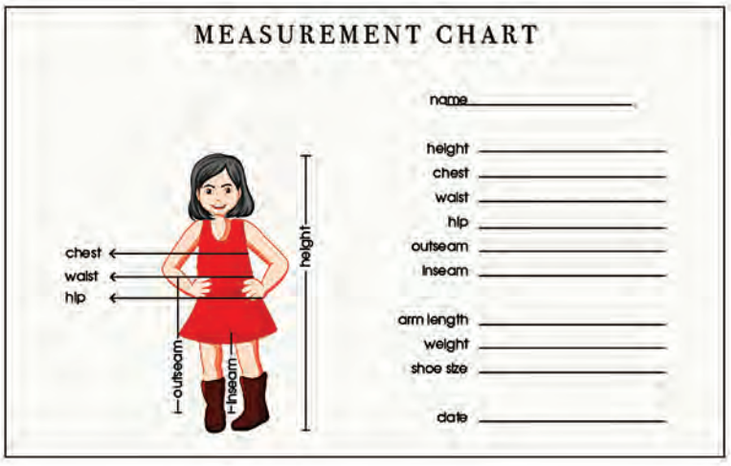
- **Cutting –** The fabric is marked with a tailoring chalk or pencil as per the drafting pattern. Seam allowance is also marked and then the fabric is cut on the seam allowance lines.

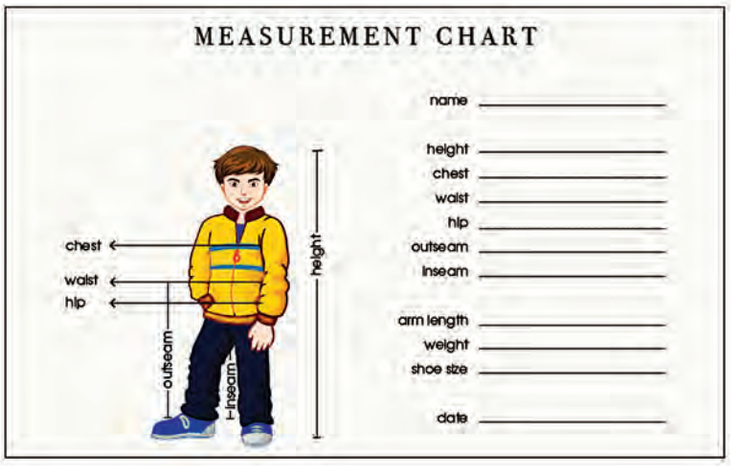
- **Seam Allowance** – It is the margin or extra fabric kept beyond the boundaries of drafting patterns on the fabric. This extra margin is used up in stitching. If this allowance is not kept in mind, the garment will turn out to be smaller than the measurements.
- **Ease Allowance** – Even the most 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:

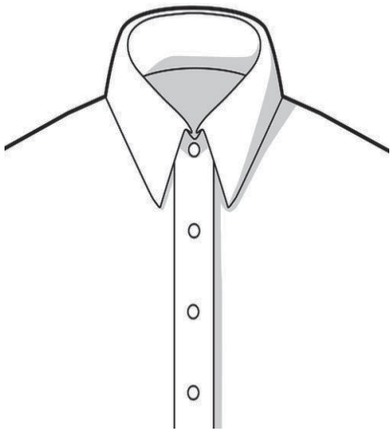
This placket is used for the garments which are full open like shirts, saree blouses, etc. two separate strips are cut to finish this type of opening. One side, usually the right side is folded halfway, extending beyond the garment. The left side is fully folded and overlaps the extended side which is 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 are 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 are marked as Right and Left as if they are sides of a shirt.

Two strips are 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.

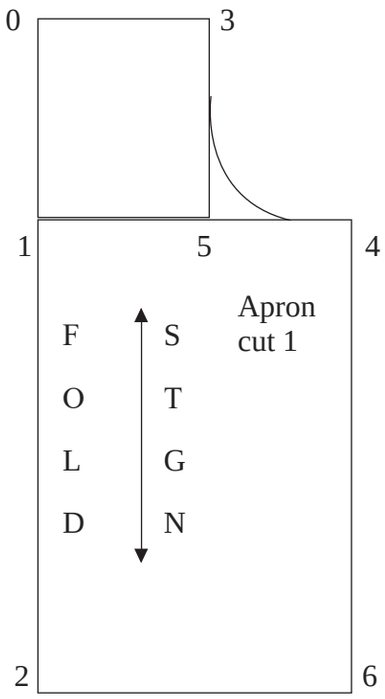
Measurements :

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.

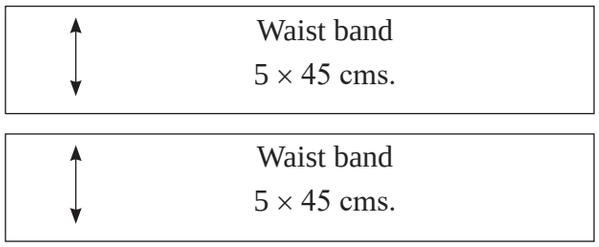
Join 4-6 with a straight line.

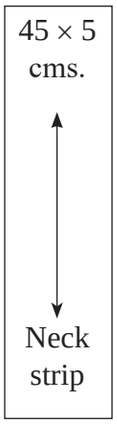
Give curve shape for a bib as shown in figure.

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 : $1/4^{th}$ 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 : $1/4^{th}$ 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 : $1/6^{th}$ 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.

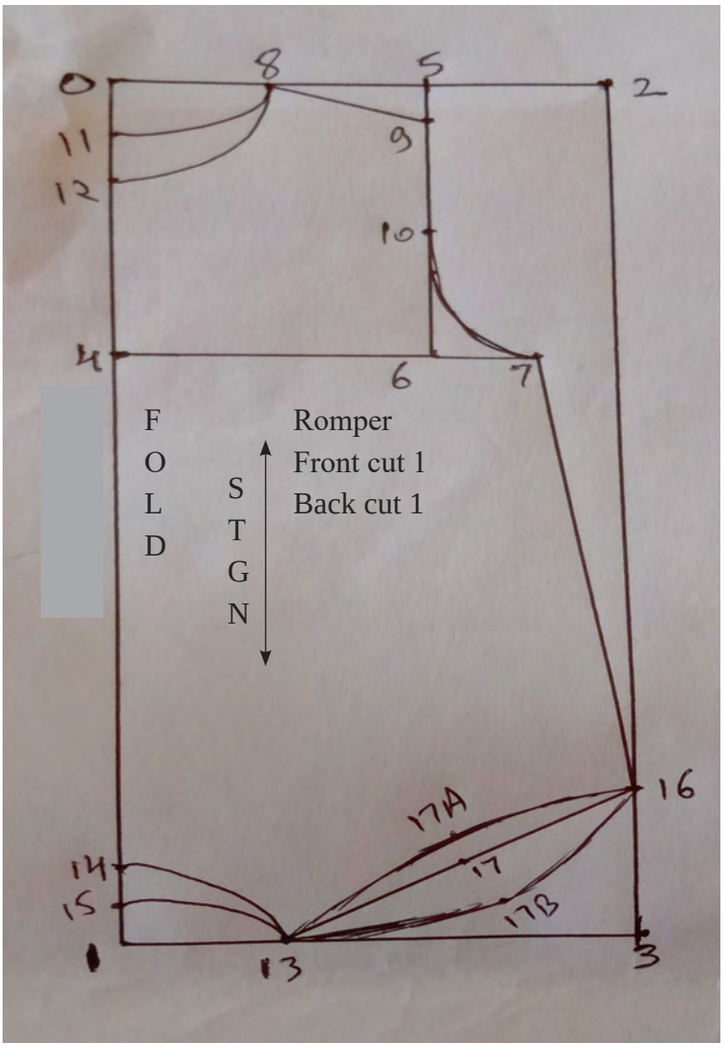
Join 13-17B-16 with a curve for back leg opening.

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.

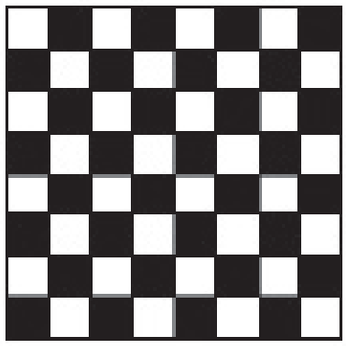


Diagram No. 5.1 Plain weave

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.

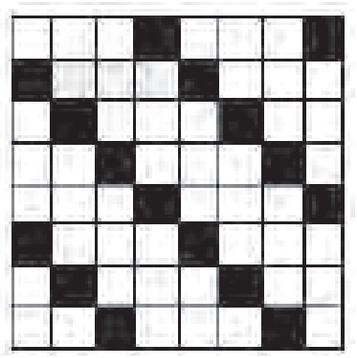


Diagram No. 5.2 Twill weave

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.

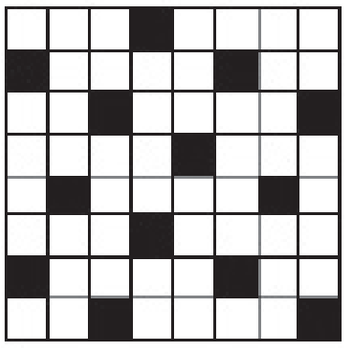


Diagram No. 5.3 Satin weave

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.

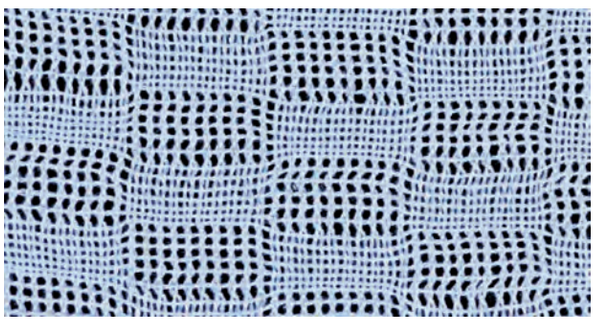
Characteristics of Novelty weaves

Uncut Pile Weave

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

Cut Pile Weave

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

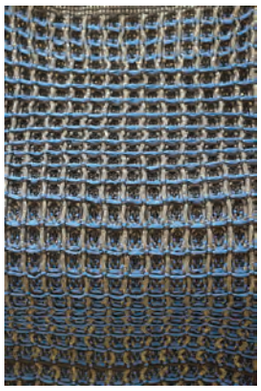


Honeycomb Weave

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

Leno Weave

- Open mesh effect
- Net like fabric



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

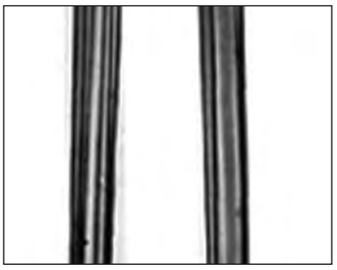
1. Uneven in diameter
2. Scales are seen

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.

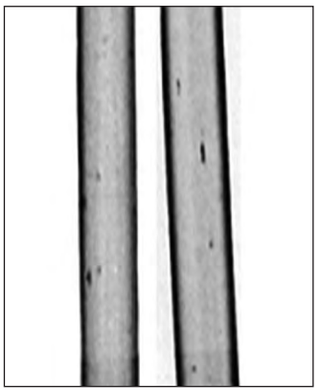
C) Microscopic test of Viscose Rayon fiber



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 from 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, Chungidi*** 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.

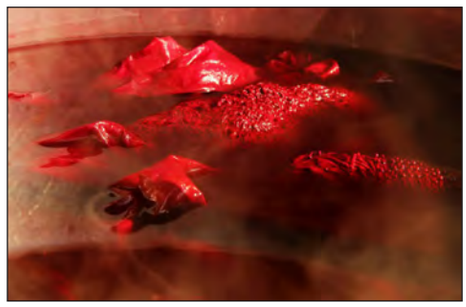
The dye powder is mixed in a little amount of water in the small bowl and then the solution is added to the tub containing water. The tied dupatta is put in the dye bath and allowed to take up colour for 30 -40 mins. It is stirred occasionally with the wooden ladle.

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.

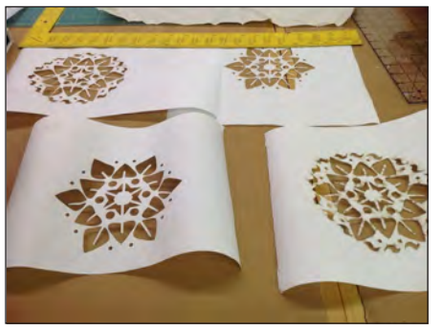
Material Required : Textile product to be printed – any one of the following –

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.

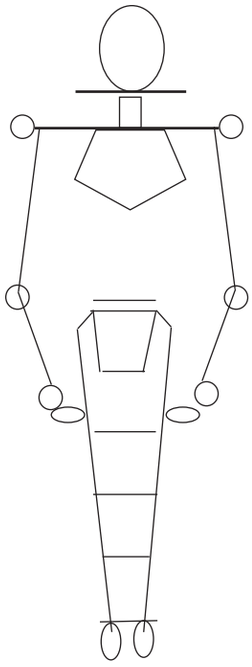
Method :

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.

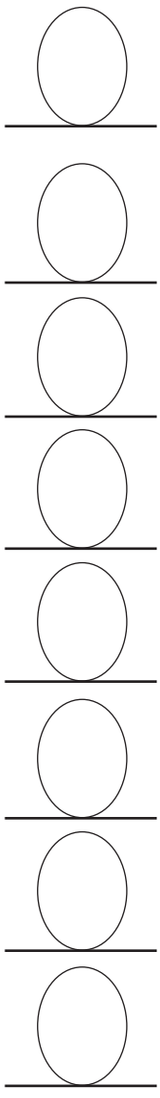


For Colour Schemes :

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 No. 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 suggested 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

ANNEXURE

Textile Times

(Historical Progress of Textiles)

B.C. 10, 000	Evidence of animal skins and furs used as body covering - vegetables clothing some leaves also used as body covering. Old sanskrit scripts are full of such descriptions.
7000	Evidence show that flax was in use in the same swiss lake dwellings.
6500	Evidence shows that weaving was in use.
6000	Evidence that flax was in regular use in Egypt.
5800	Spinning wheel and distaff in regural use. The early poetic works are full of spinning.
5600	'Athena', the greek goddess, is considered the Goddess of Distaff. Ample evidence of spinning wheel and distaff in early folklore.
4000	There are indications showing that cotton was regarded as a fiber.
3500	Cotton cloth was used. Ample evidence of this is found in the old Sanskrit script.
3000	Cotton fabrics of quality in regular use. Evidence of this found at Mohenjo-Daro (Sindh Pakistan) Shows cotton manufacturing as established industry. About this time there is evidence in old sanskrit writing showing that the method of preparing 'Indigo' a vegetable dye-was already known in India. Evidence shows that cotton was also in use in Mexico, Peru and North America.
2800	Vedic hymns give ample indications that cotton cloth of good quality was being used regularly in India.
2700	Ancient Chinese writing indicates that by this time Hemp was used as a fiber in China. Evidence shows that the properties of the rich fiber 'wool' were recognised by this time.
2640	Chinese Empress 'Si Ling - Chi' wife of Emperor 'Huage - ti' began experimenting with silk worms and sericulture. The invention of reeling of silk is attributed to her.
2600	Silk become an established industry in China, the art was however kept a closely guarded secret.
2100	Probably now began the art of dyeing and printing. Evidence of dyeing and printing of fabrics - pictured on the walls of a tomb in Egypt are shown people with decorated fabrics Also found there were illustrations of upright loom.
2000	Cotton Fabrics - Supremancy in India.
1466	Natural Dyestuff began to be used. Linen decorated with conventional design found in the tomb of Thothmus IV.
1200	A sample of Batik printing found in a temple of Java.

1050	Early Sanskrit Literature suggests the existance of silk industry, in India at about this time.
540	Evidence of ornamental linen tapestry.
500	Resist printing first practicised in China. Probably now began the art of fast colour dyeing with mineral colours.
445	Cotton clothes export from India to Europe was carried on fairly regularly by Arabs.
425	Evidence found that Babilonian and Egyption dress consisted of linen shirt reaching to the feet over which was worn a woollen tunic.
350	Secrets of silk manufacture were smuggled out of China. Japan tried to establish its silk industry - four chinese girls helped to establish the Japanese silk industry.
327	'Alexander the Great' in his invasion of India - took the Greece some quantity of printed cotton goods.
300	'Magasthenes' A Greek traveller writes in his narrations that in Indian people wore flowered garments made of finest muslins. This is probably the first indication of the famous Dacca - mulls. 'Megasthenes' - Greek ambasador to the court of 'Chandra Gupta Maurya' mentions decorated cotton fabrics with gold and silver threads and precious stones.
100	Records show evidence of domesticated breed of Angora goat in Turkey.
63	Old Roman records mention used of cotton awnings.
43	Evidence of woollen manufacturing process in writings.
01	Inventions of draw loom in Egypt was an important step in weaving.
00	"True lace fabrics" appear in the form of Egyption painting.

GLOSSARY

Term : Definition / Meaning

- **Abrasion resistant :** The ability of a fibre withstand rubbing in use and care.
- **Absorbent finish :** A finish that applied to a fabric improves its moisure absorption quality.
- **Antislip Finish :** A finish that applied to keep the yarn in place so that they will not slip over one another.
- **Basic finishes :** Finishes that are done to the most fabrics to prepare them for dyeing and special purpose finishes.
- **Basket weave :** The variation of plain weave produced when two or more filling yarns with little or no twist are interlaced with a corresponding number of lap yarns.
- **Bias :** Any direction in the fabric which does not follow exactly warp yarns or weft yarns.
- **Bleaching :** A Chemical process that makes fabrics, yarns or fibers white or prepares them for dyeing or printing.
- **Braiding :** A simple form of narrow fabric construction with interlocking or plaiting yarns of strips of cloth.
- **Brushing :** A machanical finish that removes short, loose fibres from the surface of the fabrics.
- **Carding :** An initial process in yarn making of removing impurities and arranging the fibers into parallel fashion and convert them into card sliver.
- **Cellulosic fibres :** Fibres having cellulose as their basic component. All natural vegetable fibres are cellulosic fibers. Rayon is a regenerated cellulosic fibre.
- **Cohesiveness :** The ability of fibres to stay together and adhere to each other.
- **Combing :** A process involved while manufacturing high quality yarns, which separates long desirable fibres of same length from short, undesirable fibres and arranges them in parallel order in the form of sliver.
- **Crease resistant finish :** A finish that makes fabric more resistant to wrinkling.
- **Cultivated silk :** Silk obtained after sericulture. It is produced by a species called Bombyx Mori.
- **Cut pile weave :** A type of pile weave in which loops formed on the surface of the fabric are cut or closely sheared.
- **Degumming :** Removel of the gum **Sericin** from silk filaments.
- **Delusterning :** The process of dulling the luster of man made fibre with chemicals usually titanium dioxide.
- **Density :** Mass / unit volume. It is expressed as gm/cc. The closeness with which the molecules of a substance are packed within it. Fabrics made with high density fibres are heavier than fabrics made with low density fibres.
- **Detergent :** A substance having cleaning ability.

- **Detergency :** The ability of a substance to clean.
- **Drawing :** A process in yarn manufacture in which the sliver is elongated by passing through a series of pairs of rollers.
- **Dry cleaning :** A method of laundry which uses special volatile solvents instead of water and soap to clean the clothes. It remove all greasy dirt easily.
- **Durable press finish :** A finish that imparts properties which resist wrinkling through many wearing and washing treatments.
- **Durability :** The quality of a substance which makes it long lasting.
- **Elasticity :** The ability of a substance to change dimensions when force is applied and to come back to original position once the force is removed. Clothes made from fibers having good elasticity are easy to put on or take off.
- **Felt :** Woollen fibres get interlocked with each other under special circumstances to form a non-woven fabric called Felt.
- **Felting :** A non-woven process of producing fabric directly from the fibres, usually wool or fur.
- **Fibroin :** The type of protein present in silk fibres.
- **Filament fibres :** Long, continuous, fibres whose length can be measured in meters or yards. All man-made fibres and silk are filament fibres.
- **Filature :** The processes done after Sericulture to produce silk yarn and fabric.
- **Finishing :** Any process that is applied either before or after weaving or kniting to fibre, yarn or fabric to change its appearance, hand or performance.
- **Flame retardant finish :** A finish that makes the fabric fire resistant.
- **Flammability :** The manner in which a fibre reacts to fire.
- **Fleece :** Wool obtained from live sheep.
- **Flexibility :** The ability to bend without breaking.
- **Fume fade finish :** A finish that prevents fading of dyes on textiles by environmental factors.
- **Hard water :** Water that contains calcium and magnesium salts in the form of bicarbonates, sulphates, nitrates and chlorides.
- **Heat conductivity :** The ability of substance heat to allow the heart to pass through it. Fibres with good heat conductivity are more comfortable in summer and fibres with bad heat conductivity are more suitable for winter.
- **Honeycomb weave :** A novelty weave having cell like appearance produced by floating yarns which form ridges.
- **Household Textiles :** Fabrics which we use for various activities in our homes.
- **Hydrophobic :** Substance which gets repelled by water (water hating).
- **Keratin :** The type of protein in wool fibres.
- **Knitting :** A method of constructing fabric by interlocking series of loops of one or more yarns.

- **Lace :** A method of construction of open-work fabrics usually with some figures, produced when yarns are knotted, interlooped interlaced or twisted.
- **Leno and Gauze weave :** Novelty weave with open mesh effect which has increased durabililty, stability and strength.
- **Lustre :** The amount of light reflected back and reaching our eyes from the surface of a substance.
- **Man – made fibres :** Fibres which do not occur in fibrous form in nature and have to be made into fibers.
- **Mercerization :** A chemical finish applied to cellulosic fibres especially cotton to impart luster or improve dye affinity.
- **Mildew-proof finish :** A finish applied to cotton, rayon and linen fabrics to protect them from the damage caused by mildew and fungi.
- **Monomer :** A single unit or molecule form which polymers are formed.
- **Moth-proof finish :** A finish applied to wool and silk fabrics to protect them from the damage caused by moth and carpet beetles.
- **Natural Fibres :** A fibre which is available in nature in fibrous form.
- **Non – thermoplastic fibres :** Fibres which do not change shape or melt due to heat. Such fibres burn and turn to ash on contacting fire.
- **Perspiration resistant Finish :** A finish applied to fabrics to inhibit bacterial growth and formation of perspiration odour.
- **Permanent hardness :** Hardness of water caused by the presence of calcium or magnesium sulphates, nitrates and chlorides.
- **Pile weave :** A novelty weave that produces decorative third dimension creating an effect of depth.
- **Piles :** The loops formed on the surface of a fabric with the help of extra warp or weft yarn.
- **Plain weave :** The simplest of the three basic weaves made on the simple loom by yarns at right angles passing alternately over and under each other.
- **Ply yarn :** A yarn made by twisting two or more single yarns together.
- **Polymer :** A large molecule formed by linking together many monomers.
- **Polymerisation :** The linking of many monomers to form a polymer.
- **Pulled wool :** Wool obtained from dead sheep.
- **Reeling :** The process of unwinding the cocoon and winding the silk filament on large bamboo wheels.
- **Regenerated fibres :** Fibres for which the raw material is taken from nature and then a new fibre is made by various chemical treatments. Rayon is a prime example.
- **Resiliency :** The ability of the fibre to recover after wrinkling or to save itself from wrinkling.
- **Rib weave :** Modification of plain weave producing rib or carded effect in the warp or filling direction.

- **Sanforishing :** A preparatory finishing process that minimises shrinkage and stabilizes the length and width of the fabric.
- **Saponification :** The process of mixing alkali, and fatty acid to produce soap.
- **Satin weave :** One of the basic weaves, characterized by luster because of the long floats that cover the surface of the fabric.
- **Scouring :** Finishing process that removes dirt, oil and sizing material deposited on fibres, yarns or fabrics.
- **Simple yarn :** Yarn that is even in size, has equal twist throughout length and is smooth and uniform.
- **Sericin :** The gummy substance which is produced along with silk fibre.
- **Sericulture :** The raising of silk worms for the production of silk.
- **Singeing :** A finishing process that burns off surface fibres and lint leaving an even surface before the fabric passes through any other finishing process.
- **Sizing :** The application of various materials to a fabric to produce stiffness or firmness.
- **Sliver :** Round, continuous untwisted rope like strand of fibres.
- **Soft water :** Water that contains minimum or no traces of salts.
- **Speciality fibres :** Body hair of animals other than sheep which are found only in limited areas in the world.
- **Special or functional Finishes :** Finishes which enable the fabric to perform certain function more effectively by adding to the aesthetics, comfort, ease of care or the economic attributes of textiles.
- **Spinneret :** A device consisting a series of tiny holes, essential for the manufacture of man-made fibres.
- **Spinning :** A final process of yarn manufacturing where twist is imparted to the yarn to give strength and other desirable characteristics.
- **Spun silk :** Silk yarns and fabrics produced from short fibres of a broken or damaged cocoon.
- **Stain and spot resistant finish :** A finish that protects the fabrics against permanent staining and soil retention.
- **Staple fibres :** Short fibres whose length can be measured in cm or inches. All natural fibres except silk are staple fibres.
- **Stoving :** Stifling the chrysalis with hot water or steam so that we can get unbroken cocoons.
- **Suction Washing :** A method of laundry which uses a special instrument called suction washer. This method is used mainly for heavy and large clothes.
- **Synthetic fibres :** Fibres made from chemicals that were never in fibrous form.
- **Temporary hardness :** Hardness caused due to the presence of calcium or magnesium bicarbonates.
- **Tenacity :** The tensile strength of a fibre expressed in gm / denier.
- **Terry weave :** A weave in which loops or piles are seen on both sides of the fabric. Makes a heavy, absorbent fabric.
- **Textile fibre :** A thin, long, thread – like structure which is enough flexible and strong to be made into yarns fabrics.

- **Texture :** The touch or feel of a surface.
- **Thermoplastic fibres :** Fibres which start changing their shape or start melting beyond a certain temperature.
- **Throwing :** The process of imparting slight twist to the silk yarn. Such silk is also called Thrown silk.
- **Twill weave :** A basic weave characterized by a diagonal line on the surface of the fabric.
- **Twist :** The spiral arrangement of the fibres around the axis of the yarn.
- **Uncut pile weave :** A type of pile weave in which loops formed on the surface of the fabric are cut or closely sheared.
- **Warp :** The lengthwise yarn in a woven fabric which in parallel to the selvedge.
- **Water proof finish :** A finish that makes fabric unable to be penetrated by water.
- **Weave :** The pattern of interlacement of warp and weft to attain the specific appearance of the fabric.
- **Weft :** The crosswise yarn in a woven fabric which is perpendicular to the selvedge.
- **Weighting :** Due to degumming, 25% of weight of silk is lost. To compensate this weight loss, weighting is done.
- **Wild silk :** Silk produced by moths of species other than Bombyx Mori without sericulture.
- **Worsted yarns :** Yarns made from longer wool fibres having better quality which look like any other normal yarn.
- **Yarn :** A continuous strand of textile fibers, filaments or material in a form suitable for knitting, weaving or otherwise intertwining to form a textile fibre.

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