**Sub code: 16SACAF2**

**PATTERN MAKING TECHNIQUES**

**Unit – I: Fabric preparation and Lay out**

Preparing the fabric for cutting:

* Fabric should be placed in a flat surface
* There should not be any folding or shrinkage in the fabric

Importance of grain in fabric cutting:

* Grain line is the direction of yarn present in the fabric
* The warp and weft should intersect in 90\* right angle
* Grain line gives good fit to the garment

Garment construction:

* Preparing a fullest garment by marking, cutting and the sewing process

Methods of straightening fabric grains:

* Stretching method
* Immersion method
* Ironing method

Lay planning:

* It is very important in the cutting process
* The arrangement of fabric is done by the lay planning
* It reduces the manufacturing cost by minimizing the waste

Rules in patter layout:

* Pressing the fabric before laying
* Make sure the surface is flat
* Marking the correct measures to the fabric
* Using proper cutting tools for the cutting process
* Should not waste large amount of fabric

Types of layout:

* Lengthwise centre fold
* Crosswise centre fold
* Off-centre lengthwise fold
* Off-centre crosswise fold
* Combination fold
* Open layout

Transferring pattern markings:

* Transferring the pattern markings to the fabric is very important process
* Even a small mistake is done the whole garment fit will get change
* Pattern markings can be transferred by clipping notches, marking with pins, marking with pencil, chalk or fabric pen, by using the tracing wheel.

Stay stitching:

* It is a straight stitch sewn through on layer of fabric
* Used around a curve to prevent distortion

Ease stitching:

* It is used to create gathers in the fabric
* Commonly used in fitted sleeves where the shoulder of the sleeve is going to have more fabric than the shoulder of the body

**Unit – II: Drafting and Draping**

Drafting:

* It is the process of creating a pattern by taking measurements from a person, form or model by drawing

Preparation of paper patterns:

* The pattern paper should be straight
* Drawing tools like pencil, ruler is important
* Should have a proper scissors for the cutting of pattern
* The main thing is the proper measurement of a person

Advantages of paper pattern:

* It can be used latter
* Most easy to create new pattern using a basic paper pattern
* Most economical way to reduce the fabric waste while cutting

Pattern drafting with personal measurement:

* It can be done for individual measurement
* The measurements are taken and the pattern is created according to their need
* Various designs can be created and will gives a good fit

Principles for pattern drafting:

* Using the proper tools for the process
* French curves must be used for armholes and necklines
* Shears should be used for cutting
* Transparent rulers should be used
* Hip curve scales for slight curves

Preparing draft for basic bodice, sleeve and skirt pattern:

* For the preparation of bodice, sleeve and skirt personal measurement is needed
* Those measurements will be substitute and the accurate measure will be obtained

Draping:

* It is the flow of the fabric
* It could be done in a person or dress form

Types of dress form:

* Professional dress form with cast iron base. It is made with papier mache, padded with few layers of cotton wadding and covered in linen
* Display form
* Adjustable dress form
* Handmade dress form

Preparation of adhesive paper dress form:

* It can be used as an individual dress for
* Proper measurement is required
* Plastic paper and more waste papers is needed with tape for covering the dress form
* It is fully stuffed with paper according to the circumference of the body measurement

Draping techniques:

* It is simple and effective method of creating a pattern directly to the fabric
* The fabric is placed in the dress form and the measures are marked
* It can be done using muslin, cotton fabric etc.

Draping basic blocks:

* Fabric is placed on the needed part like bodice, sleeve or skirt and the measures should be marked
* The measurements are then transfer to the fabric to be sewed

**Unit – III: Flat pattern techniques**

Types of flat pattern techniques:

Pivot method

Slash & spread method

Measurement method

Creating styles through dart manipulation and relocation of dart:

* Relocating the dart from one place to another place to create a design in the garment

**Unit – IV: Commercial pattern and pattern grading**

Commercial pattern:

* It is used for the commercial purpose
* It has standard measurement that are used for the bulk production of garments

Merits:

* Makes sewing easy and accurate
* They are made in many different styles and designs

Demerits:

* It is not fit for all the users
* It is more expensive

Pattern grading:

* Increasing or decreasing the size of pattern

Selecting a grading system:

* Cut and spread
* Pattern shifting
* Computer grading

Grading techniques:

* Manual grading
* Computer aided grading

Advantages:

* Manual grading is cost effective process
* Computer aided grading is quick process i.e. less time consumption. High accuracy may be obtained

Disadvantages:

* Manual grading is time consuming process. Expected accuracy may not be obtained.
* Computer aided grading involves high initial cost. Skilled operator is required.

**Unit – V: Pattern alteration, Garment fitting and assembling**

Pattern alteration:

* Pattern adjustment or alteration is often necessary to achieve good fit in a garment.

General principles for pattern alteration:

* Slash and spread is best for alteration
* To preserve the grain lines, make all slashes and folds parallel or perpendicular to grain line
* Where there are darts, make changes between the tip of the dart and the outside edge

Common pattern alteration in a fitted bodice pattern:

* By folding out excess fullness to make an area smaller
* By slashing and spreading or overlapping along pattern lines to increase or decrease dimensions
* By redrawing darts or seamlines

Garment fitting and assembling:

* Sewing darts
* Sewing front edge fastenings
* Inserting zip fastenings
* Attaching waistbands
* Assembling and attaching simple and complex pockets
* Assembling and attaching cuffs
* Assembling and attaching collars

Standards for a good fit:

* Ease
* Line
* Set
* Balance
* Grain

Checking for good fit:

 Evaluating the fit of the garment, all the sides of the garment must be examined.

* Shoulders
* Bust
* Neckline
* Collar
* Armscye
* Sleeves
* Waistline
* Hips
* Crotch

Solving fitting problems and remedies:

* Identify the fitting problem in garment parts like neckline, shoulder, bust etc.
* By adjusting the measure and stich of the garment it can be solved