

**DR.DHARMAMBAL GOVERNMENT POLYTECHNIC COLLEGE FOR  
WOMEN**

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**GTH303 – APPAREL DESIGNING**

**DEPARTMENT OF GARMENT TECHNOLOGY**

**Part A – Multiple Choice Questions (21 × 1 = 21 Marks)**

**Unit I – Basics of apparel designs**

1. The eight-head theory is mainly used in

- A) Pattern grading
- B) Fashion illustration
- C) Marker planning
- D) Garment finishing

Answer: B

2. Which tool is used to measure body dimensions?

- A) L-square
- B) Measuring tape
- C) Tracing wheel
- D) French curve

Answer: B

3. Which of the following is a marking tool?

- A) Tailor's chalk
- B) Seam ripper
- C) Bodkin
- D) Awl

Answer: A

4. Which body measurement is taken around the fullest part of the bust? A) Waist

- B) Hip

C) Bust

D) Neck

Answer: C

5. A paper pattern is mainly used for:

A) Stitching

B) Cutting garment pieces

C) Pressing

D) Dyeing

Answer: B

6. Which figure type has balanced body proportions?

A) Corpulent

B) Semi-corpulent

C) Proportionate

D) Stooping

Answer: C

7. A stooping figure is characterized by:

A) Forward shoulders

B) Broad hips

C) Straight back

D) Long legs

Answer: A

8. The natural waistline is located:

A) At the hip B) At the narrowest part of the torso

C) Below the bust

D) At the shoulder

Answer: B

9. Which tool is used to transfer pattern markings?

A) Tracing wheel

B) Iron

C) Bobbin

D) Needle

Answer: A

10. Which tool is mainly used for cutting fabric?

A) Dressmaker's scissors

B) French curve

C) Pin cushion

D) Tailor's ham

Answer: A

11. Pressing during garment construction helps to:

A) Reduce fabric weight

B) Improve garment appearance

C) Change fabric color

D) Increase fabric thickness

Answer: B

12. Which measurement is taken around the fullest part of the hip?

A) Hip

B) Waist C) Bust

D) Neck

Answer: A

13. A pattern should always include

: A) Grain line

- B) Price tag
- C) Brand logo
- D) Fabric sample

Answer: A

14. Seam allowance is:

- A) Fabric beyond the stitching line
- B) Pattern length
- C) Fabric width
- D) Garment ease

Answer: A

15. Which is NOT a basic body measurement?

- A) Sleeve length
- B) Waist circumference
- C) Fabric width
- D) Hip circumference

Answer: C

16. Which figure has an upright posture?

- A) Stooping
- B) Erect
- C) Corpulent D) Semi-corpulent

Answer: B

17. Which tool helps draw curved pattern lines?

- A) French curve
- B) Tailor's chalk
- C) Bobbin

D) Needle

Answer: A

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18. Accurate body measurements ensure:

A) Proper garment fit

B) Lower fabric quality

C) Faster dyeing

D) Better printing

Answer: A

19. Which of the following is a cutting tool?

A) Pinking shears

B) Tailor's chalk

C) Awl

D) Pin cushion

Answer: A

20. Which body figure has a larger waist and abdomen?

A) Proportionate

B) Corpulent

C) Erect

D) Stooping

Answer: B

21. The first step before drafting a pattern is:

A) Stitching

B) Taking body measurements

C) Pressing

D) Cutting fabric

Answer: B

Analytical MCQs ( $9 \times 1 = 9$  Marks)

22. A customer has a stooping posture. Which alteration gives the best fit

- A) Reduce back length
- B) Increase back length and shoulder slope
- C) Reduce chest measurement
- D) Increase waist measurement

Answer: B

23. A measuring tape is pulled too tightly while taking the bust measurement. What is the

likely result?

- A) Loose garment
- B) Tight-fitting garment
- C) Longer sleeve
- D) Larger neckline

Answer: B

24. A pattern is placed without considering the grain line. What is the likely outcome?

- A) Better drape
- B) Garment twisting after stitching
- C) Reduced seam allowance
- D) Better fit

Answer: B

25. A designer selects the wrong body figure while drafting a pattern. Which problem is most likely?

- A) Improved fit
- B) Poor garment fit
- C) Better marker efficiency
- D) Faster production

Answer: B

26. Which tool should be used to transfer dart markings from the pattern to fabric?

- A) Tracing wheel
- B) Iron
- C) Scissors
- D) Needle

Answer: A

27. A student cuts fabric without adding seam allowance. What will happen?

- A) Garment becomes larger
- B) Garment becomes smaller than required
- C) No effect
- D) Fabric becomes stronger

Answer: B

28. During measurement, the customer stands in an incorrect posture. What is the result?

- A) Accurate pattern
- B) Incorrect body measurements
- C) Better garment fit
- D) Improved marker layout

Answer: B

29. A designer uses paper patterns repeatedly in production. Which advantage is obtained?

- A) Standardization of garment pieces
- B) Increased fabric wastage
- C) Reduced garment quality
- D) More stitching defects

Answer: A

30. Why should body measurements be verified before drafting?

- A) To avoid fitting problems
- B) To reduce sewing speed
- C) To increase fabric thickness
- D) To improve dye absorption

Answer: A

## **UNIT II – Pattern Layout**

1. Which fabric grain runs parallel to the selvedge?

- A) Cross grain
- B) Bias grain
- C) Lengthwise grain
- D) Diagonal grain

Answer: C

2. The main purpose of a pattern layout is to:

- A) Increase stitching time
- B) Minimize fabric wastage
- C) Improve dyeing quality
- D) Reduce sewing speed

Answer: B

3. Which fabric grain provides the greatest stability?

- A) Bias grain
- B) Cross grain
- C) Lengthwise grain
- D) Circular grain

Answer: C

4. Pattern making is the process of:

- A) Dyeing fabric
- B) Developing templates for garment components
- C) Stitching garments
- D) Finishing garments

Answer: B

5. Which fabric grain has the maximum stretch?

- A) Lengthwise grain
- B) Cross grain
- C) Bias grain
- D) Selvedge

Answer: C

6. Marker planning is mainly done to:

- A) Increase labour cost
- B) Improve fabric utilization
- C) Increase sewing defects
- D) Reduce production speed

Answer: B

7. Which type of layout is commonly used for bulk production?

- A) Single-piece layout
- B) Marshden layout

- C) Circular layout
- D) Zigzag layout

Answer: B

8. Marker efficiency is expressed as:

- A) Stitch length
- B) Percentage of fabric utilized
- C) Number of operators
- D) Sewing speed

Answer: B

9. Economical layout aims to:

- A) Increase fabric consumption
- B) Reduce fabric wastage
- C) Increase garment weight
- D) Increase seam allowance

Answer: B

10. Fabric folding before layout is important because it:

- A) Improves fabric colour
- B) Helps achieve accurate cutting and production efficiency
- C) Reduces sewing time only
- D) Changes fabric grain

Answer: B

11. Which of the following affects marker efficiency the most?

- A) Pattern arrangement
- B) Needle size
- C) Thread colour

D) Button size

Answer: A

12. A marker is:

A) A cutting tool

B) A layout showing the arrangement of pattern pieces

C) A measuring tape

D) A sewing machine part

Answer: B

13. Which layout provides better fabric utilization?

A) Random layout

B) Scientific layout

C) Uneven layout

D) Open layout without planning

Answer: B

14. Fabric grain should be considered because it affects:

A) Garment fit and drape

B) Price only

C) Fabric colour only

D) Button placement

Answer: A

15. Lay length refers to:

A) Pattern width

B) Length of fabric spread on the cutting table

C) Garment length

D) Seam length

Answer: B

16. A lay consists of:

A) One fabric layer only

B) Multiple fabric layers spread for cutting

C) One garment piece

D) One marker only

Answer: B

17. Which of the following is NOT a type of fabric grain?

A) Lengthwise

B) Crosswise

C) Bias

D) Spiral

Answer: D

18. Efficient marker planning results in:

A) Higher fabric wastage

B) Lower production cost

C) More sewing defects

D) Poor fit

Answer: B

19. The purpose of special layouts is to:

A) Increase fabric wastage

B) Meet specific production requirements

C) Reduce pattern size

D) Increase garment weight

Answer: B

20. Which process follows marker planning?

A) Fabric cutting

B) Dyeing

C) Printing

D) Stitching buttons

Answer: A

21. The major objective of pattern layout is:

A) Increase seam allowance

B) Achieve maximum fabric utilization with correct grain direction

C) Increase garment thickness

D) Reduce pattern accuracy

Answer: B

Analytical MCQs ( $9 \times 1 = 9$  Marks)

22. A garment factory notices excessive fabric wastage during cutting. Which action should be taken first?

A) Increase seam allowance

B) Improve marker planning

C) Change thread color

D) Increase stitch length

Answer: B

23. A marker is prepared without considering grain lines. What is the likely result?

A) Better fit

- B) Garment distortion after stitching or washing
- C) Reduced labour cost
- D) Faster cutting only

Answer: B

24. A factory changes from a single lay to a bulk lay. What is the main advantage?

- A) Reduced productivity
- B) Increased production efficiency
- C) Increased fabric defects
- D) Higher labour cost

Answer: B

25. While arranging pattern pieces, the operator leaves large gaps between them. This will lead to:

- A) Improved marker efficiency
- B) Increased fabric wastage
- C) Better garment fit
- D) Faster stitching

Answer: B

26. A stretch fabric is cut ignoring the grain direction. Which problem is most likely?

- A) Improved appearance
- B) Garment twisting and poor drape
- C) Lower fabric consumption
- D) Better dimensional stability

Answer: B

27. A marker has an efficiency of 92%, while another has 80%. Which should be selected?

- A) 80% marker

- B) 92% marker
- C) Both are equal
- D) Neither

Answer: B

28. During bulk production, why is Marshden layout preferred?

- A) It increases cutting time.
- B) It improves production efficiency and fabric utilization.
- C) It reduces garment quality.
- D) It increases labour requirements.

Answer: B

29. A pattern piece is accidentally placed on the bias instead of the lengthwise grain.

What is the likely effect?

- A) Greater stability
- B) Increased stretch and possible garment distortion
- C) Reduced flexibility
- D) No effect on the garment

Answer: B

30. A factory wants to reduce production cost without affecting garment quality. Which is

the best solution?

- A) Increase fabric consumption
- B) Improve marker efficiency and layout planning
- C) Increase seam allowance
- D) Reduce inspection

Answer: B

### UNIT III – Seams, Plackets & Fasteners

1. A seam is defined:

A) Fabric decoration

B) Joining two or more fabric pieces by stitching

C) Fabric folding

D) Fabric cutting

Answer: B

2. Which is the most commonly used seam?

A) French seam

B) Plain seam

C) Lapped seam

D) Bound seam

Answer: B

3. French seam is mainly used for:

A) Heavy fabrics

B) Transparent and delicate fabrics

C) Denim garments

D) Leather garments

Answer: B

4. Which seam encloses the raw edges completely?

A) Plain seam

B) French seam

C) Open seam

D) Edge seam

Answer: B

5. Lapped seam is commonly used in:

- A) Sarees
- B) Jeans
- C) Curtains
- D) Scarves

Answer: B

6. A flat-felled seam is widely used in:

- A) Shirts and jeans
- B) Curtains
- C) Knitwear
- D) Socks

Answer: A

7. Which seam gives maximum strength?

- A) French seam
- B) Flat-felled seam
- C) Plain seam
- D) Bound seam

Answer: B

8. A placket is mainly provided to:

- A) Decorate garments
- B) Provide an opening for wearing and removing garments
- C) Increase garment length
- D) Reduce fabric consumption

Answer: B

9. Which placket is commonly used in shirt sleeves?

- A) Continuous placket
- B) Tailored shirt placket
- C) Faced placket
- D) Bound placket

Answer: B

10. Continuous placket is mainly used in:

- A) Children's garments
- B) Sleeve openings
- C) Trousers
- D) Jackets

Answer: B

11. Which is NOT a fastener?

- A) Button
- B) Hook and eye
- C) Zipper
- D) Dart

Answer: D

12. Hook and eye fasteners are commonly used in

- : A) Blouses
- B) Towels
- C) Bed sheets
- D) Curtains

Answer: A

13. Which fastener provides the quickest opening and closing?

- A) Hook

B) Button

C) Zipper

D) Snap

Answer: C

14. Velcro is also known as:

A) Hook-and-loop fastener

B) Slide fastener

C) Snap fastener

D) Eyelet

Answer: A

15. Buttons are attached using:

A) Blind stitch

B) Buttonhole stitch

C) Overlock stitch

D) Hem stitch

Answer: B

16. Which placket is suitable for kurtas?

A) Faced placket

t B) Continuous placket

C) Shirt placket

D) Decorative placket

Answer: A

17. Which seam is suitable for fine garments?

A) French seam

B) Lapped seam

C) Flat seam

D) Open seam

Answer: A

18. A zipper is classified as a:

A) Temporary fastener

B) Decorative trim

C) Fastening device

D) Seam finish

Answer: C

19. Which fastener is invisible from the outside?

A) Hook and eye

B) Button

C) Decorative zip

D) Toggle

Answer: A

20. Seam allowance is the distance between:

A) Two buttons

B) Stitching line and fabric edge

C) Two darts

D) Two pleats

Answer: B

21. The main function of a fastener is to:

A) Decorate the garment

- B) Secure garment openings
- C) Increase garment weight
- D) Reduce fabric cost

Answer: B

Analytical MCQs ( $9 \times 1 = 9$  Marks)

22. A designer is making a chiffon blouse. Which seam should be selected?

- A) Plain seam
- B) French seam
- C) Lapped seam
- D) Flat-felled seam

Answer: B

23. A pair of denim jeans requires a durable seam. Which is the best choice?

- A) French seam
- B) Flat-felled seam
- C) Open seam
- D) Bound seam

Answer: B

24. A school shirt sleeve requires a neat opening with durability. Which placket is suitable?

- A) Tailored shirt placket
- B) Continuous placket
- C) Faced placket
- D) Bound placket

Answer: A

25. A child needs to dress independently. Which fastener is most convenient?

- A) Hook and eye
- B) Velcro
- C) Safety pin D) Hand stitch

Answer: B

26. A garment manufacturer wants a concealed fastening for a blouse neckline. Which is

most suitable?

- A) Large button
- B) Hook and eye
- C) Decorative zip
- D) Toggle

Answer: B

27. During quality inspection, the seam opens when stretched. What is the likely reason?

- A) Proper seam allowance
- B) Weak seam construction
- C) Correct thread tension
- D) Correct stitch length

Answer: B

28. A kurta requires a front opening with a neat finish. Which placket is recommended?

- A) Faced placket
- B) Shirt placket
- C) Continuous placket
- D) Bound placket

Answer: A

29. A raincoat requires a fastener that opens and closes quickly. Which should be used?

- A) Hook
- B) Zipper
- C) Button
- D) Eyelet

Answer: B

30. A garment factory receives complaints about buttons coming off after washing. What

is the best corrective action?

- A) Reduce button size
- B) Reinforce button stitching with proper buttonhole stitching
- C) Remove buttons
- D) Increase seam allowance

Answer: B

#### **UNIT IV – Yoke, Collars & Sleeves**

1. A yoke is a garment component used to:

- A) Increase garment length
- B) Support and shape the upper portion of a garment
- C) Finish the hem
- D) Attach fasteners

Answer: B

2. The primary function of a yoke is to:

- A) Reduce fullness
- B) Provide support, fit, and style
- C) Join sleeves only
- D) Decorate the hem

Answer: B

3. Which of the following is a type of yoke?

A) Straight yoke

B) Curved yoke

C) Shoulder yoke

D) All of the above

Answer: D

4. A collar is attached to the:

A) Waistline

B) Neckline

C) Hemline

D) Sleeve edge

Answer: B

5. Which collar stands upright around the neck?

A) Peter Pan collar

B) Flat collar

C) Stand collar

D) Sailor collar

Answer: C

6. Which collar lies flat on the garment?

A) Stand collar

B) Flat collar

C) Mandarin collar

D) Shirt collar

Answer: B

7. Peter Pan collar is classified as a:

- A) Stand collar
- B) Flat collar
- C) Roll collar
- D) Convertible collar

Answer: B

8. A shirt collar consists of: A) Collar stand and collar fall

- B) Sleeve cap
- C) Yoke only
- D) Cuff only

Answer: A

9. Which sleeve is gathered at the sleeve cap?

- A) Plain sleeve
- B) Puff sleeve
- C) Bell sleeve
- D) Raglan sleeve

Answer: B

10. Which sleeve extends from the neckline without a shoulder seam?

- A) Set-in sleeve
- B) Raglan sleeve
- C) Puff sleeve
- D) Bell sleeve

Answer: B

11. Which sleeve is widest at the bottom?

- A) Plain sleeve
- B) Bell sleeve
- C) Puff sleeve
- D) Cap sleeve

Answer: B

12. The most commonly used sleeve in shirts is:

- A) Bell sleeve B) Set-in sleeve
- C) Puff sleeve
- D) Kimono sleeve

Answer: B

13. A cuff is attached to the

- : A) Neckline
- B) Sleeve opening
- C) Waistline
- D) Hem

Answer: B

14. Sleeve drafting mainly depends on:

- A) Hip measurement
- B) Armhole measurement
- C) Waist measurement
- D) Neck measurement

Answer: B

15. Which collar is commonly used in T-shirts?

- A) Shawl collar

B) Rib knit collar

C) Shirt collar

D) Sailor collar

Answer: B

16. Which sleeve provides maximum arm movement?

A) Raglan sleeve

B) Puff sleeve

C) Bell sleeve

D) Cap sleeve

Answer: A

17. A decorative yoke is mainly used to:

A) Increase garment weight

B) Enhance garment appearance

C) Reduce sleeve length

D) Reduce collar size

Answer: B

18. Which collar is commonly used in formal shirts?

A) Shirt collar

B) Peter Pan collar

C) Sailor collar

D) Shawl collar

Answer: A

19. The sleeve cap is the:

A) Lower edge of the sleeve

- B) Upper curved portion of the sleeve
- C) Sleeve opening
- D) Sleeve hem

Answer: B

20. A kimono sleeve is:

- A) Attached separately
- B) Cut as one piece with the bodice
- C) Gathered at the wrist
- D) Used only in jackets

Answer: B

21. The main purpose of collars is to:

- A) Strengthen the hem
- B) Finish the neckline and improve appearance
- C) Reduce fabric consumption
- D) Attach pockets

Answer: B

Analytical MCQs ( $9 \times 1 = 9$  Marks)

22. A designer is making a formal men's shirt. Which collar is the most appropriate?

- A) Peter Pan collar
- B) Shirt collar
- C) Shawl collar
- D) Sailor collar

Answer: B

23. A sports jacket requires greater arm mobility. Which sleeve should be selected?

- A) Puff sleeve
- B) Raglan sleeve
- C) Bell sleeve
- D) Cap sleeve

Answer: B

24. A chiffon frock requires a soft, feminine sleeve. Which sleeve is most suitable?

- A) Raglan sleeve
- B) Puff sleeve
- C) Set-in sleeve
- D) Kimono sleeve

Answer: B

25. A garment has excessive fullness at the shoulder. Which component can be used to control it?

- A) Yoke
- B) Pocket
- C) Cuff
- D) Placket

Answer: A

26. During stitching, the sleeve cap does not match the armhole. What is the likely cause?

- A) Incorrect sleeve drafting
- B) Wrong button size
- C) Incorrect zipper length
- D) Improper hemming

Answer: A

27. A fashion designer wants a decorative neckline for a children's dress. Which collar is most suitable?

- A) Peter Pan collar
- B) Stand collar
- C) Mandarin collar
- D) Shirt collar

Answer: A

28. A kurta requires a simple upright neckline finish. Which collar should be chosen?

- A) Stand collar
- B) Peter Pan collar
- C) Sailor collar
- D) Shawl collar

Answer: A

29. A one-piece garment without a separate shoulder seam is required. Which sleeve is appropriate?

- A) Set-in sleeve
- B) Kimono sleeve
- C) Bell sleeve
- D) Puff sleeve

Answer: B

30. A garment manufacturer receives complaints that sleeves restrict arm movement.

Which design modification is most appropriate?

- A) Reduce sleeve width
- B) Use a raglan sleeve
- C) Shorten the sleeve
- D) Remove the cuff

Answer: B

## UNIT -V FULLNESS

1. Fullness in a garment refers to the extra fabric provided for:

- a) Decoration
- b) Ease and design
- c) Seam finishing
- d) Fastening

Answer: b

2. Which method creates fullness by drawing fabric into small folds?

- a) Pleating
- b) Gathering
- c) Tucking
- d) Smocking

Answer: b

3. Which type of fullness is formed by folding fabric regularly?

- a) Gathering
- b) Pleating
- c) Shirring
- d) Ruffling

Answer: b

4. A dart is primarily used to:

- a) Add fullness
- b) Remove excess fabric
- c) Decorate the garment
- d) Finish the hem

Answer: b

5. Which fullness technique uses a circular or semi-circular shape?

- a) Gathers
- b) Godet
- c) Tucks
- d) Shirring

Answer: b

6. A flared skirt mainly obtains fullness through:

- a) Seam allowance
- b) Shape of the pattern
- c) Buttons
- d) Pockets

Answer: b

7. Which technique produces soft, closely spaced folds?

- a) Knife pleat
- b) Gathering
- c) Godet
- d) Dart

Answer: b

8. A knife pleat usually has:

- a) Pleats facing in different directions
- b) Pleats facing the same direction
- c) No folds
- d) Circular folds

Answer: b

9. Box pleats are characterized by:

- a) Two pleats meeting at the centre
- b) Pleats opening towards the sides
- c) Random gathers
- d) Diagonal tucks

Answer: a

10. Inverted pleats are formed when:

- a) Pleats fold outward
- b) Pleats fold towards the inside
- c) Fabric is gathered
- d) Fabric is cut diagonally

Answer: b

11. Which fullness technique is created by stitching parallel rows of elastic thread?

- a) Shirring
- b) Pleating
- c) Godet
- d) Tucking

Answer: a

12. Tucks are:

- a) Permanent stitched folds
- b) Loose gathers
- c) Circular inserts
- d) Seam finishes

Answer: a

13. A ruffle is generally:

- a) A fitted garment section
- b) A strip of fabric gathered or pleated
- c) A dart
- d) A pocket

Answer: b

14. Which fabric generally produces softer fullness?

- a) Stiff denim
- b) Chiffon
- c) Buckram
- d) Canvas

Answer: b

15. The fullness created by inserting a triangular piece of fabric is called:

- a) Godet
- b) Dart
- c) Tuck
- d) Pleat

Answer: a

16. Which fullness technique is commonly used in children's dresses?

- a) Gathering

- b) Dart manipulation only
- c) Seam binding
- d) Facing

Answer: a

17. The amount of fullness depends mainly on:

- a) Fabric colour
- b) Fabric width and design requirement
- c) Button size
- d) Thread colour

Answer: b

18. Which pleat is commonly used in school uniforms?

- a) Knife pleat
- b) Sunray pleat
- c) Accordion pleat
- d) Crystal pleat

Answer: a

19. Accordion pleats are:

- a) Irregular gathers
- b) Narrow, evenly spaced pleats
- c) Circular inserts
- d) Large darts

Answer: b

20. Sunray pleats generally:

- a) Remain equal in width throughout
- b) Radiate from a central point

- c) Are made using elastic
- d) Are formed using darts

Answer: b

21. Fullness can be controlled by:
- a) Amount of fabric used
  - b) Colour only
  - c) Button placement only
  - d) Thread thickness only

Answer: a

#### Analytical Based MCQs

22. A designer wants to create a soft, comfortable waistline in a summer dress without using darts. Which technique would be most suitable?

- a) Gathering
- b) Tailored dart
- c) Seam binding
- d) Facing

Answer: a

23. A skirt needs structured fullness with evenly arranged folds. Which technique would be most appropriate?

- a) Gathering
- b) Pleating
- c) Shirring
- d) Ruffling

Answer: b

24. A designer wants maximum fullness at the hem while keeping the waist fitted. Which pattern shape would be most suitable?

- a) Straight skirt

- b) Flared skirt
- c) Pencil skirt
- d) Tube skirt

Answer: b

25. A lightweight chiffon dress looks too bulky after excessive gathering. What should the designer do?

- a) Increase the gathers
- b) Reduce the fabric ratio used for gathering
- c) Use thicker fabric
- d) Add more darts

Answer: b

26. A designer wants fullness to spread gradually from the waist to the hem of a skirt. Which method would be most suitable?

- a) Godet
- b) Dart
- c) Tuck
- d) Patch pocket

Answer: a

27. A client wants a skirt with a neat, formal appearance and controlled fullness. Which option would be most appropriate?

- a) Random gathers
- b) Knife pleats
- c) Large ruffles
- d) Shirring

Answer: b

28. A designer uses very stiff fabric for a heavily gathered sleeve. What is the most likely result?

- a) Very soft drape
- b) Increased bulk and stiffness
- c) No fullness
- d) Transparent effect

Answer: b

29. A dress requires flexible fullness at the bodice that can expand comfortably with body movement. Which technique would be suitable?

- a) Shirring
- b) Tailored dart
- c) Flat seam
- d) Facing

Answer: a

30. A designer wants to create a dramatic flare at the bottom of a garment by inserting triangular fabric pieces into seams. Which technique should be selected?

- a) Tucking
- b) Godet
- c) Shirring
- d) Gathering

Answer: b

## **PART – B**

### **UNIT I – BASICS OF APPAREL DESIGN**

**Q1. (5 + 5 Marks) a) Explain the Eight Head Theory and its importance in apparel manufacturing. (5 Marks)**

Eight Head Theory

The Eight Head Theory is a standard system of body proportion used in fashion designing, apparel manufacturing, and fashion illustration. According to this theory, the

height of an ideal adult human body is equal to eight times the height of the head. The head is taken as the basic unit of measurement, and the rest of the body is divided proportionately into eight equal parts.

#### Body Proportions

1st Head – Head and neck.

2nd Head – Shoulders, chest, and bust line.

3rd Head – Waistline and elbows.

4th Head – Hips and crotch level.

5th Head – Mid-thigh.

6th Head – Knees.

7th Head – Calf muscles.

8th Head – Ankles and feet.

#### Importance in Apparel Manufacturing

Helps designers maintain correct body proportions while creating fashion sketches.

Provides a standard guide for pattern drafting and garment construction.

Ensures better garment fitting and balanced appearance.

Helps in developing garments for different sizes and styles.

Reduces errors during pattern making and improves production accuracy.

Widely used in fashion illustration, CAD pattern making, and apparel production.

#### Conclusion:

The Eight Head Theory serves as a foundation for designing proportionate garments and

is an essential concept in apparel manufacturing. b) Describe the tools and equipment used in garment construction with their functions.

#### (5 Marks)

**Garment construction requires different tools and equipment to ensure accurate cutting, stitching, and finishing.**

#### Tool/Equipment and Function

##### \*Measuring Tape

Used to take body and fabric measurements accurately.

##### \*Tailor's Chalk/Fabric Marker

Marks cutting lines, darts, pleats, and stitching lines on fabric.

**\*Scissors/Shears**

Used for cutting fabric, paper patterns, and threads.

**\*Pins and Pin Cushion**

Hold fabric pieces together before stitching.

**\*Hand Sewing Needles**

Used for temporary stitching, hemming, and finishing work.

**\*Sewing Machine**

Joins fabric pieces quickly and efficiently.

**\*Seam Ripper**

Removes unwanted stitches without damaging the fabric.

**\*Tracing Wheel and Carbon Paper**

Transfers pattern markings onto fabric.

**\*Scale/Ruler/French Curve**

Used in pattern drafting and drawing curved lines.

**\*Iron and Ironing Board**

Presses garments, removes wrinkles, and sets seams for a neat finish.

Conclusion: Proper use of garment construction tools improves accuracy, quality, productivity, and the

overall appearance of the finished garment.

## **Q2. (5 + 5 Marks)**

**a) Explain the importance and procedure for taking body measurements. (5 Marks)**

### **Importance of Body Measurements**

Body measurement is the process of measuring different parts of the human body to prepare garments that fit correctly.

The importance of taking body measurements includes:

- Ensures proper fitting of garments.
- Provides comfort and ease of movement.
- Helps in accurate pattern drafting.

- Reduces fabric wastage and alteration costs.
- Improves garment appearance and customer satisfaction.
- Essential for both custom-made and ready-made garments.
- Procedure for Taking Body Measurements
- Ask the person to stand in a natural and relaxed posture.
- Wear close-fitting clothing while taking measurements.
- Tie a narrow tape around the natural waistline as a reference point.
- Use a flexible measuring tape.
- Hold the tape snugly without pulling it too tight or leaving it too loose.
- Measure horizontally or vertically depending on the body part.
- Record all measurements carefully in centimetres or inches.

Conclusion: Accurate body measurements are the first step in producing well-fitting, comfortable, and attractive garments.

b) Discuss the types of body measurements used in garment construction. (5 Marks)

Body measurements are classified into three main categories.

#### 1. Circumference (Girth) Measurements

These measure the roundness of different body parts.

Examples:

- Neck circumference
- Bust/Chest circumference ● Waist circumference
- Hip circumference
- Armhole circumference
- Wrist circumference
- Thigh circumference
- Ankle circumference

#### 2. Length Measurements

These measure the vertical dimensions of the body.

Examples:

- Full body length

- Back waist length
- Front waist length
- Sleeve length
- Shoulder length
- Waist to hip length
- Waist to knee length
- Inseam length

### 3. Width Measurements

These measure the horizontal distance across the body.

Examples:

- Shoulder width
- Back width
- Chest width
- Across-front measurement

Conclusion:

Different body measurements are combined to prepare accurate garment patterns that provide proper fit, comfort, and style.

### **Q3. (10 Marks)**

**Explain the definition, importance, types, merits, and demerits of patterns used in garment manufacturing.**

#### **Definition**

A pattern is a paper, cardboard, or digital template that represents each part of a garment.

It acts as a guide for cutting fabric accurately before sewing. Patterns ensure that all garment pieces are produced in the correct shape and size.

#### **Importance of Patterns**

- Ensures accurate garment fitting.
- Reduces fabric wastage.
- Saves production time.

- Maintains uniformity in mass production.
- Makes garment construction easier.
- Helps in grading garments into different sizes.
- Improves production efficiency and quality.

#### Types of Patterns

##### 1. Basic or Block Pattern

A simple pattern without style details.

Used as the foundation for developing different garment styles.

##### 2. Working Pattern

Developed from the basic pattern.

Includes seam allowances, grain lines, notches, darts, and construction markings.

##### 3. Production Pattern

Prepared for industrial garment manufacturing.

Includes all necessary specifications for bulk production.

##### 4. Commercial Pattern

Ready-made patterns available in different sizes.

Used mainly for home sewing and boutique work.

##### 5. Computer-Aided Design (CAD) Pattern

Created using computer software.

Commonly used in modern garment industries for speed and precision.

Merits of Patterns Produces garments with accurate fitting.

Saves time during production.

Minimizes fabric wastage.

Ensures consistency in garment size and shape.

Easy to reproduce multiple garment pieces.

Facilitates mass production.

#### Demerits of Patterns

Initial preparation requires time.

Requires technical knowledge and skill.

Paper patterns can tear or wear out with repeated use.

Storage requires space.

CAD systems involve high installation costs.

Conclusion:

Patterns are one of the most important elements in garment manufacturing because they ensure accuracy, efficiency, uniformity, and quality in garment production.

#### **Q4. (10 Marks)**

**Describe the types of body figures and explain their characteristics with neat sketches.**

**Body figures differ from person to person. Understanding different body figures helps**

**designers prepare garments that fit well and enhance the wearer's appearance.**

##### **1. Normal Figure**

Characteristics

Well-balanced body proportions.

Standard shoulder, waist, and hip measurements.

Most ready-made garments fit comfortably.

Considered the standard body shape for pattern development.

##### **2. Tall Figure Characteristics**

Height is above average.

Long torso, arms, and legs.

Requires additional garment length.

Vertical design lines enhance appearance.

##### **3. Short Figure**

Characteristics

Height is below average.

Short legs and torso.

Garments require shorter lengths.

Vertical designs help create a taller appearance.

#### 4. Thin (Slim) Figure

##### Characteristics

Narrow shoulders and hips.

Small bust and waist measurements.

Less body fullness.

Soft fabrics and layered garments improve appearance.

#### 5. Stout (Heavy) Figure

##### Characteristics

Broad shoulders and hips.

Fuller bust, waist, and abdomen.

Requires garments with more ease allowance.

Dark colours and vertical lines provide a slimming effect.

**Conclusion** Knowledge of different body figures is essential in apparel manufacturing because it

helps designers prepare garments that provide better fit, comfort, balance, and appearance. Proper understanding of body types also improves pattern drafting and customer satisfaction.

### **UNIT II – PATTERN LAYOUT**

#### **Q1. (5 + 5 Marks)**

##### **a) Explain the types of fabrics used in garment manufacturing. (5 Marks)**

##### **Introduction**

Fabric is the basic raw material used in garment manufacturing. The selection of fabric depends on the type of garment, comfort, durability, appearance, cost, and end use.

Fabrics are broadly classified into natural, man-made, and blended fabrics.

##### Types of Fabrics

##### 1. Natural Fabrics

Natural fabrics are obtained from plants and animals. They are soft, comfortable, and breathable.

**Cotton:** Soft, absorbent, breathable, and suitable for summer wear.

Linen: Made from flax fibers, strong, cool, and highly absorbent.

Silk: Produced from silkworms, smooth, lustrous, and commonly used for luxury garments.

Wool: Obtained from sheep, warm, elastic, and ideal for winter clothing.

## 2. Man-Made (Synthetic) Fabrics

These fabrics are manufactured using chemical processes.

Polyester: Strong, wrinkle-resistant, durable, and easy to maintain.

Nylon: Lightweight, strong, elastic, and resistant to abrasion.

Acrylic: Soft, lightweight, and often used as a substitute for wool.

Rayon: Semi-synthetic fabric with good drape and comfort.

## 3. Blended Fabrics

Blended fabrics are made by combining two or more fibers to improve fabric performance. Examples:

Cotton + Polyester

Wool + Polyester

Silk + Cotton

Advantages of Blended Fabrics

Better durability

Improved wrinkle resistance

Increased comfort

Better shape retention

Reduced cost

Conclusion

The proper selection of fabric plays an important role in determining the quality, appearance, comfort, and durability of garments.

b) Describe fabric grains, types of grains with diagram and their importance. (5 Marks)

Fabric Grain

Fabric grain refers to the direction of yarns in a woven fabric. Proper grain alignment is essential for correct garment fit, appearance, and durability.

Types of Fabric Grains

### 1. Lengthwise Grain (Warp Grain)

Runs parallel to the selvedge.

Strongest and least stretchable direction.

Most garment patterns are placed along this grain.

### 2. Crosswise Grain (Weft Grain)

Runs perpendicular to the selvedge.

Slightly more stretch than the lengthwise grain.

Provides comfort and ease.

### 3. Bias Grain

Runs diagonally at a 45° angle to the warp and weft.

Has the greatest stretch.

Used for garments requiring flexibility and smooth drape.

### Importance of Fabric Grain

Ensures proper garment fitting.

Prevents twisting and distortion after stitching.

Improves garment appearance.

Maintains shape after washing.

Provides correct drape and comfort.

Reduces sewing defects.

### Conclusion

Understanding fabric grain is essential for accurate pattern placement and high-quality garment production.

### **Q2. (5 + 5 Marks)**

#### **a) Explain the principles of pattern layout. (5 Marks)**

##### Pattern Layout

Pattern layout is the process of arranging pattern pieces on fabric before cutting to obtain

maximum fabric utilization with minimum wastage.

##### Principles of Pattern Layout

- Follow the Grain Line

- Pattern pieces should be placed according to the grain line marked on the pattern.
- Maintain Fabric Direction
- Patterns should be placed in the same direction for fabrics with nap, pile, or one-way prints.
- Economical Fabric Utilization
- Arrange pattern pieces closely to minimize fabric waste.
- Place Large Pieces First
- Large garment pieces should be arranged before smaller pieces.
- Maintain Seam Allowances
- Ensure adequate spacing where required.
- Avoid Overlapping
- Pattern pieces should not overlap each other.
- Check Fabric Defects
- Avoid placing important pattern pieces over defective areas.
- Match Checks and Stripes
- Pattern placement should ensure matching of stripes and checks after stitching.

#### Conclusion

A proper pattern layout reduces production cost, improves garment quality, and increases

fabric utilization.

b) Describe the different types of fabric folding used for pattern layout. (5 Marks)

Fabric is folded in different ways before arranging pattern pieces depending on garment type and fabric width.

#### 1. Lengthwise Fold

Fabric is folded along its length with selvages together.

Most commonly used for symmetrical garments.

#### 2. Crosswise Fold

Fabric is folded across its width.

Suitable for short garments and small fabric pieces.

#### 3. Open Fold

Fabric is spread in a single layer.

Used for asymmetrical garments and directional fabrics.

#### 4. Double Fold

Fabric is folded from both edges towards the center.

Saves fabric and allows multiple pattern placement.

#### 5. Off-Center Fold

Selvages are folded unevenly. Used when pattern pieces have different widths.

#### Advantages of Proper Folding

Saves fabric.

Improves cutting accuracy.

Increases production efficiency.

Simplifies pattern placement.

Reduces cutting errors.

### **Q3. (10 Marks)**

**Explain the procedure for economical layout, insufficient fabric layout and Marshden layout for bulk production with suitable illustrations.**

#### 1. Economical Layout

##### Definition

An economical layout is a pattern arrangement that utilizes the maximum area of fabric while minimizing wastage.

##### Procedure

Select the correct fabric width.

Fold the fabric properly.

Place large pattern pieces first.

Fill empty spaces with smaller pattern pieces.

Maintain grain line direction.

Avoid overlapping patterns.

Check pattern placement before cutting.

##### Advantages

Reduces fabric wastage.

Lowers production cost.

Increases efficiency. Suitable for bulk production.

Illustration

+-----+

| Front | Back | Sleeve | Collar |

| Pocket | Cuff | Facing | Belt |

+-----+

## 2. Insufficient Fabric Layout

Definition

This layout is used when the available fabric is less than the required amount.

Procedure

Place essential garment pieces first.

Rearrange small pattern pieces carefully.

Use open fabric layout if necessary.

Combine fabric pieces where acceptable.

Avoid unnecessary wastage.

Advantages

Makes maximum use of limited fabric.

Reduces leftover scraps.

Suitable for small production.

Illustration

+-----+

| Front | Sleeve |

| Pocket | Collar |

| Back (Adjusted) |

+-----+

## 3. Marshden Layout

Definition

Marshden Layout is a systematic pattern arrangement used mainly in bulk garment production to achieve maximum marker efficiency and minimum fabric waste.

#### Procedure

Prepare production marker.

Arrange patterns according to grain line.

Maintain pattern direction.

Place large pieces first.

Fill gaps using smaller pieces.

Check marker before cutting.

#### Advantages

High fabric utilization.

Faster cutting process.

Uniform production quality.

Widely used in garment industries.

#### Illustration

-----  
| Front | Back | Sleeve | Front |  
| Collar | Pocket | Sleeve | Back |  
-----

#### Conclusion

Economical layout, insufficient fabric layout, and Marshden layout help garment manufacturers reduce fabric waste, improve cutting efficiency, and lower production costs.

**Q4. (10 Marks) Discuss the types of lays, lay length, marker, marker efficiency and lay efficiency in garment manufacturing.**

#### 1. Lay

A lay is the arrangement of several layers (plies) of fabric spread one over another on the

cutting table before cutting.

## Types of Lays

### a) Straight Lay

Fabric is spread in one direction.

Suitable for one-way fabrics.

### b) Zigzag Lay

Fabric is spread continuously without cutting after each ply.

Saves spreading time.

### c) Face-to-Face Lay

Fabric faces alternate upward and downward.

Suitable for symmetrical garments.

### d) One-Way Lay

All plies are spread in the same direction.

Used for striped, checked, and printed fabrics.

### e) Tubular Lay

Used for tubular knitted fabrics.

Eliminates side seams in some garments.

## 2. Lay Length

Lay length is the total length of fabric spread on the cutting table for one marker.

### Importance

Determines production quantity.

Reduces spreading time. Improves cutting efficiency.

## 3. Marker

A marker is a planned arrangement of pattern pieces on fabric to obtain maximum fabric

utilization before cutting.

### Importance

Reduces fabric waste.

Increases productivity.

Improves cutting accuracy.

Reduces production cost.

#### 4. Marker Efficiency

Marker efficiency is the percentage of fabric utilized by the marker.

Formula

Marker

Efficiency =

Area of Pattern Pieces

---

Area of Marker

×

100

Importance

Indicates fabric utilization.

Higher marker efficiency means lower fabric wastage.

Reduces production cost.

#### 5. Lay Efficiency

Lay efficiency refers to the effective utilization of fabric during the spreading and cutting

process. Formula

Lay

Efficiency =

Actual Fabric Used

---

Total Fabric Spread

×

100

Importance

- Measures spreading efficiency.
- Reduces material loss.

- Improves production planning.
- Increases overall productivity.

#### Conclusion

\Proper selection of lay type, marker planning, and efficient fabric spreading are essential

for achieving maximum fabric utilization, reducing manufacturing costs, and ensuring high productivity in garment manufacturing. These concepts are fundamental to modern apparel production and quality management.

### **UNIT III – SEAMS & PLACKET**

#### **Q1. (5 + 5 Marks)**

##### **a) Define seams and explain the different types of seams. (5 Marks)**

##### Definition of Seam

A seam is the line formed by stitching two or more pieces of fabric together. Seams are one of the most important elements in garment construction because they join fabric pieces and give shape, strength, and durability to the garment.

##### Types of Seams

##### 1. Plain Seam

The simplest and most commonly used seam. Two fabric pieces are placed with right sides together and stitched.

The seam allowance is pressed open or to one side.

Applications: Shirts, dresses, skirts, trousers, and blouses.

##### 2. French Seam

A double-stitched seam that completely encloses the raw edges.

Produces a neat and clean finish.

Applications: Sheer fabrics, silk garments, lingerie, and children's wear.

##### 3. Flat-Felled (Welt) Seam

One seam allowance is folded over the other and stitched flat.

Very strong and durable.

Applications: Jeans, uniforms, sportswear, and workwear.

##### 4. Lapped Seam

One fabric piece overlaps another and is stitched.

Suitable for bulky fabrics and decorative purposes.

Applications: Leather garments, raincoats, and denim wear.

#### 5. Bound Seam

Raw edges are enclosed with binding tape.

Improves durability and appearance.

Applications: Necklines, armholes, jackets, and decorative garments.

#### Importance of Seams

Joins garment pieces securely.

Provides shape and structure.

Improves durability.

Enhances garment appearance.

Prevents fabric separation during use.

### **b) Explain the different seam finishes and neckline finishes. (5 Marks)**

#### Seam Finishes

A seam finish is a method of finishing the raw edges of a seam to prevent fraying and improve the appearance of the garment.

#### Types of Seam Finishes

##### 1. Pinked Finish

Raw edges are cut with pinking shears.

Suitable for fabrics that do not fray much.

##### 2. Zigzag Finish

Zigzag stitches are sewn along raw edges.

Prevents fraying and is commonly used in home sewing.

##### 3. Overlock (Serge) Finish

Raw edges are finished using an overlock machine.

Strong, neat, and widely used in garment industries.

##### 4. Bound Finish

Raw edges are enclosed with bias binding.

Used for decorative and durable finishes.

## 5. Clean Finish

Raw edge is folded and stitched.

Gives a neat appearance.

## Neckline Finishes

Neckline finishing improves the appearance, strength, and durability of the neckline.

### Types of Neckline Finishes

**Bias Facing:** Uses bias strips to finish curved necklines.

**Shaped Facing:** A separate facing piece shaped like the neckline. **Bias Binding:** Bias tape covers the raw edge.

**Collar Finish:** Neckline is finished by attaching a collar.

**Rib Knit Finish:** Commonly used in T-shirts and sportswear.

### Importance

Prevents stretching of neckline.

Improves garment appearance.

Provides comfort.

Increases durability.

## **Q2. (5 + 5 Marks)**

### **a) Define hems and explain the types of hems. (5 Marks)**

#### Definition of Hem

A hem is the finished edge formed by folding the raw edge of fabric and stitching it.

#### Hems

are commonly used at the bottom of garments, sleeves, skirts, and trousers to prevent fraying and provide a neat finish.

#### Types of Hems

##### 1. Plain Hem

Folded once or twice and stitched.

Most common hem.

Applications: Shirts, dresses, skirts.

## 2. Narrow (Rolled) Hem

Very narrow folded hem.

Suitable for lightweight fabrics.

Applications: Handkerchiefs, scarves, and frills.

## 3. Blind Hem

Stitches are almost invisible from the right side.

Applications: Formal trousers, skirts, and dresses.

4. Machine Hem

Hem stitched using a sewing machine.

Fast and suitable for mass production.

5. Faced Hem

Finished using a separate facing piece.

Suitable for curved hems.

Importance of Hems

Prevents fraying.

Improves garment appearance.

Adds durability.

Gives proper garment length.

b) Define plackets and explain the characteristics of a good placket. (5 Marks)

Definition of Placket

A placket is an opening in a garment that allows easy wearing and removal. It is strengthened with extra fabric and usually contains buttons, buttonholes, hooks, snaps, or

zippers.

Characteristics of a Good Placket

Strong and durable.

Neatly stitched.

Lies flat without wrinkles.

Maintains garment shape.

Comfortable to wear.

Easy to open and close.

Properly aligned with fasteners.

Attractive in appearance.

Applications Shirts

Kurtas

Sleeves

Dresses

Trousers

Children's garments

### **Q3. (10 Marks)**

**Explain the construction and applications of Plain, French, Welt, and Top-stitched seams with neat sketches.**

#### **1. Plain Seam**

Construction

Place two fabric pieces with right sides facing each other.

Stitch along the seam line.

Press seam allowance open or to one side.

Applications

Shirts

Dresses

Skirts

Blouses

#### **2. French Seam**

Construction

Place wrong sides together and stitch a narrow seam.

Trim seam allowance.

Turn fabric right sides together. Stitch again to enclose raw edges.

Applications

Silk garments

Chiffon garments

Lingerie

Baby garments

### 3. Welt (Flat-Felled) Seam

Construction

Stitch a plain seam.

Trim one seam allowance.

Fold the wider allowance over the trimmed edge.

Stitch again to secure.

Applications

Jeans

Uniforms

Sportswear

Men's shirts

### 4. Top-Stitched Seam

Construction

Sew a plain seam.

Press seam allowance to one side.

Stitch again on the right side close to the seam.

Applications

Denim garments

Jackets Shirts

Decorative stitching

Advantages

Strong seam.

Decorative appearance.

Improves durability.

Maintains garment shape.

#### **Q4. (10 Marks)**

**Describe the different types of plackets (One-piece, Two-piece and Tailored plackets)**

**with neat sketches.**

##### **1. One-Piece Placket**

###### **Definition**

The one-piece placket is made from the same fabric extension as the garment. It is folded

and stitched to create the opening.

###### **Construction**

Extend the fabric while cutting.

Fold along marked lines.

Stitch neatly.

Attach buttonholes if required.

###### **Applications**

Children's garments

Nightwear

Casual shirts

###### **Advantages**

Easy to construct.

Economical. Less fabric consumption.

##### **2. Two-Piece Placket**

###### **Definition**

A separate strip of fabric is attached to each side of the opening.

###### **Construction**

Cut two placket strips.

Stitch each strip separately.

Fold and topstitch.

Attach fasteners.

###### **Applications**

Shirts

Kurtas

Blouses

Advantages

Stronger than one-piece placket.

Better appearance.

Suitable for repeated use.

### 3. Tailored Placket

Definition

A tailored placket is a professionally finished placket commonly used in men's formal shirts.

Construction

Prepare separate underlap and overlap pieces.

Attach carefully.

Fold and topstitch. Add buttons and buttonholes.

Applications

Formal shirts

Uniforms

Office wear

Advantages

Strong and durable.

Professional appearance.

Long-lasting.

Easy to operate.

Conclusion

Seams, hems, and plackets are essential components of garment construction. Different seam and placket types are selected according to the fabric, garment style, and purpose.

Proper construction techniques improve the strength, durability, comfort, and overall appearance of garments, making them suitable for both domestic sewing and industrial

garment manufacturing.

## **UNIT IV – YOKE, COLLAR & SLEEVES**

### **Q1. (5 + 5 Marks)**

#### **a) Define Yoke and explain the selection of yoke design. (5 Marks)**

##### Definition of Yoke

A yoke is a shaped garment piece fitted around the shoulders, chest, back, or waist to support and give shape to the garment. It is usually joined to the main body of the garment by stitching and may also be used for decorative purposes. Yokes are commonly

found in shirts, dresses, kurtas, blouses, skirts, and children's garments.

##### Selection of Yoke Design

The selection of a suitable yoke design depends on several factors:

##### Body Shape and Figure

The yoke should suit the wearer's body type. Horizontal yokes make a person appear broader, while vertical designs create a slimmer appearance.

##### Garment Style

The yoke design should match the style of the garment, whether casual, formal, or traditional.

##### Fabric Type

Lightweight fabrics are suitable for gathered yokes, while medium and heavy fabrics are

better for simple yokes.

##### Purpose of the Garment

Functional garments require strong and simple yokes, whereas party wear may include decorative yokes.

##### Fashion Trends

Modern designs and customer preferences influence the choice of yoke.

#### Comfort and Fit

The yoke should allow ease of movement while maintaining the garment's shape.

#### Importance of Yokes

- Gives shape and support to garments.
- Improves fitting and comfort.
- Enhances the appearance of garments.
- Allows decorative stitching, embroidery, pleats, and gathers.
- Reduces strain on seams and increases durability.

b) Explain the different types of yokes. (5 Marks)

#### Types of Yokes

##### 1. Shoulder Yoke

Positioned across the shoulder line.

Commonly used in shirts, uniforms, and jackets.

##### 2. Front Yoke

Attached to the front portion of dresses and blouses. Often decorated with pleats, gathers, embroidery, or lace.

##### 3. Back Yoke

Attached across the back of the garment.

Improves fitting and supports the back portion.

##### 4. Round (Curved) Yoke

Curved in shape around the neckline or chest.

Mostly used in children's wear and ladies' dresses.

##### 5. Square Yoke

Square-shaped yoke attached to the front or back.

Provides a classic and decorative appearance.

##### 6. Straight Yoke

Cut in a straight horizontal line.

Simple to construct and commonly used in shirts.

Applications of Yokes

Shirts

Blouses

Dresses

Kurtas

Children's garments

Nightwear

**Q2. (5 + 5 Marks)**

**a) Explain the different types of collars. (5 Marks)**

Definition of Collar

A collar is a finished band or shaped piece of fabric attached around the neckline of a garment. It enhances the appearance, provides support to the neckline, and contributes to

the garment's style. Types of Collars

1. Shirt Collar

Consists of a collar stand and collar fall.

Used in men's and women's formal shirts.

2. Stand Collar

Stands upright around the neck without folding.

Also called Mandarin or Chinese collar.

Commonly used in kurtas and uniforms.

3. Peter Pan Collar

Flat collar with rounded edges.

Soft and decorative.

Used in children's wear and ladies' dresses.

4. Shawl Collar

Continuous rolled collar without a collar stand.

Commonly seen in coats, blazers, and dressing gowns.

5. Sailor Collar

Large flat collar extending over the shoulders.

Used in children's garments and uniforms.

#### 6. Convertible Collar

Can be worn open or closed.

Commonly used in casual shirts.

#### Importance of Collars

Improves garment appearance.

Frames the face attractively.

Provides neckline support. Enhances comfort and style.

### **b) Describe the different types of sleeves with neat sketches. (5 Marks)**

#### Definition of Sleeve

A sleeve is the part of a garment that covers the arm. Sleeves may vary in shape, length, and fullness depending on fashion and garment style.

#### Types of Sleeves

##### 1. Plain Sleeve

Simple sleeve without gathers or fullness.

Used in shirts, blouses, and uniforms.

##### 2. Puff Sleeve

Fullness gathered at the top, bottom, or both.

Gives a soft and decorative appearance.

##### 3. Bell Sleeve

Fits at the upper arm and gradually flares towards the wrist.

##### 4. Circular Sleeve

Cut in a circular shape with flowing fullness.

Provides graceful movement.

#### Applications

Dresses

Blouses

Kurtas

Party wear

Children's garments

**Q3. (10 Marks)**

**Discuss the classification, construction and applications of different yokes used in garments.**

**Introduction**

A yoke is a separate garment piece joined to the main body of a garment to improve fit, support, and appearance. Yokes may be functional or decorative and are widely used in garment manufacturing.

**Classification of Yokes**

**1. Straight Yoke**

Horizontal yoke joined across the garment.

**2. Curved (Round) Yoke**

Curved along the neckline or chest.

**3. Square Yoke**

Square-shaped decorative yoke.

**4. Shoulder Yoke**

Attached across the shoulders.

**5. Front Yoke**

Located on the front portion.

**6. Back Yoke**

Positioned across the back.

**Construction of Yokes**

Draft the yoke pattern.

Cut the yoke and garment pieces.

Stitch the yoke to the garment body.

Add gathers or pleats if required.

Press the seam.

Finish the seam neatly using overlock or seam finishing techniques.

Topstitch if necessary for decoration and strength.

Applications of Yokes • Men's shirts

- Women's blouses
- Dresses
- Kurtas
- Children's garments
- Uniforms
- Nightwear
- Advantages of Yokes
- Improves garment fitting.
- Adds strength to the garment.
- Supports gathers and pleats.
- Provides decorative effects.
- Enhances comfort and appearance.

Conclusion

Yokes are important garment components that improve both the functional and decorative aspects of clothing. Their proper selection and construction ensure better fit, durability, and style.

#### **Q4. (10 Marks)**

**Explain the construction, characteristics and uses of Shirt, Stand, Shawl and Peter Pancollars and Plain, Puff, Bell and Circular sleeves.**

A. Collars

1. Shirt Collar

Construction

Prepare collar stand and collar fall.

Stitch both together.

Turn, press, and attach to the neckline.

Characteristics

Formal appearance.

Neat and structured.

Usually stiffened with interfacing. Uses

Formal shirts

School uniforms

Office wear

## 2. Stand Collar (Mandarin Collar)

Construction

Draft a straight collar band.

Attach directly to the neckline.

Characteristics

Upright collar without turnover.

Comfortable and elegant.

Uses

Kurtas

Jackets

Uniforms

## 3. Shawl Collar

Construction

Cut as an extension of the front facing.

Roll smoothly around the neckline.

Characteristics

Continuous curved shape.

Soft and elegant appearance.

Uses

Blazers

Coats Dressing gowns

Evening wear

#### 4. Peter Pan Collar

Construction

Draft two rounded collar pieces.

Stitch and attach to the neckline.

Characteristics

Flat collar with rounded edges.

Soft and decorative.

Uses

Children's garments

School uniforms

Ladies' dresses

#### B. Sleeves

##### 1. Plain Sleeve

Construction

Cut sleeve pattern.

Join underarm seam.

Attach to armhole.

Characteristics

Simple construction.

Comfortable fit.

Uses

Shirts

Uniforms Blouses

##### 2. Puff Sleeve

Construction

Add fullness to sleeve pattern.

Gather at sleeve cap or hem.

Attach to armhole.

Characteristics

Soft gathered appearance.

Adds volume.

Uses

Children's wear

Party dresses

Fashion garments

### 3. Bell Sleeve

Construction

Extend sleeve width toward the wrist.

Join sleeve seam and attach to armhole.

Characteristics

Wide flared bottom.

Elegant appearance.

Uses

Fashion tops

Kurtis

Evening dresses

### 4. Circular Sleeve Construction

Draft using a circular pattern.

Attach to armhole with smooth stitching.

Characteristics

Continuous flowing flare.

Soft drape and graceful movement.

Uses

Designer gowns

Party wear

Bridal dresses

## Conclusion

Yokes, collars, and sleeves are essential elements of garment construction. They not only

improve the fit and comfort of garments but also enhance their beauty and style.

Different

types are selected based on the garment design, fabric, fashion trends, and end use, making them important components in apparel manufacturing.

## UNIT V – FULLNESS

### Q1. (5 + 5 Marks)

#### a) Define Fullness and explain single-pointed and double-pointed darts. (5 Marks)

##### Definition of Fullness

Fullness is the extra amount of fabric added to a garment to provide ease, comfort, freedom of movement, and decorative effect. It allows the garment to fit the body properly while enhancing its style and appearance. Fullness can be created by using darts,

pleats, gathers, tucks, frills, shirring, and godets.

##### Single-Pointed Dart

A single-pointed dart is a folded and stitched wedge-shaped tuck that tapers to a single point. It removes excess fabric and helps the garment fit the body's curves.

##### Characteristics

Has one pointed end. Commonly used in bodices, skirts, and trousers.

Provides shaping at the bust, waist, shoulder, or hip.

##### Applications

Waist dart

Bust dart

Shoulder dart

Neck dart

Simple Sketch

Wide End

### Double-Pointed Dart (Fish Dart)

A double-pointed dart has two pointed ends with fullness removed from the middle. It shapes both the upper and lower portions of a garment.

#### Characteristics

Two pointed ends.

Wider at the center.

Gives better fitting around the waist

#### Applications

Dresses

Fitted blouses

Jackets

Long bodices

Simple Sketch

#### Importance of Darts

Gives proper garment fitting.

Removes excess fabric. Shapes garments according to body contours.

Improves comfort and appearance.

### **b) Explain the relocation of darts by slash-and-spread method. (5 Marks)**

#### **Definition**

Dart relocation is the process of shifting a dart from one position to another without changing the total amount of fullness. The garment fit remains the same, but the style changes.

#### Slash-and-Spread Method

The slash-and-spread method is the most common technique used for dart manipulation.

#### Procedure

Draw the original pattern with the existing dart.

Mark the new position where the dart is to be moved.

Draw a line from the bust point to the new dart location.

Cut (slash) along the new line up to the bust point.

Close the original dart by folding it.

As the original dart closes, the new dart automatically opens.

Trace the new pattern and smooth the pattern lines.

Advantages

- Creates different garment styles.
- Maintains original garment fit.
- Allows creative pattern development.
- Used in fashion designing and pattern making.

## **Q2. (5 + 5 Marks)**

### **a) Explain the different types of tucks and their importance. (5 Marks)**

**Definition of Tucks** A tuck is a fold of fabric stitched in place to control fullness or decorate a garment. Unlike

darts, tucks remain visible on the garment surface.

**Types of Tucks**

#### **1. Pin Tucks**

Very narrow stitched folds.

Used as decorative elements.

#### **2. Corded Tucks**

A cord is inserted inside the tuck.

Gives a raised decorative effect.

#### **3. Cross Tucks**

Two or more tucks stitched across each other.

Creates attractive designs.

#### **4. Blind Tucks**

Stitched from the wrong side.

Gives a subtle decorative appearance.

#### 5. Shell Tucks

Decorative tucks producing shell-like edges.

Importance of Tucks

Controls fullness.

Adds decorative effects.

Improves garment appearance.

Gives texture to fabrics.

Strengthens lightweight fabrics.

Applications

- Children's garments
- Blouses ● Dresses
- Nightwear

#### **b) Describe the different types of pleats and their importance. (5 Marks)**

Definition of Pleats

A pleat is a fold of fabric that is folded and pressed permanently or temporarily to provide

fullness and decorative appearance.

Types of Pleats

##### 1. Knife Pleat

All folds face one direction.

Most common pleat.

##### 2. Box Pleat

Two knife pleats folded away from each other.

Creates fullness at the center.

##### 3. Inverted Pleat

Opposite of box pleat.

Folds meet at the center.

##### 4. Accordion Pleat

Narrow, evenly spaced pleats.

Permanently pressed.

### 5. Sunburst Pleat

Narrow at the top and wider at the bottom.

Importance of Pleats

Adds fullness.

Improves garment appearance.

Provides ease of movement. Creates stylish designs.

Maintains garment shape.

### **Q3. (10 Marks)**

**Explain the construction, classification and applications of tucks, pleats, gathers and frills with suitable sketches.**

#### 1. Tucks

Construction

Fold fabric.

Stitch parallel to the fold.

Press neatly.

Classification

Pin tuck

Corded tuck

Cross tuck

Blind tuck

Applications

Blouses

Dresses

Children's wear

Nightwear

#### 2. Pleats

Construction

Fold fabric evenly.

Press folds.

Stitch or secure at the top. Classification

Knife pleat

Box pleat

Inverted pleat

Accordion pleat

Applications

School uniforms

Skirts

Dresses

Curtains

3. Gathers

Construction

Sew gathering stitches.

Pull threads evenly.

Distribute fullness.

Stitch permanently.

Applications

Sleeves

Yokes

Children's garments

Dresses

Sketch

4. Frills (Ruffles)

Construction

Cut fabric strip. Gather one edge.

Stitch onto garment.

Applications

Party dresses

Baby garments

Nightwear

Decorative garments

Advantages

Enhances garment beauty.

Adds fullness.

Improves comfort.

Creates fashionable styles.

#### **Q4. (10 Marks)**

**Discuss the importance of fullness in garment design and explain the methods of creating fullness using darts, pleats, tucks, gathers and frills.**

Definition

Fullness is the additional fabric incorporated into a garment to provide ease, comfort, proper fitting, and decorative style.

Importance of Fullness

Provides freedom of movement.

Improves garment fitting.

Enhances comfort.

Creates attractive styles.

Adds decorative value.

Allows proper draping of garments.

Increases flexibility during body movement. Helps garments suit different body shapes.

Methods of Creating Fullness

##### **1. Darts**

Remove excess fabric.

Shape garments according to body curves.

Used in bodices, dresses, skirts, and trousers.

Example: Bust dart, waist dart, shoulder dart.

## 2. Pleats

Folded fabric stitched or pressed.

Adds controlled fullness.

Examples

Knife pleat

Box pleat

Inverted pleat

## 3. Tucks

Narrow stitched folds.

Control fullness while decorating garments.

Examples

Pin tuck

Corded tuck

## 4. Gathers

Created by pulling gathering stitches.

Produces soft fullness.

Applications

Sleeve caps Yokes

Waistlines

## 5. Frills (Ruffles)

Fabric strips gathered and attached.

Adds decorative fullness.

Applications

Party dresses

Children's garments

Bridal wear

Conclusion

Fullness is an essential aspect of garment design because it combines fit, comfort, and style

Different techniques such as darts, pleats, tucks, gathers, and frills are used according to the garment design and fabric type.

Proper use of fullness enhances the appearance, functionality, and overall quality of garments.

## **UNIT I – BASICS OF APPAREL DESIGN**

Q1

**a) A customer has a stooping body figure. Analyze the body characteristics and explain**

**the changes required while taking body measurements and selecting a suitable pattern.**

Introduction

A stooping body figure is a body posture in which the upper back is slightly rounded, causing the neck, shoulders, and head to bend forward. This posture may develop due to

age, occupation, poor posture, or physical conditions. Since the body proportions differ from those of a normal figure, special care is required while taking body measurements and preparing garment patterns. Proper adjustments ensure that the garment fits comfortably without wrinkles, strain, or distortion. Characteristics of a Stooping Body Figure

The following are the main characteristics of a stooping body figure:

The upper back is rounded or curved outward.

The head and neck project forward, making the neck appear shorter.

Shoulders slope forward instead of remaining straight.

The back width is greater than that of a normal figure.

The back length is longer, while the front length appears shorter.

The chest appears comparatively flat or narrow.

The shoulder blades are more prominent.

Garments often develop horizontal wrinkles across the back if pattern adjustments are not made.

The armhole may feel tight because of the forward shoulder position.

## Changes Required While Taking Body Measurements

To obtain an accurate fit, body measurements should be taken carefully by considering the customer's posture.

### 1. Back Length Measurement

Measure from the neck to the waist carefully.

Since the back is rounded, the back length is usually longer than the standard measurement.

### 2. Across Back Measurement

Measure the width across the shoulder blades.

Extra width may be required because the upper back is broader.

### 3. Shoulder Measurement

Measure the shoulder slope accurately.

The shoulder seam may need to be shifted slightly forward.

4. Chest Measurement Measure around the fullest part of the chest without pulling the tape tightly.

Compare front and back measurements to identify differences.

### 5. Armhole Depth

The armhole may need to be slightly deeper to allow comfortable arm movement.

### 6. Neck Measurement

Take accurate neck measurements because the neck leans forward.

### 7. Waist Measurement

Measure at the natural waistline and ensure the tape remains level.

## Pattern Alterations Required

After taking measurements, the basic pattern should be modified to suit the stooping body figure.

## Pattern Adjustments

Increase the center back length to accommodate the rounded back.

Add extra width across the upper back.

Shift the shoulder seam slightly towards the front.

Increase the back armhole depth.

Reduce excess length at the front if necessary.

Modify the neckline to suit the forward neck position.

Reposition shoulder darts if required.

These changes help eliminate wrinkles and improve garment balance.

#### Suitable Garment Designs

The following garment designs are suitable for customers with a stooping figure:

Garments with shoulder yokes provide better support.

Princess-line dresses create a balanced appearance.

Vertical seams and panels make the figure appear straighter. Raglan sleeves provide greater comfort.

Stand collars or simple shirt collars fit better around the neck.

Medium-weight fabrics with soft drape improve the garment's appearance.

Avoid bulky shoulder pads and large horizontal design lines across the back.

#### Advantages of Proper Pattern Selection

Provides better garment fitting.

Eliminates wrinkles across the back.

Improves comfort during movement.

Enhances posture and appearance.

Increases customer satisfaction.

Reduces alterations after stitching.

#### Conclusion

A stooping body figure requires careful body measurement and suitable pattern modifications to achieve a comfortable and attractive fit. By increasing the back length, adjusting the shoulder position, and providing sufficient ease across the back, garment manufacturers can produce garments that enhance both comfort and appearance.

**b) Compare the proportionate figure and corpulent figure. Suggest suitable garment**

**designs and patterns for each figure.**

#### Introduction

The success of garment construction depends greatly on understanding different body figures. Two common body types are the proportionate figure and the corpulent figure.

Each body type has unique characteristics that influence garment design, pattern drafting,

and fitting. Selecting appropriate designs and making necessary pattern alterations improve both comfort and appearance.

### Proportionate Figure

#### Definition

A proportionate figure is a body in which all parts are balanced according to standard body measurements. The shoulders, chest, waist, hips, and legs are well proportioned, making it the ideal body figure used for preparing standard garment patterns.

#### Characteristics

Balanced shoulders and hips.

Well-defined natural waistline.

Flat abdomen.

Normal bust and hip measurements.

Standard body proportions.

Ready-made garments usually fit without alteration.

#### Suitable Garment Designs

Shirts and blouses with standard fitting.

A-line skirts.

Straight skirts.

Princess-line dresses.

Formal trousers.

Saree blouses.

Jackets and coats.

Almost every garment style suits this body type because of its balanced proportions.

#### Suitable Patterns

Standard basic block pattern.

Normal seam allowance.

Standard ease allowance.

Minimal pattern alterations.

Standard dart placement.

### Corpulent Figure

Definition A corpulent figure refers to a heavy or stout body type in which the waist, abdomen, chest,

or hips are larger than standard body measurements. This figure requires special pattern adjustments to provide comfort and good fitting.

### Characteristics

Broad shoulders.

Full chest and bust.

Thick waist.

Prominent abdomen.

Fuller hips and thighs.

Larger body measurements than standard sizes.

Garments require additional ease.

### Suitable Garment Designs

Straight-cut garments.

Semi-fitted dresses.

Princess-line garments.

Vertical seam lines.

Dark-coloured fabrics.

Small prints.

V-shaped necklines.

Simple sleeves without excessive fullness.

### Designs to Avoid

Large horizontal stripes.

Oversized collars.

Bulky gathers.

Heavy frills.

Large pockets placed at the waist. Tight-fitting garments.

#### Suitable Pattern Alterations

For a corpulent figure, the following changes are made:

Increase chest, waist, and hip measurements.

Add extra ease allowance.

Extend the front length if the abdomen is prominent.

Lower the armhole slightly.

Reposition darts to distribute fullness evenly.

Increase shoulder width if required.

Provide sufficient seam allowance for future adjustments.

#### Comparison between Proportionate Figure and Corpulent Figure

A person's body figure plays an important role in garment designing and pattern making.

Different body types require different measurements and pattern adjustments to achieve a proper fit. A proportionate figure has balanced body measurements, whereas a corpulent figure has more body fullness and requires special pattern modifications.

#### Proportionate Figure

A proportionate figure is a well-balanced body shape in which the shoulders, chest, waist,

and hips are in proper proportion. It is considered the standard figure used for developing

basic garment patterns.

The main characteristics of a proportionate figure are:

- Balanced shoulders and hips.
- Normal chest, waist, and hip measurements.
- Well-defined waistline.
- Flat or slightly curved abdomen.
- Standard body proportions.
- Most ready-made garments fit easily.

For this figure, standard patterns can be used with very few changes. Normal ease allowance and basic blocks are sufficient. Almost all garment styles, such as fitted dresses, skirts, shirts, trousers, jackets, and blouses, are suitable. Both fitted and loose garment designs can be selected according to fashion and personal preference.

#### Corpulent Figure

A corpulent figure refers to a heavy or stout body shape where the body has more fullness,

especially around the chest, waist, abdomen, hips, and thighs.

The main characteristics of a corpulent figure are:

- Broad or rounded shoulders.
- Fuller chest and abdomen.
- Thick waist with less definition.
- Larger hip and thigh measurements.
- Increased body width compared to height.
- Requires extra ease for comfort.

For this figure, standard patterns need modifications. Extra allowance should be provided

around the chest, waist, and abdomen. The front length may need to be increased to accommodate a prominent abdomen. Darts should be adjusted properly to distribute fullness and improve fitting.

Suitable garment designs for a corpulent figure include:

- Straight-cut garments.
- Semi-fitted dresses.
- Princess-line garments.
- Vertical seam designs.
- V-necklines.
- Simple collars and sleeves.
- Dark colours and small prints for a balanced appearance.

Garments with excessive gathers, large prints, bulky decorations, and horizontal stripes should generally be avoided as they may increase the appearance of body width.

## Importance of Selecting Suitable Garments

Choosing the right garment design according to body figure:

- Improves overall appearance.
  - Provides better comfort and freedom of movement.
  - Enhances garment fitting.
  - Creates visual balance.
  - Increases wearer confidence.
  - Reduces fitting problems and alterations.
- Conclusion

A proportionate figure is considered the standard body type and generally requires only basic garment patterns with minimal alterations. In contrast, a corpulent figure requires careful body measurement, additional ease, and specific pattern modifications to accommodate body fullness. By selecting appropriate garment designs and making necessary pattern adjustments, designers can produce garments that are comfortable, functional, and aesthetically pleasing for both body types.

## UNIT II – PATTERN LAYOUT

### Q1.

**a) A factory receives an order for bulk garment production. Analyze and recommend the most suitable layout and type of lay to reduce fabric wastage. Justify your answer.**

#### Introduction

In bulk garment production, fabric is one of the most expensive materials. Proper planning of pattern layout and fabric laying helps to reduce fabric wastage, save production cost, and improve efficiency. A suitable layout and lay method should be selected to use maximum fabric with minimum waste.

#### Recommended Layout – Economical Layout

The most suitable layout for bulk garment production is an economical layout. It is a method of arranging garment patterns on fabric in such a way that the maximum area of

fabric is utilized.

In this layout, large pattern pieces are placed first, and smaller pieces are arranged in the

remaining spaces. Pattern pieces are placed according to the grain line, fabric width, and

design requirements. Care is taken to avoid unnecessary gaps between patterns.

#### Recommended Type of Lay – Straight Lay

The suitable type of lay for bulk production is a straight lay. In this method, all fabric layers are spread in the same direction. It is mainly used for fabrics with prints, stripes, checks, or nap because it maintains the same appearance in all garments.

#### Reasons for Selection

Reduces fabric wastage.

Provides maximum fabric utilization. Improves marker efficiency.

Makes cutting easier and faster.

Maintains correct grain direction.

Produces garments with uniform appearance.

Reduces overall production cost.

#### Conclusion

For bulk garment production, an economical layout with a straight lay is the best choice because it saves fabric, reduces wastage, and increases production efficiency.

#### **b) Compare economical layout and insufficient fabric layout based on fabric utilization,**

#### **marker efficiency and production cost.**

##### Economical Layout

An economical layout is used when enough fabric is available for production. The main aim is to arrange patterns in the best possible way to reduce fabric wastage. Large and small pattern pieces are placed carefully to occupy maximum fabric area.

This layout provides high fabric utilization because very little fabric is wasted. It also gives high marker efficiency because most of the marker area is covered by pattern pieces. Since less fabric is wasted, the production cost is lower. It is commonly used for

bulk garment manufacturing.

#### Insufficient Fabric Layout

An insufficient fabric layout is used when the available fabric is less than the required amount. In this method, pattern pieces are adjusted carefully to fit into the available fabric.

The main purpose is to complete production with limited fabric.

This layout has lower fabric utilization because the limited fabric restricts proper pattern

arrangement. The marker efficiency is also lower compared to an economical layout.

Production cost may increase because more time and effort are needed for planning and fabric adjustment.

#### Conclusion

Economical layout is more suitable for bulk production because it provides better fabric utilization, higher marker efficiency, and lower production cost. Insufficient fabric layout is useful only when fabric availability is limited and maximum use of available fabric is required.

### UNIT III – SEAMS & PLACKET

#### Q1.

**a) A shirt is intended for heavy-duty use. Analyze and recommend the most suitable**

**seam type and justify your choice.**

#### Introduction

For heavy-duty shirts such as workwear, uniforms, industrial shirts, and outdoor garments,

the seam type should provide high strength, durability, comfort, and a neat appearance.

Since these garments are exposed to frequent washing, stretching, and rough use, a strong seam construction is required.

Recommended Seam Type – Flat-Felled (Welt) Seam

The most suitable seam for a heavy-duty shirt is the flat-felled seam (also called a welt seam). It is a strong and durable seam in which the raw edges of the fabric are enclosed inside the seam, giving a clean and long-lasting finish.

#### Construction of Flat-Felled Seam

Two fabric pieces are placed together and stitched.

One seam allowance is trimmed shorter than the other.

The wider seam allowance is folded over the trimmed edge.

It is then stitched down securely to form a flat finish.

#### Reasons for Selection

Provides excellent strength and durability.

Raw fabric edges are completely enclosed, preventing fraying.

Can withstand repeated washing and heavy use.

Gives a neat and professional appearance.

Reduces irritation caused by exposed seam allowances.

Suitable for thick and medium-weight fabrics.

Applications • Flat-felled seams are commonly used in:

- Work shirts
- Denim shirts
- Uniforms
- Sportswear
- Jackets
- Outdoor garments

#### Conclusion

For a heavy-duty shirt, a flat-felled seam is the best choice because it provides maximum

strength, durability, and a clean finish, making it suitable for garments that require long-lasting performance.

**b) Compare one-piece, two-piece and tailored plackets and recommend the most**

## **suitable placket for formal wear with reasons.**

### Introduction

A placket is an opening provided in a garment to make it easy to wear and remove. It is usually reinforced with buttons, buttonholes, hooks, or other fasteners. Different types of

plackets are selected depending on the garment style, strength, and purpose.

### One-Piece Placket

A one-piece placket is made by extending the fabric from the garment itself. The fabric extension is folded and stitched to form the opening.

It is simple and economical to construct. It requires less fabric and less sewing time.

However, it is not as strong as other placket types and is mainly used for casual garments

and children's wear.

### Applications:

- Nightwear
- Children's garments
- Casual shirts
- Kurtas

### Two-Piece Placket

A two-piece placket is made by attaching separate fabric strips to both sides of the opening. One side acts as the overlap and the other as the underlap. It provides better strength and a cleaner appearance compared to a one-piece placket. It

is commonly used in shirts and blouses.

### Advantages:

- Strong and durable.
- Provides better finishing.
- Suitable for repeated use.

### Applications:

- Casual shirts
- Women's blouses

- Kurtas

#### Tailored Placket

A tailored placket is a professionally finished placket mainly used in formal shirts. It consists of carefully constructed overlap and underlap portions with precise stitching. It gives a neat, sharp, and high-quality appearance. It is stronger than one-piece and two-piece plackets and can withstand frequent use.

#### Applications:

- Formal shirts
- Office wear
- Uniform shirts
- Designer garments
- Recommended Placket for Formal Wear – Tailored Placket

The tailored placket is the most suitable choice for formal wear because:

- It provides a neat and professional appearance.
- It has better strength and durability.
- It maintains shape even after repeated washing.
- It allows accurate placement of buttons and buttonholes.
- It gives a premium finish suitable for office and formal garments.

#### Conclusion

Among the three types, the tailored placket is the best option for formal wear due to its superior finishing, strength, durability, and professional appearance. One-piece and two-piece plackets are more suitable for casual and less structured garments.

### **UNIT IV – YOKE, COLLAR & SLEEVES**

#### **Q1.**

**a) Analyze the effect of different yoke designs on garment appearance and fullness.**

**Recommend a suitable yoke for a child's frock and justify your answer.**

#### Introduction

A yoke is a separate garment piece attached to the upper part of a dress, shirt, or frock to

provide support, improve fitting, and add decorative value. Different yoke designs affect

the overall appearance, shape, and amount of fullness in a garment. In children's wear, yokes are commonly used because they allow comfort, movement, and attractive styling.

### Effect of Different Yoke Designs on Garment Appearance and Fullness

#### 1. Straight Yoke

A straight yoke is cut in a straight horizontal line across the garment. It gives a simple and

neat appearance. It can control fullness below the yoke by allowing gathers or pleats to be added. It is commonly used in shirts and simple frocks.

#### 2. Round or Curved Yoke

A round yoke follows a curved shape around the neckline or chest area. It gives a soft and

decorative appearance. It allows more fullness below the yoke, making the garment comfortable and attractive, especially for children's clothing.

#### 3. Square Yoke

A square yoke has a square-shaped neckline or upper section. It provides a stylish and traditional look. It is suitable for decorative garments but may require careful construction

to maintain shape.

#### 4. Shoulder Yoke

A shoulder yoke extends across the shoulder area and provides better support to the garment. It improves fitting and gives a structured appearance. It is commonly seen in shirts, dresses, and uniforms.

5. Front and Back Yokes Front and back yokes improve garment strength and allow decorative elements such as

embroidery, lace, gathers, or pleats. They help distribute fullness evenly and improve the

overall appearance of the garment.

Recommended Yoke for a Child's Frock – Round (Curved) Yoke

The most suitable yoke for a child's frock is the round yoke.

#### Reasons for Selection

- Provides a soft and attractive appearance suitable for children's wear.
- Allows extra fullness below the yoke through gathers or pleats.
- Provides comfort and freedom of movement for children.
- Creates a graceful and decorative look.
- Allows the use of embroidery, lace, and decorative trims.
- Gives a better fit around the chest and shoulder area.

#### Conclusion

Different yoke designs influence the style and fullness of a garment. For a child's frock, round yoke is most suitable because it combines comfort, attractive appearance, and sufficient fullness required for children's clothing.

**b) Compare shirt collar, stand collar, shawl collar and Peter Pan collar.**

**Recommend the most suitable collar for office wear with reasons. (5 Marks)**

#### Introduction

A collar is a garment component attached around the neckline to improve appearance, provide support, and add style. Different collar types are selected based on garment purpose, fabric, and occasion.

#### Shirt Collar

A shirt collar consists of a collar stand and collar fall. It has a formal and structured appearance. It is commonly used in men's and women's formal shirts.

#### Characteristics:

Gives a professional look.

Can be worn with or without a tie.

Provides good neckline support.

Suitable for formal and semi-formal garments. Uses:

Office shirts

Uniforms

Formal blouses

## Stand Collar

A stand collar is an upright collar that stands around the neck without folding over.

Characteristics:

Simple and elegant appearance.

Provides a neat neckline finish.

Comfortable and less bulky.

Uses:

- Kurtas
- Jackets
- Traditional and modern garments

## Shawl Collar

A shawl collar is a continuous collar that rolls smoothly from the neckline without a separate collar stand.

Characteristics:

- Soft and curved appearance.
- Gives a luxurious and elegant look.
- Adds fullness around the neck area.

Uses:

- Blazers
- Coats
- Evening wear
- Peter Pan Collar

A Peter Pan collar is a flat collar with rounded edges. It provides a soft and decorative appearance. Characteristics:

- Feminine and youthful style.
- Simple and comfortable.
- Less formal compared to shirt collars.

The shirt collar is the most suitable collar for office wear because:

- It provides a professional and formal appearance.

- It creates a neat and structured neckline.
- It matches well with formal shirts, trousers, and suits.
- It can be styled with ties, scarves, or worn open.
- It is comfortable for long working hours.
- It maintains its shape and gives a polished look.

#### Conclusion

Among shirt collar, stand collar, shawl collar, and Peter Pan collar, the shirt collar is the best choice for office wear due to its formal appearance, versatility, comfort, and professional finish. Other collars are more suitable for casual, traditional, or decorative garments.

## UNIT V – FULLNESS

**a) A designer wants to create fullness in a dress without using gathers. Analyze the available methods and recommend the most suitable technique with justification.**

#### Introduction

In garment design, fullness refers to the extra amount of fabric added to a garment to provide comfort, ease of movement, and decorative effects. Fullness can be created using different methods such as darts, pleats, tucks, gathers, and frills. If a designer wants to create fullness without using gathers, other techniques can be selected depending on the required appearance, fabric type, and garment style.

#### Methods of Creating Fullness Without Gathers

##### 1. Pleats

Pleats are folds of fabric that are stitched or pressed to create controlled fullness. They provide a neat and structured appearance compared to gathers.

Advantages: Creates permanent and controlled fullness.

Gives a neat and attractive finish.

Allows easy movement.

Suitable for skirts, dresses, and uniforms.

## 2. Tucks

Tucks are narrow folds of fabric stitched in place. They provide small amounts of fullness

while adding decorative effects.

Advantages:

Creates texture and design details.

Suitable for lightweight fabrics.

Gives a neat appearance.

Applications:

Children's dresses

Blouses

Decorative garments

## 3. Darts

Darts are folded and stitched portions of fabric used mainly for shaping garments according to body curves. They can control fullness and improve fitting.

Advantages:

Provides accurate shaping.

Improves garment fit.

Suitable for fitted dresses and bodices.

## 4. Godets

Godets are triangular or wedge-shaped fabric pieces inserted into a garment to add flare and fullness.

Advantages: Creates attractive flare.

Allows greater movement.

Provides a stylish appearance.

Applications:

Skirts

Gowns

Designer dresses

## Recommended Technique – Pleats

The most suitable technique for creating fullness in a dress without gathers is pleating.

### Reasons for Selection

Provides controlled and even fullness.

Gives a clean and professional appearance.

Maintains the shape of the garment.

Suitable for different types of fabrics.

Allows freedom of movement.

Adds decorative value to the dress.

More durable and easier to maintain compared to gathers.

### Conclusion

Among the different methods of creating fullness, pleats are the best choice when gathers are not preferred because they provide a structured, attractive, and long-lasting finish while maintaining garment comfort and style.

b) Compare knife pleats, box pleats, kick pleats and cartridge pleats based on appearance, construction and garment application. Recommend the best pleat for a school uniform skirt with reasons.

**Introduction** Pleats are folds created in fabric to add fullness, comfort, and decorative effects.

Different types of pleats produce different appearances and are selected according to the

purpose of the garment.

### Knife Pleats

Knife pleats are narrow, evenly spaced folds that all face the same direction.

#### Appearance:

Gives a neat and uniform look.

Creates regular vertical lines.

#### Construction:

Fabric is folded repeatedly in one direction.

Pleats are pressed and stitched at the waist or upper portion.

Applications:

School skirts

Dresses

Uniforms

Fashion skirts

Box Pleats

Box pleats are formed by two knife pleats folded away from each other, creating a box-like shape.

Appearance:

Gives a wider and structured appearance.

Provides more fullness than knife pleats.

Construction:

Two folds are made facing opposite directions.

The center forms a flat box shape.

Applications: Skirts

Shirts

Uniforms

Jackets

Kick Pleats

Kick pleats are pleats placed at the bottom of skirts or coats to provide ease of movement.

Appearance:

Usually hidden when standing.

Opens during walking to allow movement.

Construction:

A fold is inserted at the lower part of the garment.

The pleat is secured above and left open below.

Applications:

Skirts

Coats

Formal dresses

Cartridge Pleats

Cartridge pleats are rounded tube-shaped pleats created by gathering fabric into small circular folds.

Appearance:

Gives a decorative and bulky effect.

Creates a rich and gathered appearance.

Construction:

Several parallel gathering stitches are made.

Threads are pulled to create round folds. Applications:

Historical costumes

Decorative garments

Sleeves

Recommended Pleat for School Uniform Skirt – Knife Pleat

The most suitable pleat for a school uniform skirt is the knife pleat.

Reasons for Selection

Provides a neat and disciplined appearance suitable for school uniforms.

Creates comfortable fullness for movement.

Easy to construct and maintain.

Requires less fabric compared to wider pleats.

Maintains a uniform appearance among students.

Allows easy ironing and washing.

Provides a smart and professional look.

## **Conclusion**

Different pleats create different effects in garment design. For school uniform skirts, knife pleats are the most suitable because they provide comfort, durability, neat appearance and easy maintenance , making them ideal for regular use .