higher education & training

Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE

INTRODUCTORY PATTERN CONSTRUCTION N4

(10010454)

31 May 2021 (X-paper)
09:00–12:00

Candidates may use drawing instruments and calculators.

This question paper consists of 13 pages and 2 addenda.

138Q1J2131

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DEPARTMENT OF HIGHER EDUCATION AND TRAINING
REPUBLIC OF SOUTH AFRICA

NATIONAL CERTIFICATE
INTRODUCTORY PATTERN CONSTRUCTION N4
TIME: 3 HOURS
MARKS: 200

INSTRUCTIONS AND INFORMATION

1. Answer all the questions.
2. Read all the questions carefully.
3. Number the answers according to the numbering system used in this question paper.
4. Start each section on a new page.
5. All the drafts must be done to the specified scale on white TYPING PAPER. Use only a black fine-liner pen to make clear construction lines. Do not use a red or a green pen.
6. Do not cut out the drafts. Paste them into the ANSWER BOOK. No loose parts will be marked.
7. Enough basic blocks are provided for planning and manipulation; it is not necessary to trace any of the blocks.
8. Manipulations must also be pasted directly into the ANSWER BOOK. Then add seam and hem allowances, if required.
9. Work neatly.

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SECTION A

QUESTION 1

1.1 Various options are given as answers to the following questions. Choose the answer and write the letter (A–D) next to the question number (1.1.1–1.1.10) in the ANSWER BOOK.

1.1.1 Used for cutting heavy-duty cardboard when making sized blocks for factory use:

A Tracing wheel
B Stapler
C Stanley knife
D Tape measure

1.1.2 Used for transferring lines and curves from one pattern or piece of paper to another:

A Tracing wheel
B Flexiruler
C Ruler
D Curved ruler

1.1.3 Metal ruler with scale on backside and two arms forming 90°-angle:

A Ruler
B Flexible rule
C Yard stick
D Tailor's square

1.1.4 Used to make all types of curves when creating patterns:

A Graduated square
B French curve
C Triangle
D Adjustable set square

1.1.5 Used for length curves on two-piece sleeves, lapels and for some feathered hemlines:

A Curved rule
B Graduated square
C Adjustable set square
D Metre stick

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1.1.6 Used for pinning fabrics for drapery and fittings:

A Pushpins
B Stanley cutter
C Pins
D Thumb tacks

1.1.7 Used for measuring figure forms and around curves when creating patterns:

A Triangle
B Tape measure
C Ruler
D Flexible ruler

1.1.8 Pierces small holes on patterns to indicate dart points, trim details, buttonhole placements and pocket locations:

A Pattern notches
B Pins
C Pattern weights
D Awl

1.1.9 Used for hanging patterns in the workshop:

A Ringers
B Rabbit punch
C Tracing wheel
D Thumb tacks

1.1.10 Used for cutting all pattern pieces no matter the material:

A Stapler
B Tape measure
C Shears
D Pattern notches

(10 × 1) (10)

1.2 Complete the following sentences by writing only the missing word or words next to the question number (1.2.1–1.2.5) in the ANSWER BOOK.

1.2.1 … is a practical way of producing patterns by modelling of fabric into a garment on a figure or a dress stand.

1.2.2 Flat pattern drafting is the construction of blocks and patterns on paper on a …

1.2.3 Two types of … define a term denoting an agreement of vertical and lateral lines on which to record proportions of certain dimensions taken from a human figure.

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1.2.4 The … measuring system is the dimension taken as the basic dimension of which certain proportions are used to draft a basic block.

1.2.5 The … system means measurements are taken directly on a figure.

(5 × 2) (10)

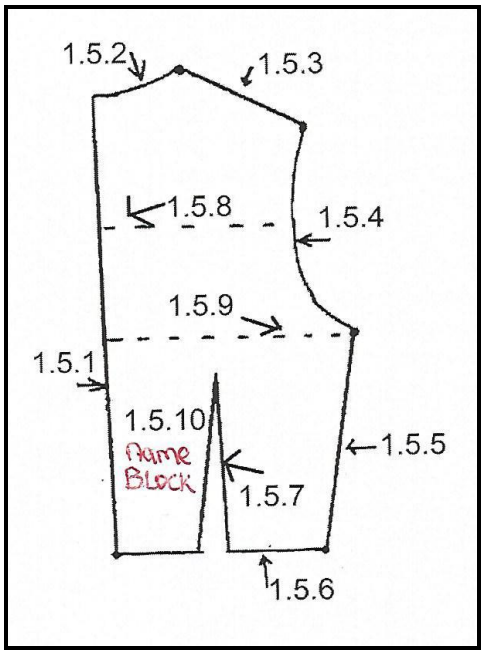
1.3 Choose a term from COLUMN B that matches a description in COLUMN A. Write only the letter (A–L) next to the question number (1.3.1–1.3.10) in the ANSWER BOOK.

	COLUMN A		COLUMN B
1.3.1	Foundation block following natural lines of figure, providing correct proportions and fit	A	trade block
1.3.2	Foundation of pattern making system	B	pattern manipulation
1.3.3	Can be developed from basic blocks produced by direct drafting	C	working pattern
1.3.4	Adaptation of standard block to suit requirements of manufacturer	D	pattern grading
1.3.5	Fully completed styled pattern with seam allowances	E	basic block pattern
1.3.6	Fashioned sections of styled pattern cut on paper from basic foundation blocks without seam allowances	F	master pattern
1.3.7	Length of paper containing copy of all pattern pieces to be cut at one time	G	markers
1.3.8	Pattern set that has been corrected and perfected, containing every pattern piece required to complete garment	H	primary block
1.3.9	Act of slashing and spreading, or pivoting pattern sections to alter its original shape	I	pattern adaptation
1.3.10	Changing basic block to fit various figure disproportions	J	secondary blocks
		K	pattern line
		L	production pattern

(10 × 1) (10)

1.4 Name 10 important labelling, marks and seams found on a final pattern piece. (10)

1.5 Identify the pattern marks and seams in the sketch below by writing only the answer next to the question number (1.5.1–1.5.10) in the ANSWER BOOK.



(10)
[50]

TOTAL SECTION A: 50

SECTION B

Follow the instructions on page 2.

QUESTION 2

Draft a ladies' bodice block, size 13, to fifth scale using the instructions and measurements below.

MEASUREMENTS

Bust	88 cm
Back length	39,5 cm
Across the back	33 cm
Waist	66 cm

INSTRUCTIONS

Scale = half bust measurement = 88/2 = 44 cm. Mark point 0 45 cm (measure on scale) downwards from the top left corner and 25 cm to the right on left side of the paper.

0–1 ¼ scale plus 9 cm down, square across right for scye depth line

0–2 Back length down, square across to the right for waist line

0–3 Midway between 0 and 1, square to the right for back width (across back)

2–4 2 cm to the right. Join 0 to 4 for new centre back line and mark 3A to the right of 3 on new centre back line

3–5 Mark 5 where centre back line crosses line from 1

0–6 1/6 scale minus 6 mm to the right (back neck) (6,7 cm)

6–7 2 cm, squared up. Curve from 7 to 0 for back neckline

3A–8 Half-across back measurement to the right (16,5 cm). Square down and mark 9 on scye depth line

5–10 2/3 scale minus 1,2 cm squared to the right (28 cm)

10–11 1/6 scale squared to the right (7,3 cm). Square up from 0 to top of construction line and mark 13

5–12 Half-bust measurement plus 2,5 cm ease, to the right (46,5 cm). Square up and down for centre front line. Mark 24 on waistline

13–14 1/12 scale minus 1,2 cm, squared up (2,5 cm)

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3A–15	2 cm up on centre back line. Join 15 and 14 and extend line to touch centre front line
16	Square up from 8 and mark 16 on line from 14 to 15
16–17	1,2 cm to the right on the line 14 to 15. Join 7 to 17 for back shoulder line
14–18	Back shoulder length minus 6 mm measured to the left on line from 14 to 15
18–19	2 cm squared down
10–20	4 cm squared up. Join 19 to 20 and mark X 1,2 cm to the right on chest line (squared line from 3). Join 19 to X to 20, make a curve down to scye line, up to 8 to 17 for armhole curve. Mark back pitch point at 8. Measure 2 cm up from scye line where it touches armhole curve, near 10, for front pitch.
21 – centre front line	1/6 scale minus 6 mm, to the left on line 14 to 15 (6,7 cm). To determine 21, move set square upwards from centre front line until measurement 6,7 cm touches line from 14 to 15
22	Place set square on centre front line to touch 21 and mark 22 on centre front line
22–23	1/6 scale, down 7,3 cm. Join 21 to 23 for front neckline curve
25	Mark 25 next to 24 on waistline for middle front line
26	Midway between 10 and 12
26–27	Square up to line 14 to 15 and mark 27
27–28	Same measurement as for 14 and 21, measured from 27 to the left. Mark Y. To find 28, pivot on 26 to make 26 to 2 the same distance as 26 to 28 through point Y. Join 28 and 26 with 27 to form the front bust control dart. Join 19–28, 27–21 for front shoulder line
29	Midway between 9 and 10. Square down to 30 on waistline
4–31	Quarter waist measurement plus 2,5 cm to the right (19 cm). Join 29 to 31 (back side seam)
4–33	7,5 cm to the right
33–34	2,5 cm (dart allowance) to the right. Locate dart centre line. Square up 16 cm. Complete dart
24–32	Quarter waist measurement plus 4 cm to the left (20,5 cm). Join 29 to 32 (front side seam). Square down from 26 for dart centre line. Length of front dart = 14 cm. Width of front dart = 4 cm. Indicate block information

[50]

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QUESTION 3

Use ADDENDUM A to do the manipulations below for a 5-year-old girl. Manipulate the bodice block front and back on half-scale with a button at the back and an extended facing.

MEASUREMENTS

Facing depth	5 cm
Button diameter	2 cm
Button stand	2 cm
Seam allowance	1,5 cm
Seam allowance at facing edge	5 mm
Button spacing	7 cm

3.1 Submit the planning of the bodice back. (13)

3.2 Submit the planning of the bodice front. (8)

3.3 Submit the final of the bodice back. (19)

INSTRUCTIONS

BACK
Add the button stand (2 cm)

Draw the back facing (5 cm)

Indicate CB

Mark the buttonholes (2 cm)

Transfer the facing line to the facing for the extended facing

Add the seam allowances

Add the grain line

Label the pattern

FRONT
Indicate the centre front

Draw the facing (5 cm)

Label the pattern

Add the grain line

[40]

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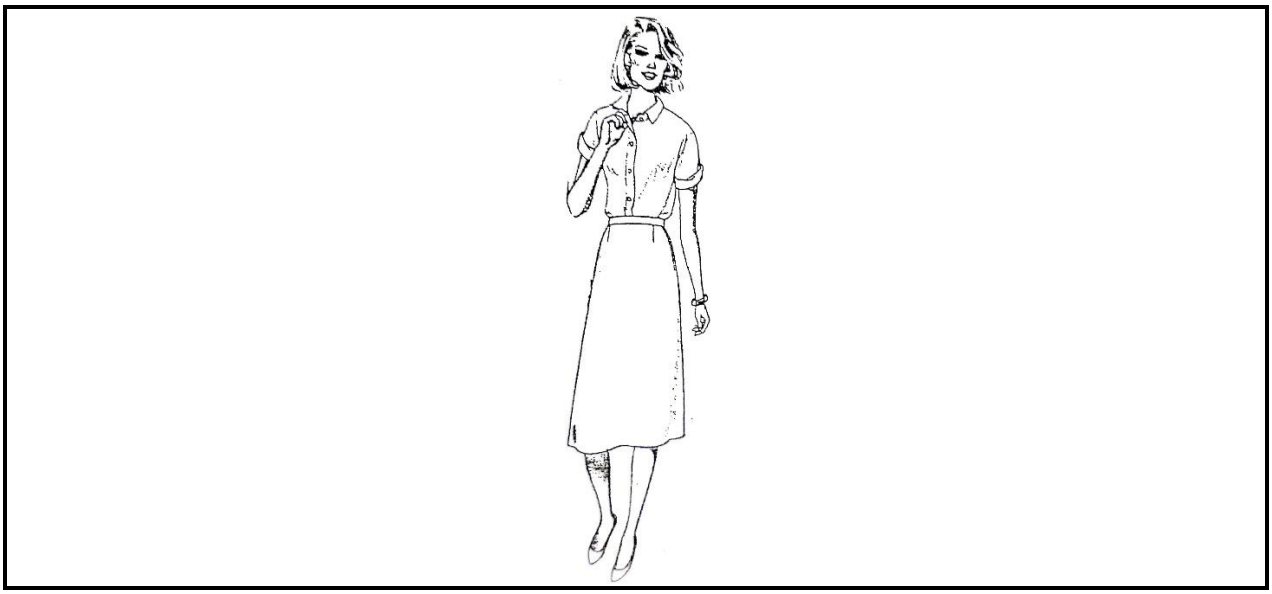
QUESTION 4

Use the ladies' skirt block, size 13, on ADDENDUM B and submit the manipulations of a ladies' A-line skirt to fifth scale.



4.1 Submit the planning of the skirt front. (13)

4.2 Submit the planning of the skirt back. (17)

INSTRUCTIONS AND MEASUREMENTS

FRONT
Draw the hip line

Mark A at the side seam hip line

B Side seam hemline

B–C 4 cm out from the hemline side seam for the flare

Draw the new side seam from A to C.

Indicate the centre front.

BACK
Draw the hip line.

Indicate the centre back.

Mark A at the side seam hip line.

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B Side seam hemline

B–C 4 cm out from the hemline side seam for the flare.

D Dart point

Centre back–E: 2 cm

Connect D to E.

Indicate the slash line from E to D.

Close the back dart.

Mark the zip length 20 cm.

Add the grain line.

Label the pattern. **[30]**

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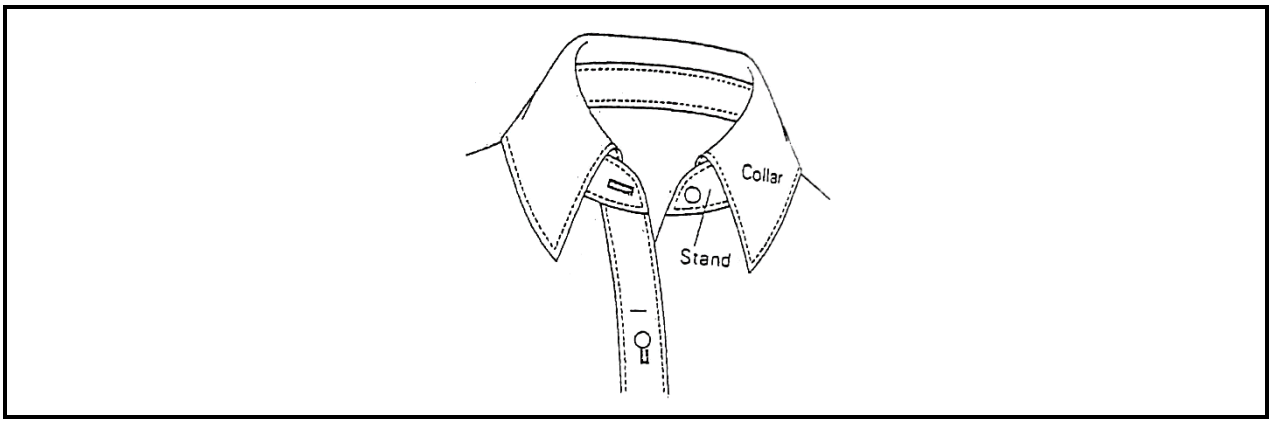
QUESTION 5

Study the sketch and draft the boy's shirt collar on full scale using the following measurements and instructions:



MEASUREMENTS

Neck circumference	28,5 cm
Button stand	1,5 cm
Collar stand depth	4,5 cm
Collar stand	2,5 cm

INSTRUCTIONS

Mark 0 as starting point on the left side of the paper.

0–1 Half-neck circumference DUC

1–2 1,5 cm

1–3 2,5 cm collar stand depth

3–4 1,5 cm button stand

0–5 2,5 cm collar stand depth

Shape the collar stand 0–2, 2–4 and through 3 to 5.

3–6 6 mm squared up from 3

5–7 4,5 cm collar depth

6–8 6,5 cm for shaping outer edge of collar placed at any desired angle

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Mark the button hole.

Trace the collar and the button stand.

Label the collar.

Add the grain line. **[30]**

TOTAL SECTION B: 150
GRAND TOTAL: 200

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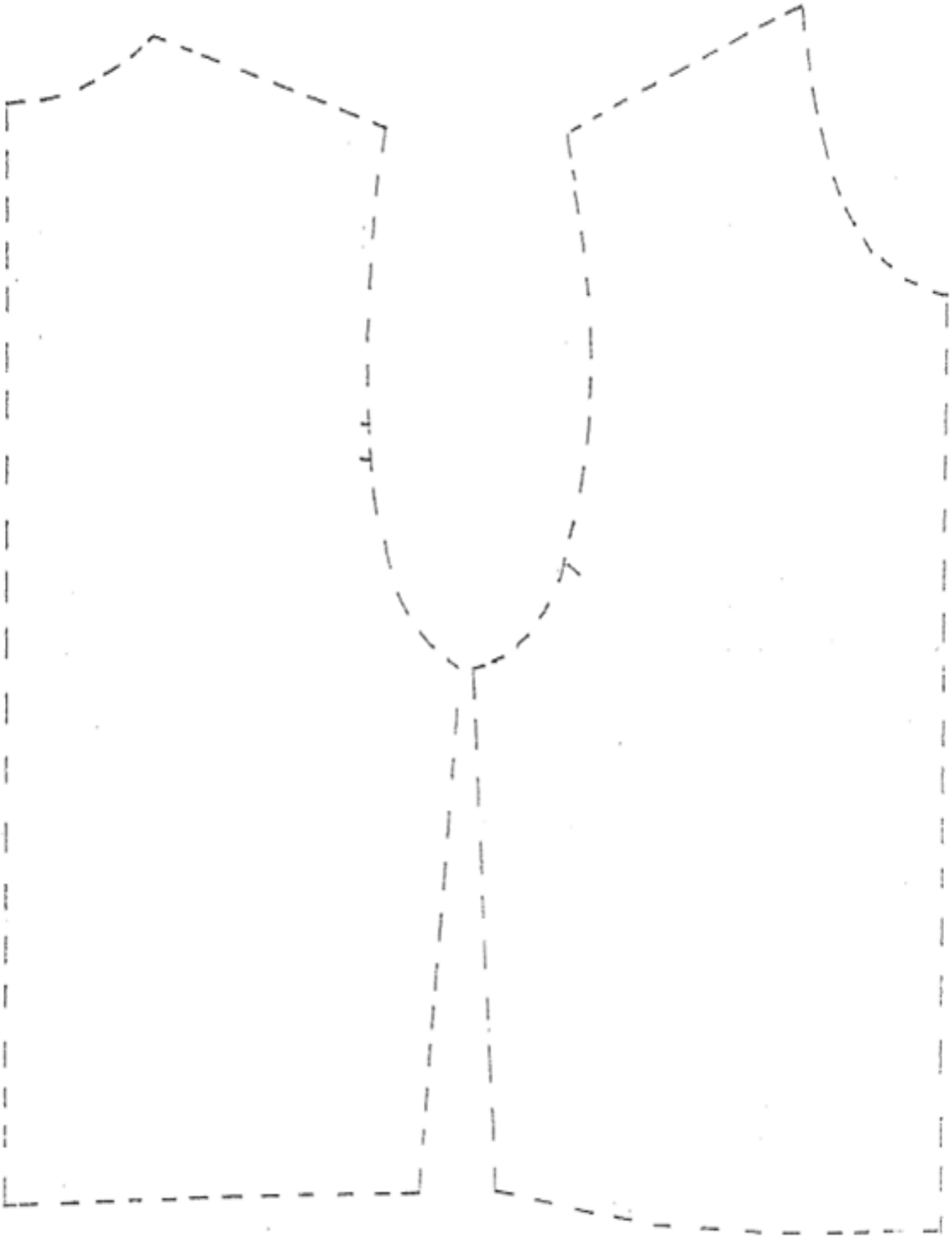
ADDENDUM A



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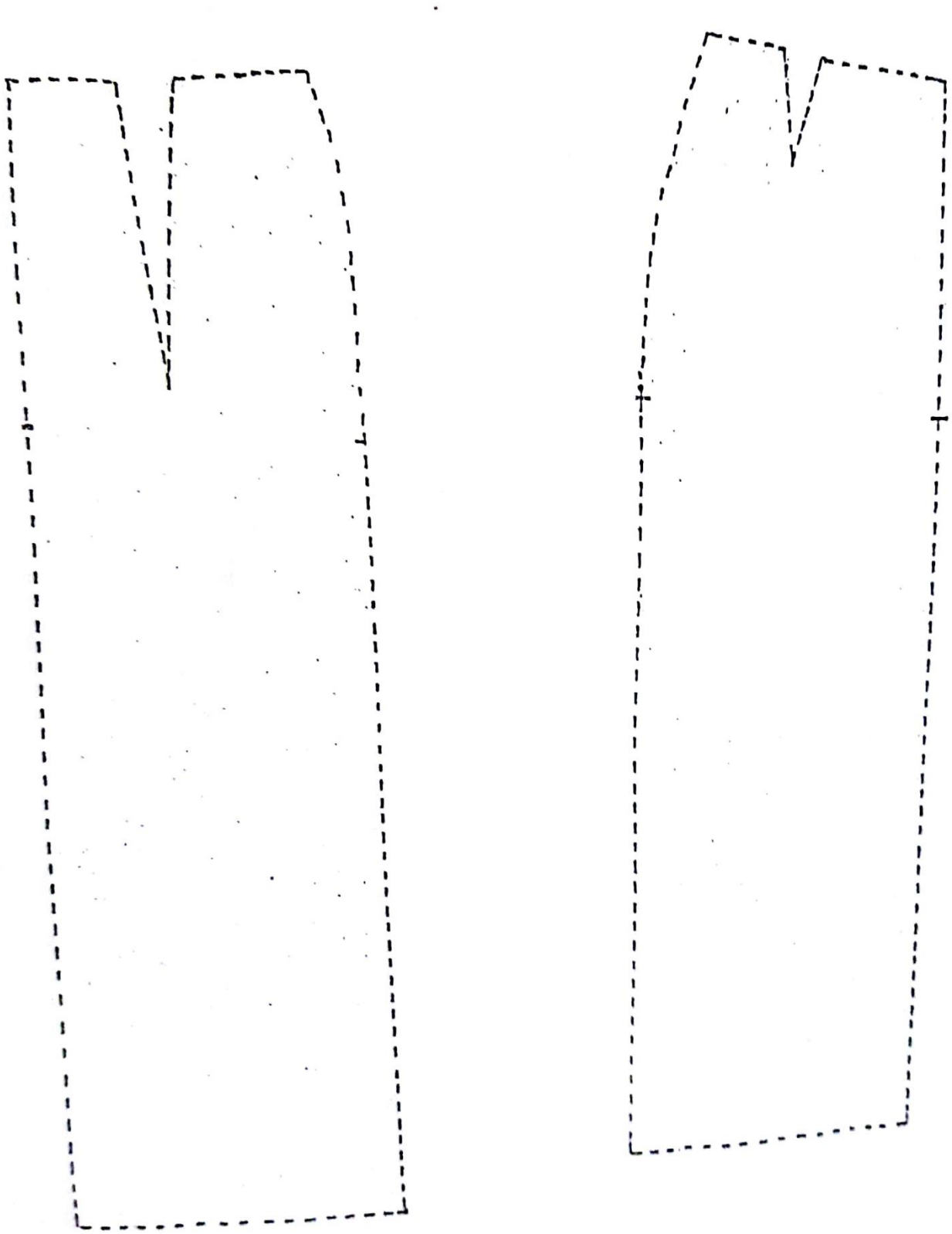
ADDENDUM B



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