



2012 Graphic Communication

Higher

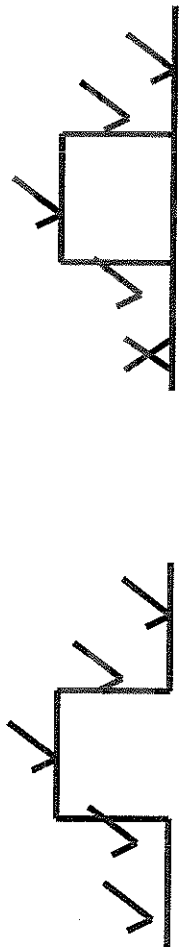
Finalised Marking Instructions

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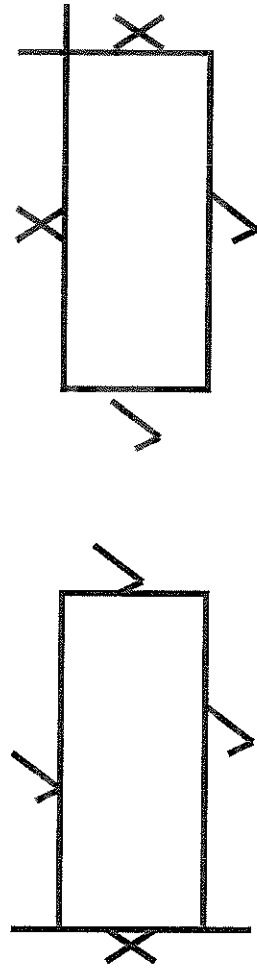
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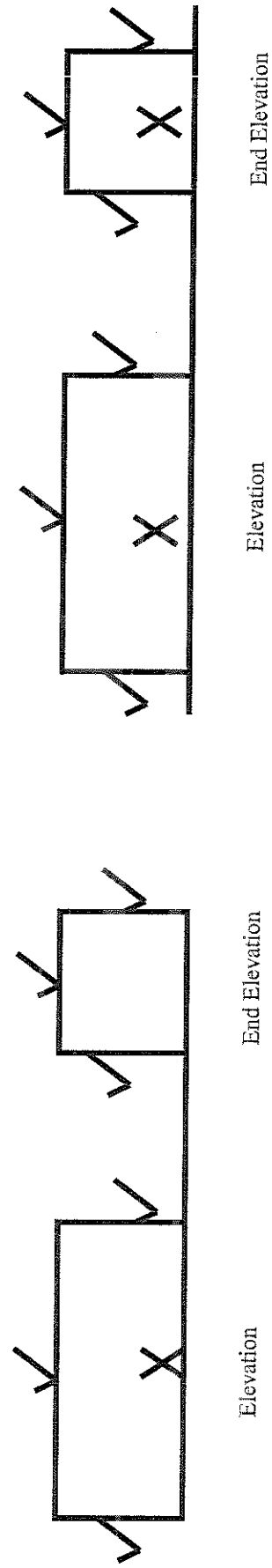


Penalty when a line is continued across a base



Penalty when a line is extended/continued incorrectly

Penalty when a line is incorrectly projected to another view



Elevation

End Elevation

Elevation

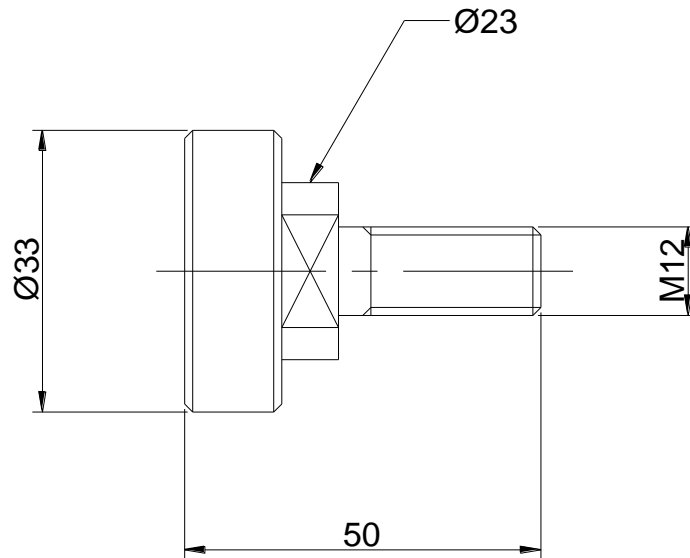
End Elevation

Question 1

		Marks
(a)	(i) Rectangular array, Box array, Linear, Multiple copy.	1
	(ii) Mirror.	1
	(iii) Circle.	1
	(iv) Trim, Break.	1
(b)	(i) Library.	1
	(ii) Standardises parts, quality control, to British Standards.	1
(c)	(i) Layer , Layering.	1
	(ii) Ease of editing, reveal or conceal parts, allows different parts to be printed.	1
	Total marks	8

Question 2

			Marks
(a)	Type A	Parallel.	1
	Type B	Chain.	1
(b)	Type A would avoid the accumulation of tolerances (or similar explanation).		1
(c)			



(i)	Four dimensions 1 mark for each. Accept only BS arrowheads.	Length 50 Dia 33 Dia 23 M 12	1 1 1 1
(ii)	Flat surface to BS.		1

Total marks 8

Question 3

			Marks
(a)	Thumbnails. Working roughs (roughs, visuals).	1 mark for each.	2
(b)	Landscape.		1
(c)	Whitespace.		1
(d)	(i) Sub heading.		1
	(ii) Rule.		1
	(iii) Footer.		1
	(iv) Gutter.		1
	(v) Column, Column width.		1
	(vi) Caption.		1
Total marks			10

Notes.

- (d) (iii) Do not accept *folio*.

Question 4

		Marks
(a)	Scale 1:250, 1:500, 1:200.	1
(b)	A Tree/Existing tree. (Not proposed tree).	1
	B Contours.	1
	C North Symbol, North point, North.	1
(c)	Floor Plan, Block Plan (accept <i>location</i>) - either for 1 mark.	1
	Total marks	5

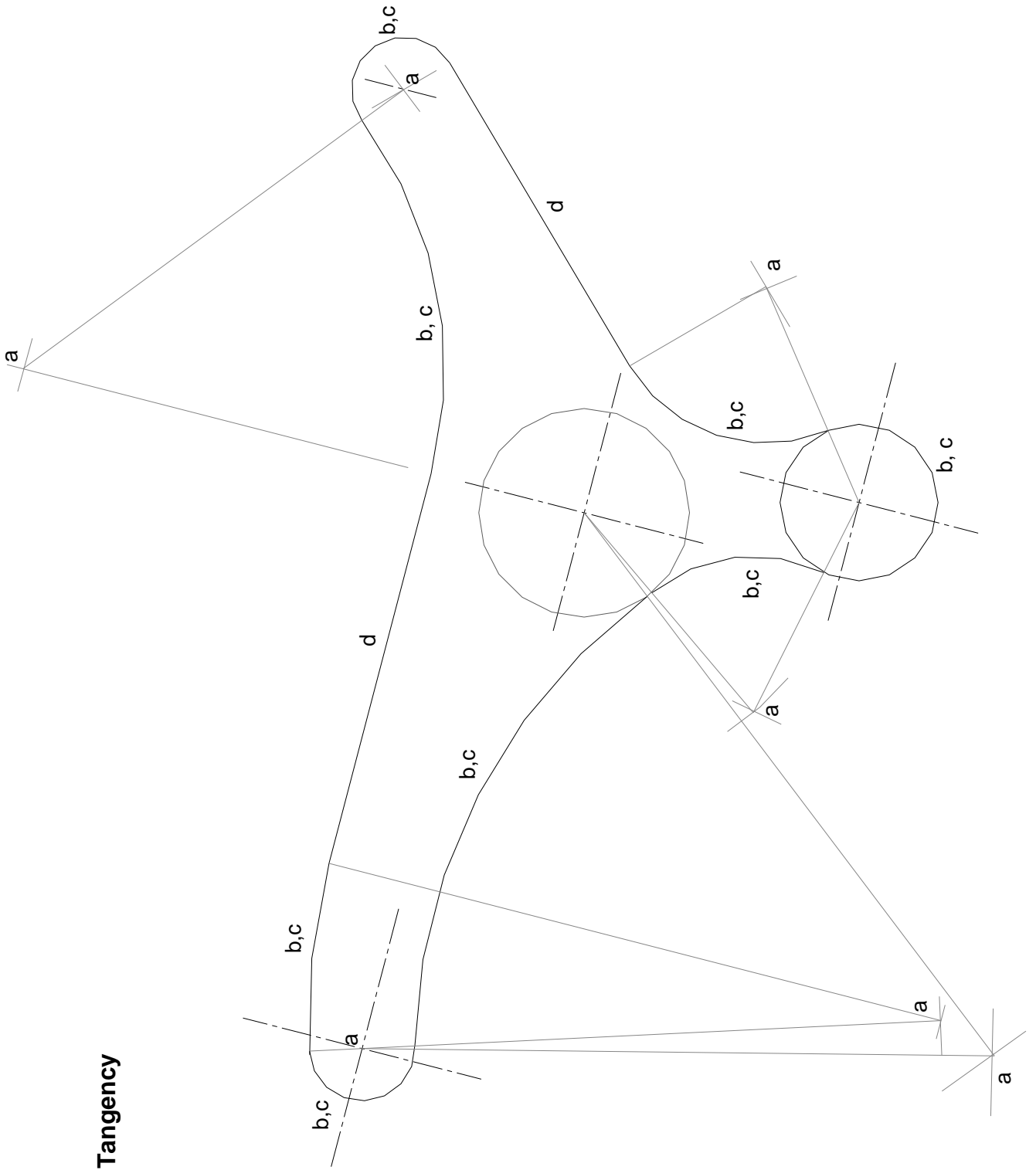
Question 5

	Marks
(a) The visible outline would take priority.	1
(b) (i) Hidden detail.	1
(ii) Fold lines, limits of movement, bend lines.	1
(iii) Limits of a partial or interrupted view. (Accept description).	1
(iv) Dimension lines, hatching, projection, construction lines.	1
Total marks	5

Question 6

		Marks
(a)	(i) Full section.	1
	(ii) Half sectional view.	1
	(iii) Section in more than one plane, stepped section.	1
(b)	To see more clearly what previously hidden parts would look like. To clearly show internal detail, to add clarity. (Accept similar answer).	1
Total marks		4

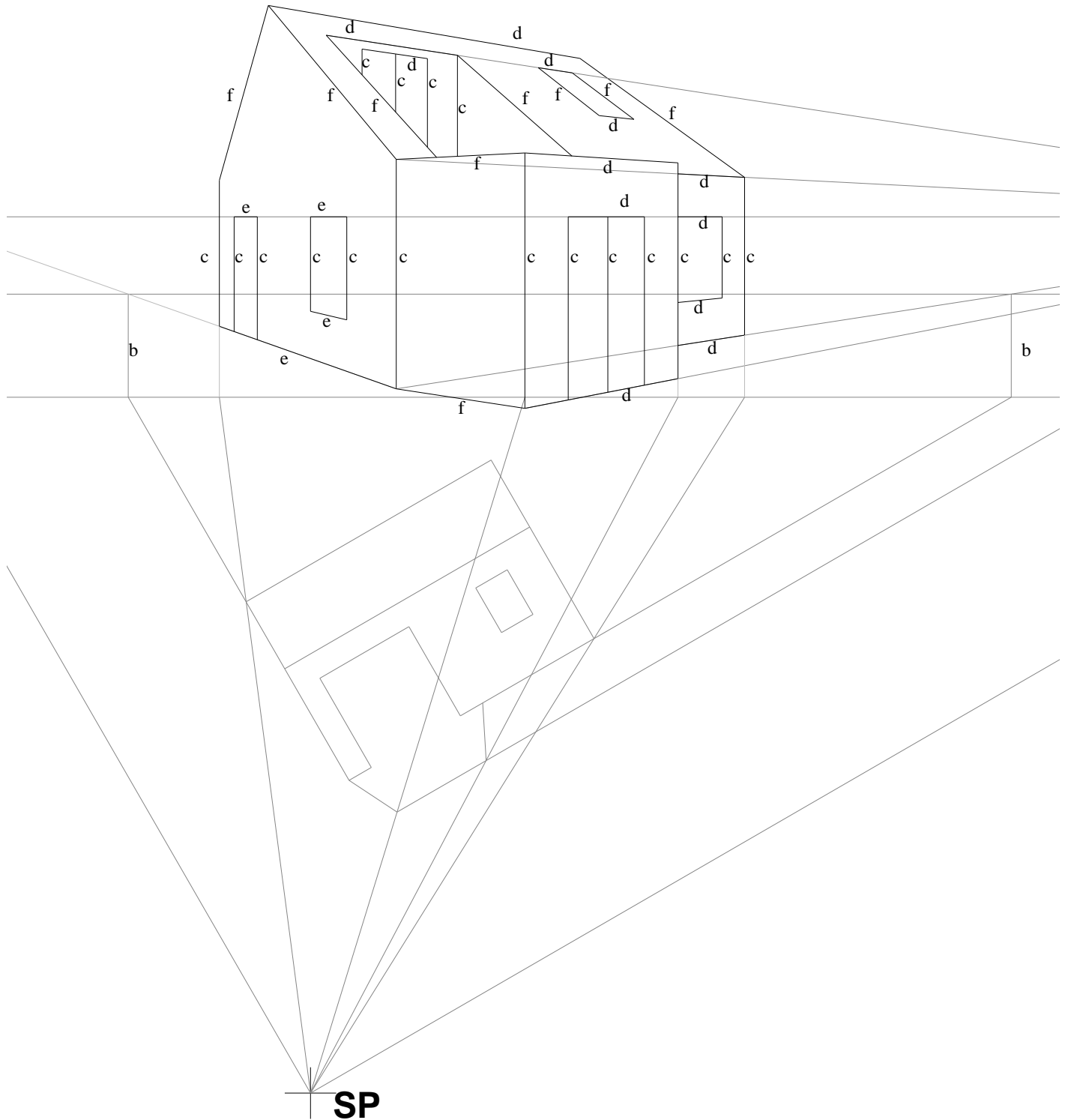
Question 7 Tangency



Question 7 – Tangency

		Marks
(a)	Centres, clearly shown and located (2 for 1), (4 for 2), (7 for 3)	7 3
(b)	Arcs, correct radii (2 for 1), (4 for 2), (8 for 3)	7 plus circle 3
(c)	Smooth arcs plus circle, no tails, firm lines. (2 for 1), (4 for 2), (8 for 3)	8 3
(d)	Straight lines (2 for 1 mark)	1
	Total marks	10

Question 8 Measured Perspective



Question 8 – Measured Perspective Cottage

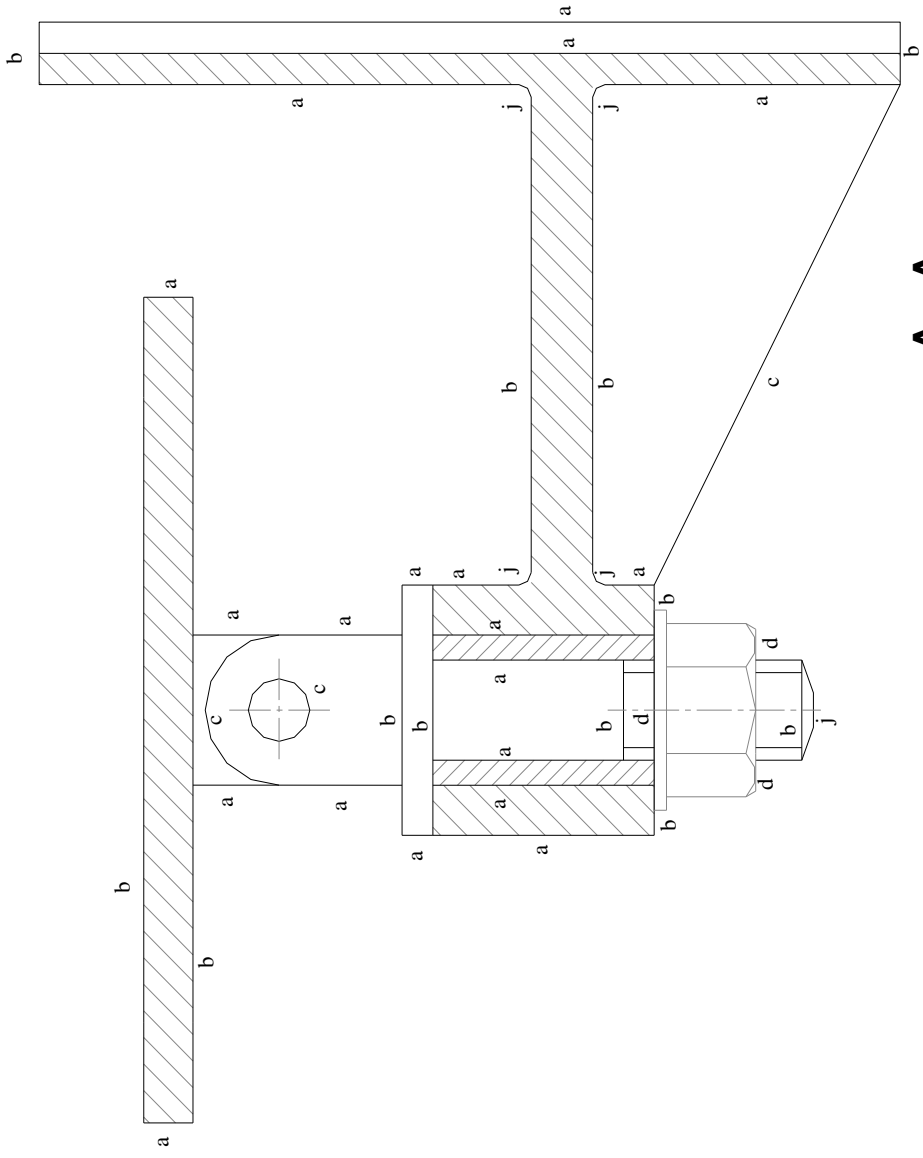
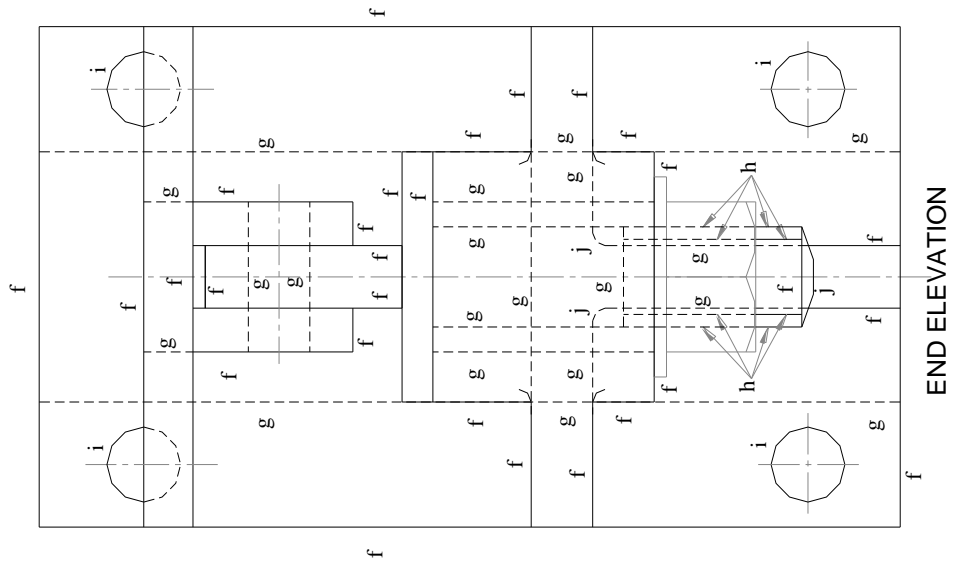
	Marks
(a) VP1 and VP2 vanishing points to left and right.	1
(b) Height line: any one correctly positioned and used.	1
(c) Vertical lines 17: Walls 6, Windows 3, Doors 8. Correct vertical location. (2 for 1), (5 for 2), (7 for 3), (9 for 4), (11 for 5), (13 for 6), (15 for 7), (17 for 8)	8
(d) Lines to Right VP 12: Walls 6, Windows 4, Doors 2. (2 for 1), (5 for 2), (7 for 3), (9 for 4), (12 for 5)	5
(e) Lines to Left VP 4: Walls 1, Windows 2, Doors 1. (2 for 1), (4 for 2)	2
(f) Sloping lines 9: Extension 2, Roof 5, Window 2. (3 for 1), (6 for 2), (9 for 3)	3
Total marks	20

Notes:

All outlines must be clearly defined.

- (c) Correct location and a start/finish required.

Question 9 Engineering



SECTIONAL ELEVATION ON A - A

Question 9 – CCTV support

Marks

Sectional Elevation

- | | | |
|-----|--|---|
| (a) | Solid lines, 19 vertical
(4 for 1), (8 for 2), (12 for 3), (16 for 4), (19 for 5) | 5 |
| (b) | Solid lines, 12 horizontal
(4 for 1), (8 for 2), (12 for 3) | 3 |
| (c) | Circle, arc and angled line
(2 for 1), (3 for 2) | 2 |
| (d) | Thread detail, 8 lines for 2 marks
(4 for 1), (8 for 2) | 2 |
| (e) | Hatching, 5 areas correctly hatched to BS (opposite direction and no herring bone)
(3 for 1), (5 for 2) | 2 |

End Elevation

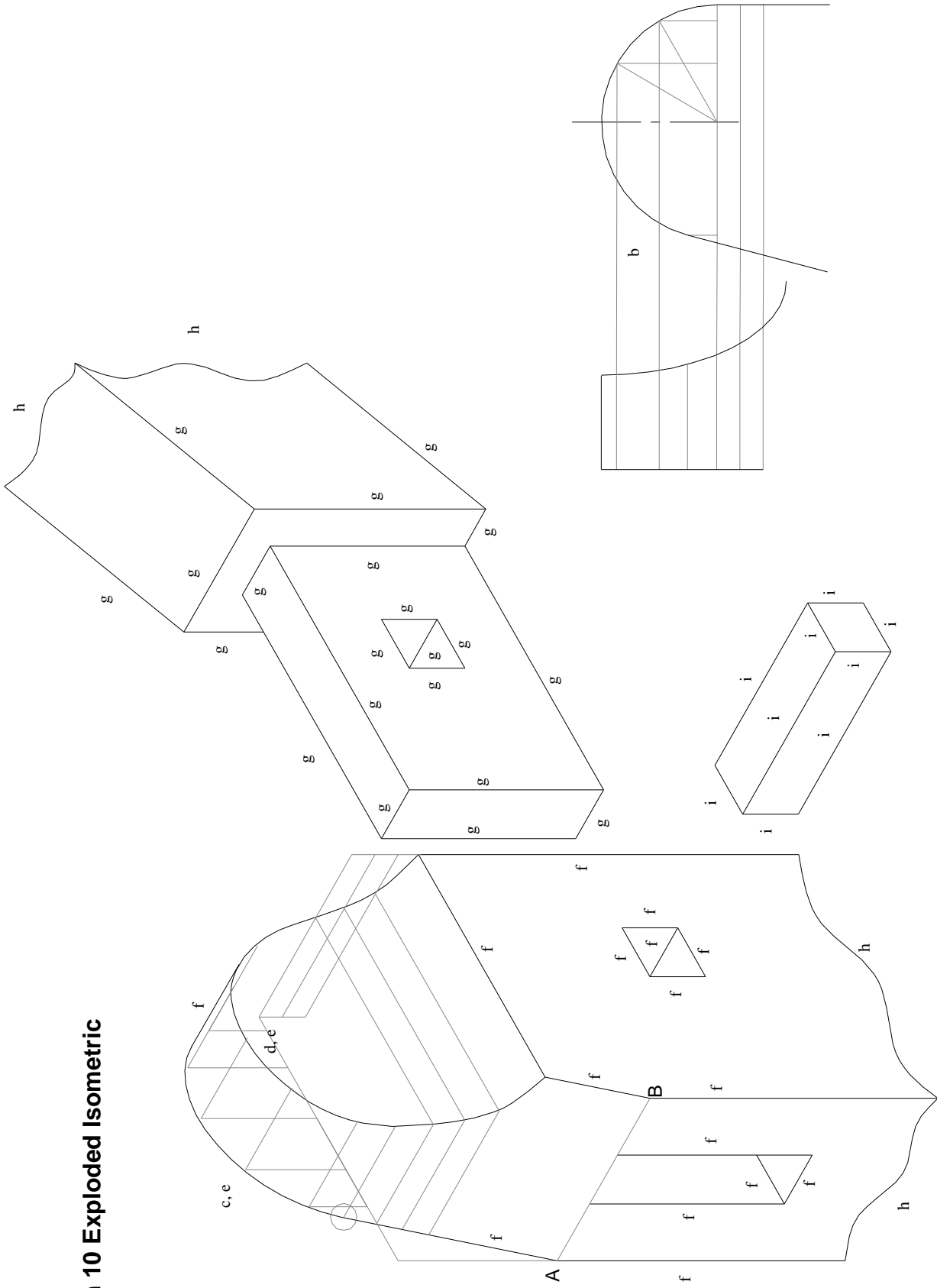
- | | | |
|-----|---|---|
| (f) | Solid lines, 12 vertical, 16 horizontal
(4 for 1), (9 for 2), (14 for 3), (19 for 4), (24 for 5), (28 for 6) | 6 |
| (g) | Broken lines, 14 vertical, 6 horizontal
(4 for 1), (8 for 2), (12 for 3), (16 for 4), (20 for 5) | 5 |
| (h) | Thread detail, 4 hidden, 4 outline
(4 for 1), (8 for 2) | 2 |
| (i) | Circles 4, position, size and line type
(2 for 1), (4 for 2) | 2 |

Both Views

- | | | |
|-----|---|---|
| (j) | 2 arcs and a minimum of 4 fillets for 1 mark. | 1 |
|-----|---|---|

Total marks 30

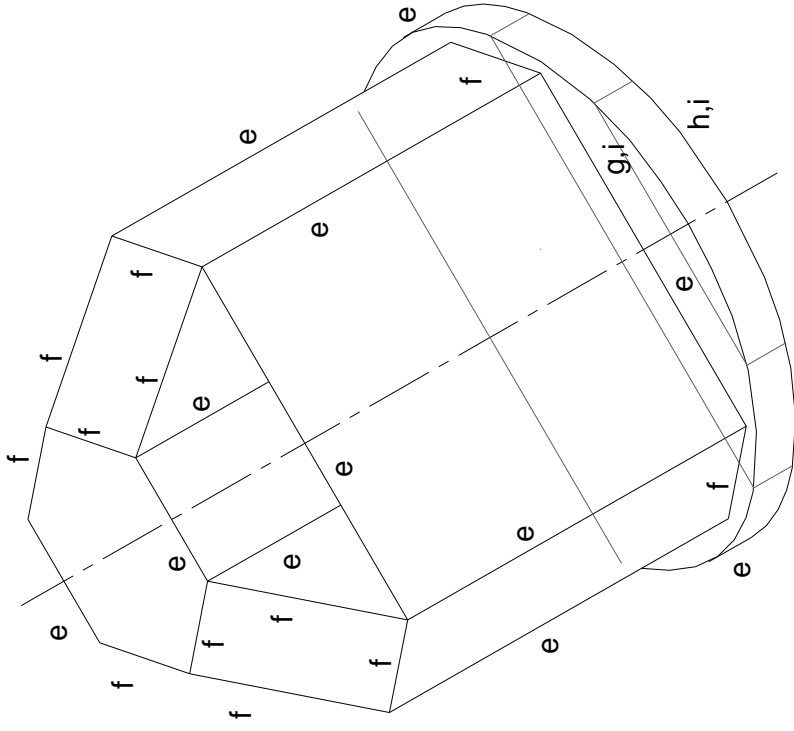
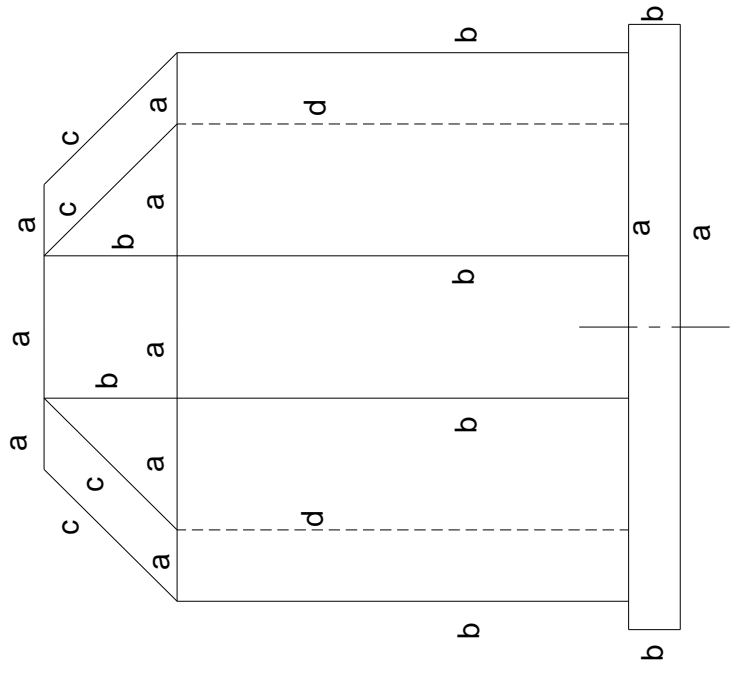
Question 10 Exploded Isometric



Question 10 – Exploded Isometric

	Marks
(a) Exploded view	1
Post	
(b) Construction for curves shown clearly in elevation and end elevation.	1
(c) Construction for rear curve minimum 5 points. Connecting point between arc and line required for both marks. (2 for 1), (5 for 2)	2
(d) Construction for front curve 10 points (3 for 1), (6 for 2), (10 for 3)	3
(e) 2 Fair curves	1
(f) Solid lines 16: 7 vertical, 3 left, 4 right, 2 sloping (4 for 1), (8 for 2), (12 for 3), (16 for 4)	4
Rail	
(g) Solid lines 21: 7 vertical, 6 left, 5 right, 3 sloping (4 for 1), (8 for 2), (12 for 3), (16 for 4), (21 for 5)	5
Post and Rail	
(h) 4 Irregular lines	1
Pin	
(i) Solid lines 9: 3 vertical, 3 left, 3 right (4 for 1), (9 for 2)	2
Total marks	20

Question 11 Auxiliary Plan



Question 11 Auxiliary Plan

Marks

End Elevation

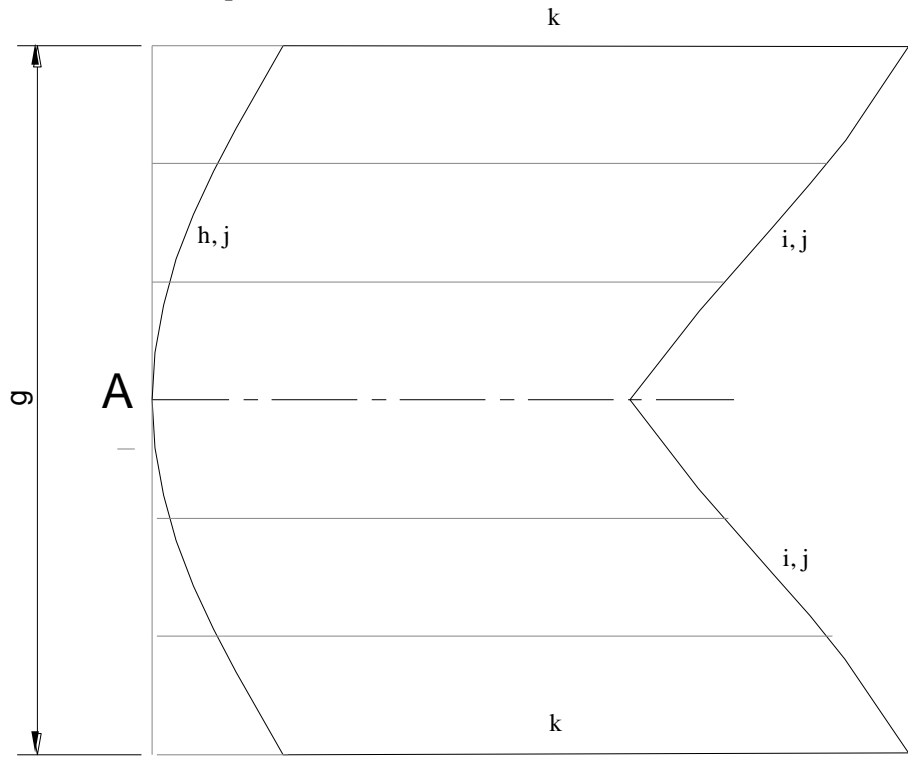
- | | | |
|-----|---|---|
| (a) | Solid lines, horizontal 10
(5 for 1), (10 for 2) | 2 |
| (b) | Solid lines, vertical 8
(4 for 1), (8 for 2) | 2 |
| (c) | Solid lines, sloping 4
(2 for 1), (4 for 2) | 2 |
| (d) | Broken lines, vertical 2
(2 for 1) | 1 |

Auxiliary Plan

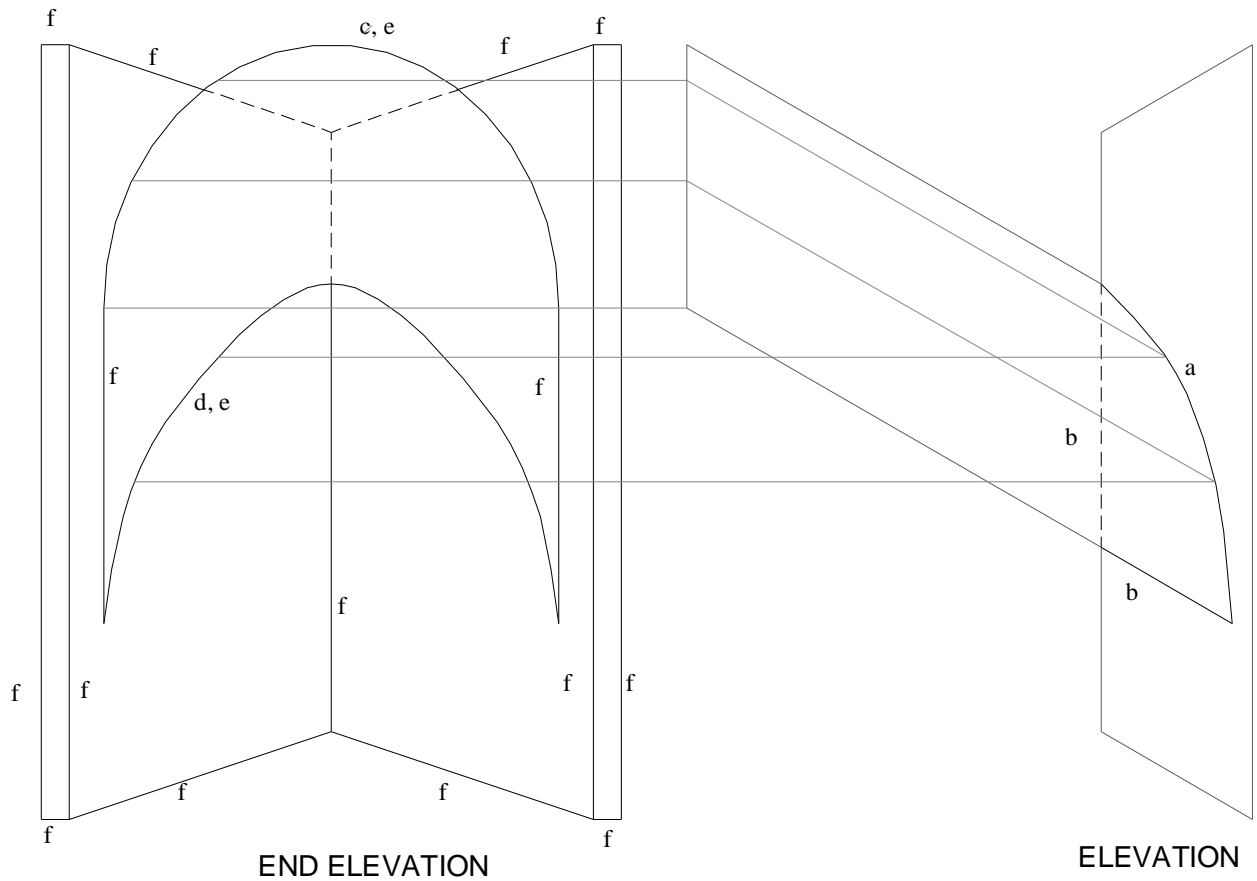
- | | | |
|-----|---|---|
| (e) | Solid lines 12, 4 at 30° and 8 at 60°.
(3 for 1), (6 for 2), (9 for 3), (12 for 4) | 4 |
| (f) | Sloping lines 12
(3 for 1), (6 for 2), (9 for 3), (12 for 4) | 4 |
| (g) | Part ellipse top, 3 critical, 6 intermediate
(3 for 1), (6 for 2), (9 for 3) | 3 |
| (h) | Projection of lower ellipse for 1 mark. | 1 |
| (i) | Fair curves
(2 for 1) | 1 |

Total marks 20

Question 12 Interpenetration & Development



DEVELOPMENT OF CANOPY



Question 12 – Interpenetration & Development

Marks

Elevation

- | | | |
|-----|--|---|
| (a) | Construction for curve, 3 points
(2 for 1), (3 for 2) | 2 |
| (b) | Lines 2, 1 solid, 1 hidden
(2 for 1) | 1 |

End Elevation

- | | | |
|-----|--|---|
| (c) | Construction of top curve, 3 critical, 4 intermediate
(3 for 1), (7 for 2) | 2 |
| (d) | Construction of bottom curve, 3 critical, 4 intermediate
(3 for 1), (7 for 2) | 2 |
| (e) | 2 Fair curves for 1 mark | 1 |
| (f) | Lines 15 (correct line type): vertical 7, horizontal 4, sloping 4
(3 for 1), (6 for 2), (9 for 3), (12 for 4), (15 for 5) | 5 |

Development

- | | | |
|-----|---|---|
| (g) | Correct height (+ or – 3mm) for 1 mark | 1 |
| (h) | Construction of curve, 7 points
(3 for 1), (7 for 2) | 2 |
| (i) | Construction of curve, 7 points
(3 for 1), (7 for 2) | 2 |
| (j) | 2 Fair curves for 1 mark | 1 |
| (k) | Solid lines 2 for 1 mark | 1 |

Total marks 20

Question 12 – Interpenetration & Development

Notes:

- (a) Curve and construction in plan and auxiliary plan must be included for both marks, no curve maximum 1 mark.
- (e,j) Must have a minimum of 3 points for each to award fair curve.
- (f) If canopy is missing from end elevation, lines with hidden components should be marked correct if drawn solid throughout.
- (i) If curve (h) is incorrect, there may be a follow on in the lengths for (i).

[END OF MARKING INSTRUCTIONS]