



2015 Graphic Communication

Higher

Finalised Marking Instructions

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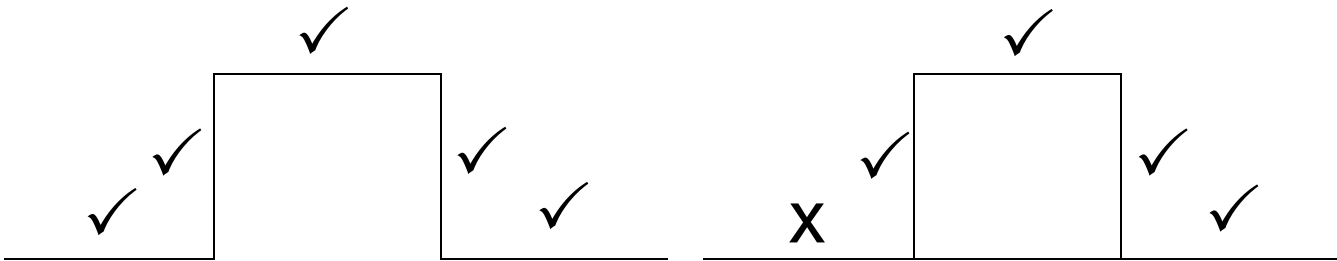
Part One: General Marking Principles for Graphic Communication Higher

This information is provided to help you understand the general principles you must apply when marking candidate responses to questions in this Paper. These principles must be read in conjunction with the specific Marking Instructions for each question.

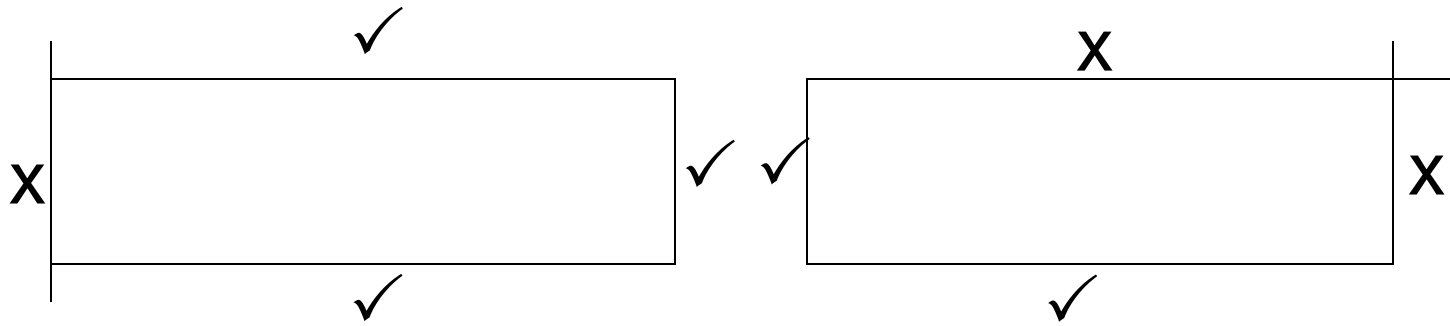
- (a)** Marks for each candidate response must always be assigned in line with these general marking principles and the specific Marking Instructions for the relevant question. If a specific candidate response does not seem to be covered by either the principles or detailed Marking Instructions, and you are uncertain how to assess it, you must seek guidance from your Team Leader/Principal Assessor.
- (b)** Marking should always be positive ie, marks should be awarded for what is correct and not deducted for errors or omissions.

GENERAL MARKING ADVICE: Graphic Communication Higher

The marking schemes are written to assist in determining the “minimal acceptable answer” rather than listing every possible correct and incorrect answer. The following notes are offered to support Markers in making judgements on candidates’ evidence, and apply to marking both end of unit assessments and course assessments.

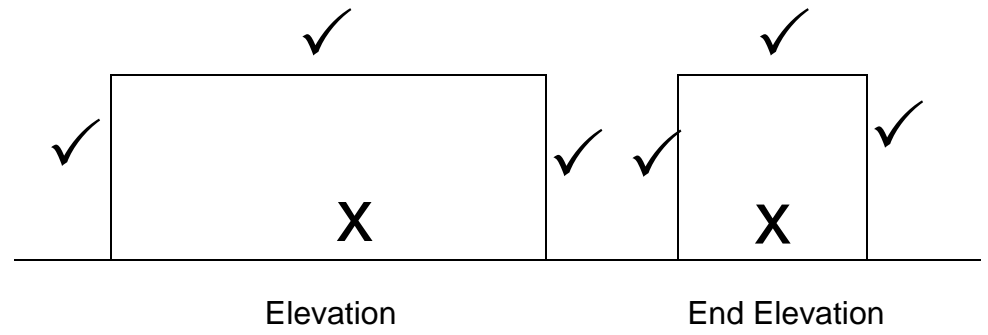
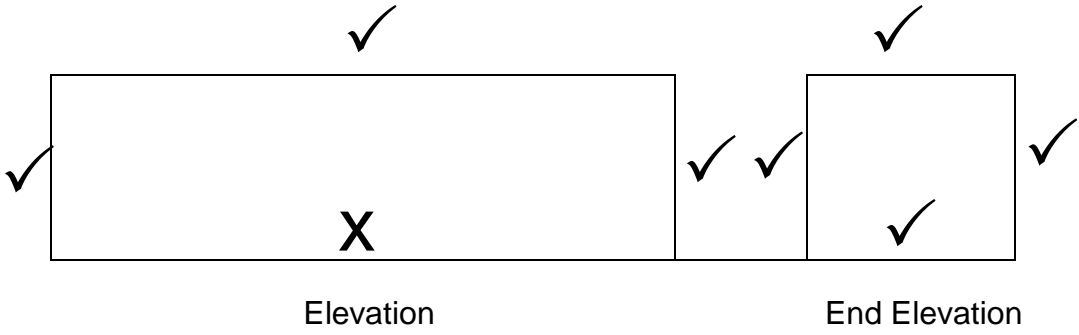


Penalty when a line is continued across a base



Penalty when a line is extended/continued incorrectly

Penalty when a line is incorrectly projected to another view



Elevation

End Elevation

Elevation

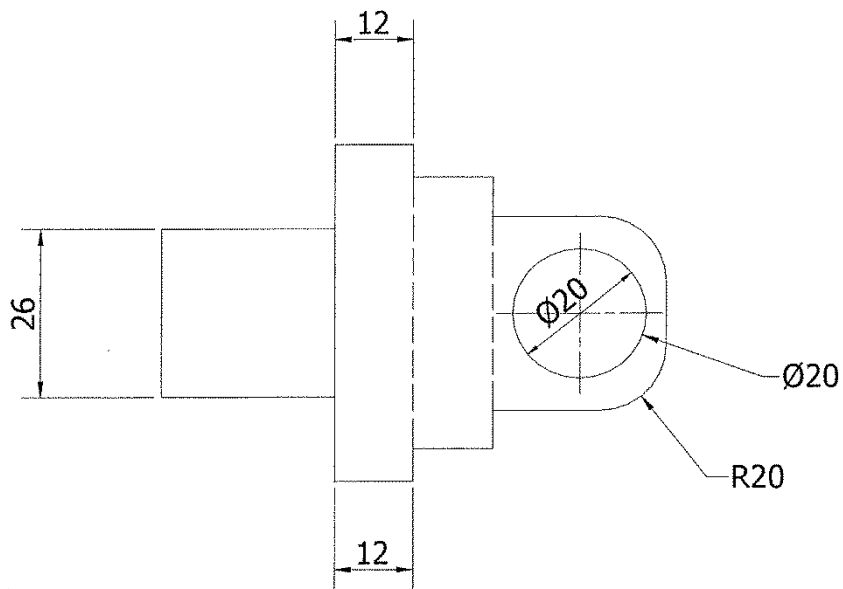
End Elevation

Part Two: Marking Instructions for each Question

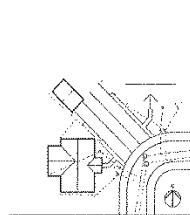
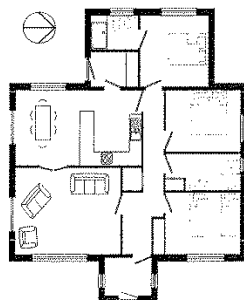
Question			Expected Answer/s	Max Mark	Additional Guidance
1			CAD command Mirror Rectangle Array (Box) Hatch Chamfer Rectangle Trim or Break Fillet 1 mark for each answer	6	
			Total marks	(6)	

Question			Expected Answer/s	Max Mark	Additional Guidance
2	a		Space between columns	1	
	b		A line inserted between columns of text	1	
	c		Each line of text extends to the width of the column	1	
	d		The descriptive text accompanying an illustration or graphic	1	
	e		A printed page number	1	
			Total marks	(5)	

Question		Expected Answer/s	Max Mark	Additional Guidance
3		All leader lines correct position and not touching/arrow heads touching.	1	
		All dimension lines correct position.	1	
		All text correctly positioned.	1	
		Diameter and radius symbols correctly used.	1	
Total marks			(4)	



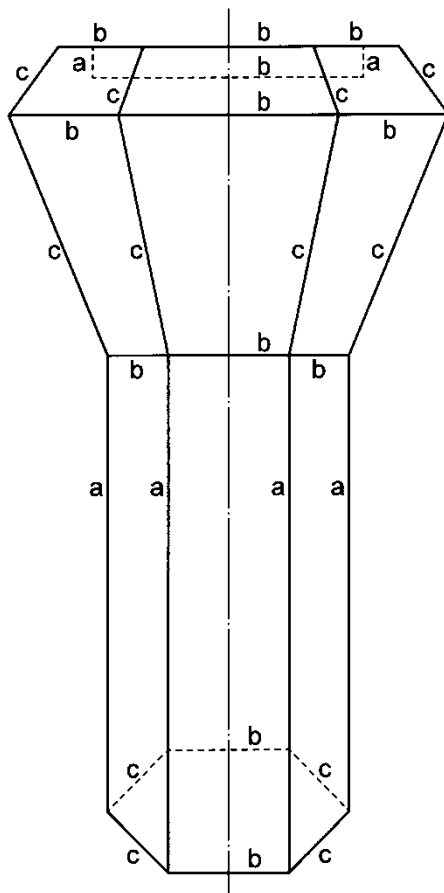
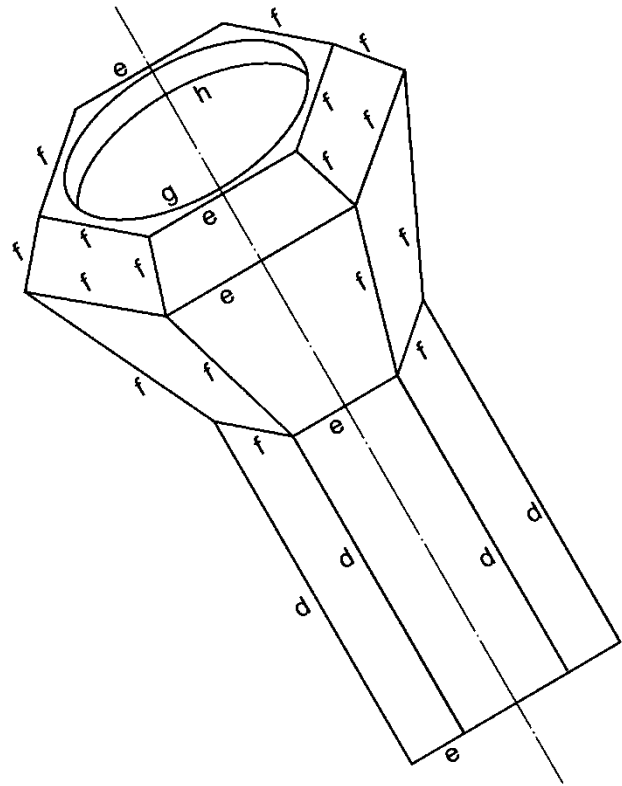
Question		Expected Answer/s	Max Mark	Additional Guidance
4	a	<p>Plan A</p> <p>Type Floor</p> <p>Scale 1:50 or 1:100</p> <p>Plan B</p> <p>Type Block, Location</p> <p>Scale 1:1250 or 1:2500</p> <p>4 correct for 2 marks 2 correct for 1 mark</p>	2	
	b	North symbol completed correctly	1	
	c	Correct building shaded	1	
	d	<p>Different elements of a drawing can be put on a different layer, these layers can be switched on and off to make the drawing: easier to work on; easier to understand; or so that different elements can be printed.</p> <p>On Plan A above the furniture could be put on one layer, the window and door on another and so on so that a plan of the room layout could be viewed by turning off the other layers.</p> <p>Or similar answer</p> <p>1 mark for explaining layers 1 mark for linking explanation to drawing</p>	2	
Total marks			(6)	



Question		Expected Answer(s)	Max Mark	Additional Guidance
5		<p><i>Preliminary</i></p> <p>Purpose: To convey ideas to clients etc quickly and clearly, to assist in the analysing and planning of the design process or similar. (1)</p> <p>Example: Dimensional sketches (2 or 2½D), investigative sketches, planning charts, graphs, thumbnails, market research. Any other reasonable answer. (1)</p> <p><i>Production</i></p> <p>Purpose: To provide precise information, to allow objects to be manufactured accurately. (1)</p> <p>Example: Orthographic, isometric, oblique, sectional, exploded, assembly, block, site, floor, flow and gantt chart. Any other reasonable answer. (1)</p> <p><i>Promotional</i></p> <p>Purpose: To bring peoples' attention to or highlight a product or special feature of a product, to inform public about a product, to sell, to advertise or similar. (1)</p> <p>Example: Advert, display, charts, models, presentations, brochures (or similar answers). Any other reasonable answer. (1)</p>	6	
		Total marks	(6)	

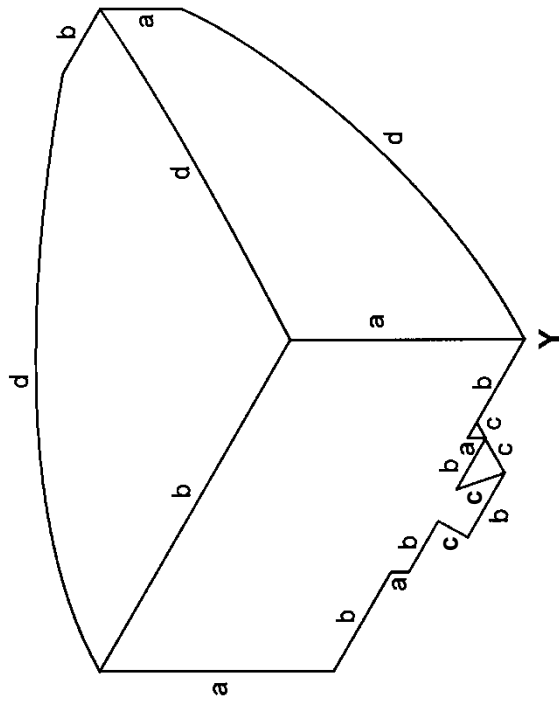
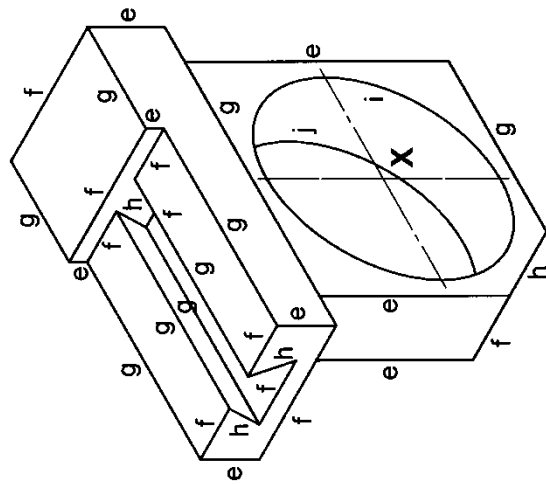
Question			Expected Answer/s	Max Mark	Additional Guidance
6	a		A gradient is a colour fill that gradually blends from one colour to another where as a tonal scale is based on one colour gradually fades from its lightest to its darkest.	1	
	b		A tint is where white has been added to a colour to make it lighter where as a shade is where black has been added to a colour to make it darker.	1	
			Total marks	2	

Question		Expected Answer(s)	Max Mark	Additional Guidance
7	a	Name Title of drawing Scale Date Tolerances Title Drawing number Sheet number Material Surface finish 1 mark for any acceptable answer for each item.	6	Accept : Type of drawing
	b	A Dimension, projection, leader lines, hatching, outline of revolved sections, short centre lines and imaginary intersections B Continuous thick C Dashed thin D Centre line, line of symmetry E Chain thin, thick at ends	5	Continuous extra-wide Dashed narrow
		Total marks	(11)	



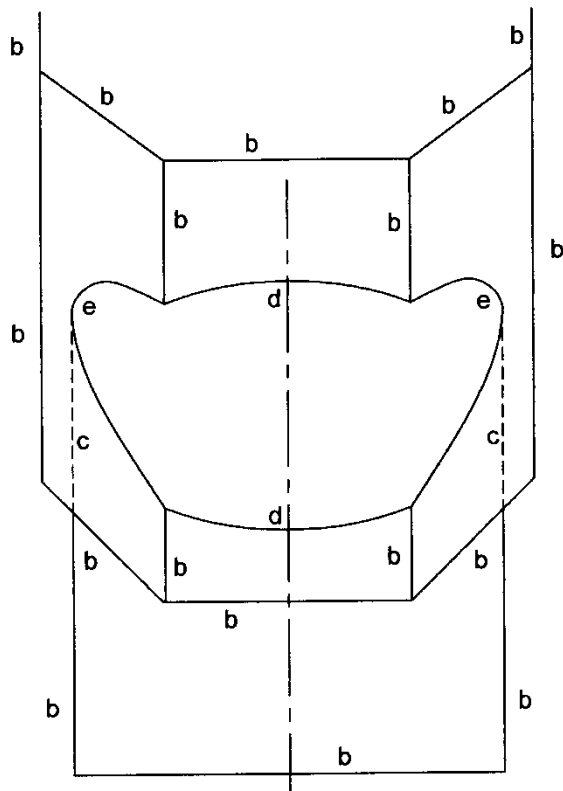
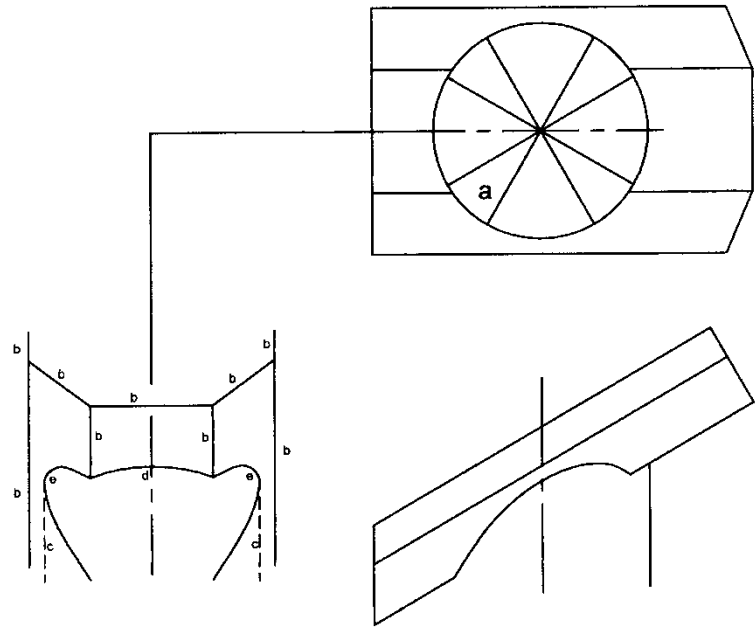
Question 8 – Torch

Question		Expected Answer/s	Max Mark	Additional Guidance
End Elevation				
	a	Vertical lines, full and hidden 6 (3 for 1), (6 for 2)	2	
	b	Horizontal lines, full 10 and hidden 2 (6 for 1), (12 for 2)	2	
	c	Sloping lines, full and hidden 12 (2 for 1), (4 for 2), (8 for 3), (12 for 4)	4	
Auxiliary Plan				
	d	Full lines 60° to the left 4 (2 for 1), (4 for 2)	2	
	e	Full lines 30° to the right 5 (2 for 1), (5 for 2)	2	
	f	Sloping lines, full 16 (2 for 1), (4 for 2), (8 for 3), (12 for 4), (16 for 5)	5	
	g	Construction of ellipse 4 critical 8 intermediate (4 for 1), (12 for 2)	2	
	h	Construction of part ellipse	1	
		Total marks	20	



Question 9 – Bicycle Lamp

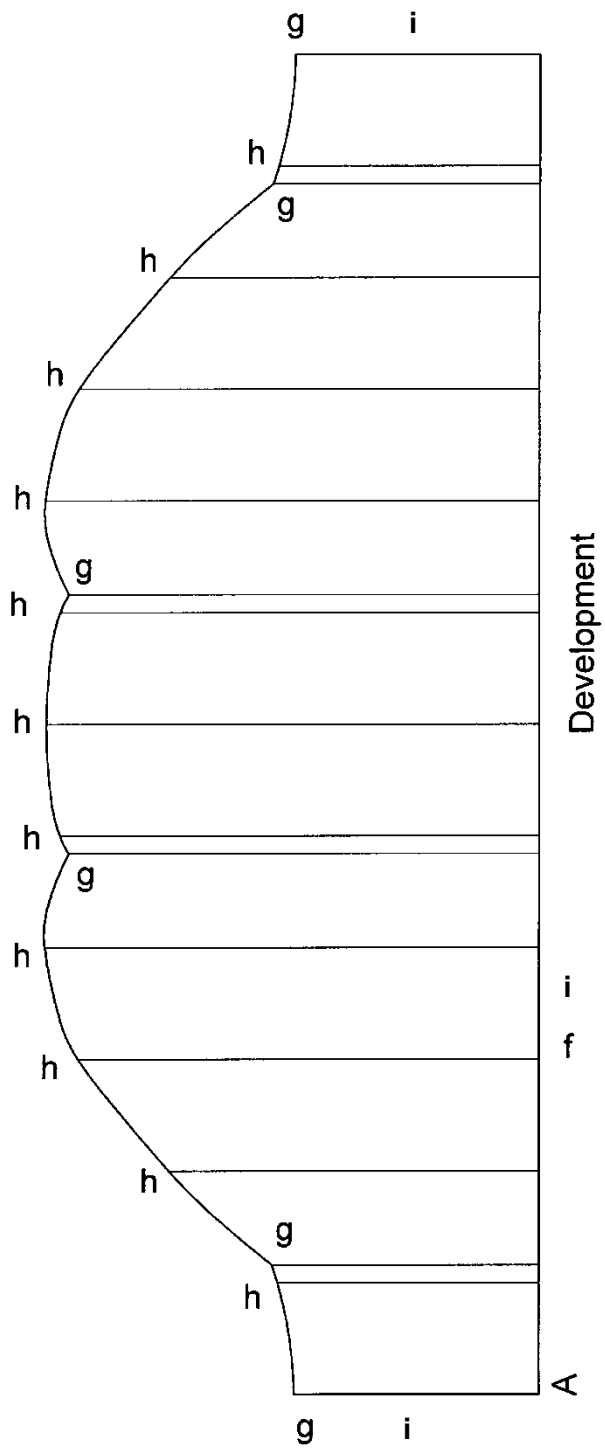
Question		Expected Answer/s	Max Mark	Additional Guidance
Lamp				
	a	Vertical lines 5 (5 for 1)	1	
	b	Lines to the left 7 (3 for 1), (7 for 2)	2	
	c	Lines to the right 2, Sloping lines 2 (4 for 1)	1	
	d	i Construction of first curve 2 critical, 3 intermediate (2 for 1), (5 for 2) ii Construction of curves 2 and 3 Minimum 2 points on each for 1 mark each	4	
Lamp Holder				
	e	Vertical lines 8 (3 for 1), (8 for 2)	2	
	f	Lines to the left 10 (3 for 1), (6 for 2), (10 for 3)	3	
	g	Lines to the right 9 (4 for 1), (9 for 2)	2	
	h	Sloping lines 4 (4 for 1)	1	
	i	Ellipse construction 4 critical, 8 intermediate (4 for 1), (12 for 2)	2	
	j	Part ellipse construction Minimum 4 points for 1 mark	1	
	k	Fair curve at d and i and j (Any 3 from 5 for 1)	1	
		Total marks	20	



END ELEVATION

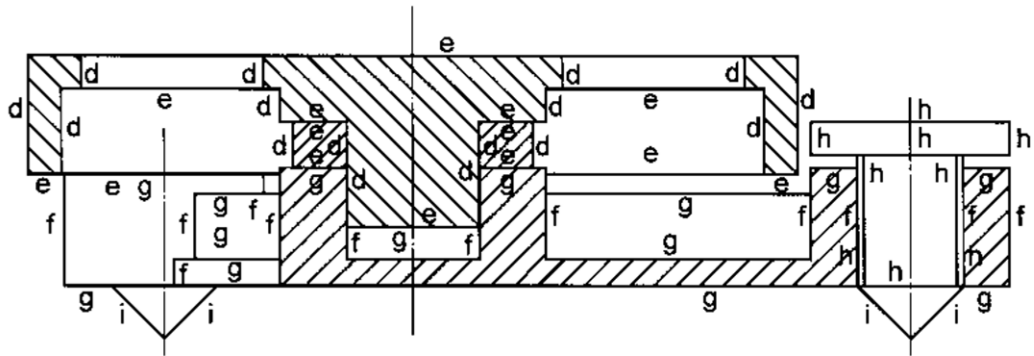
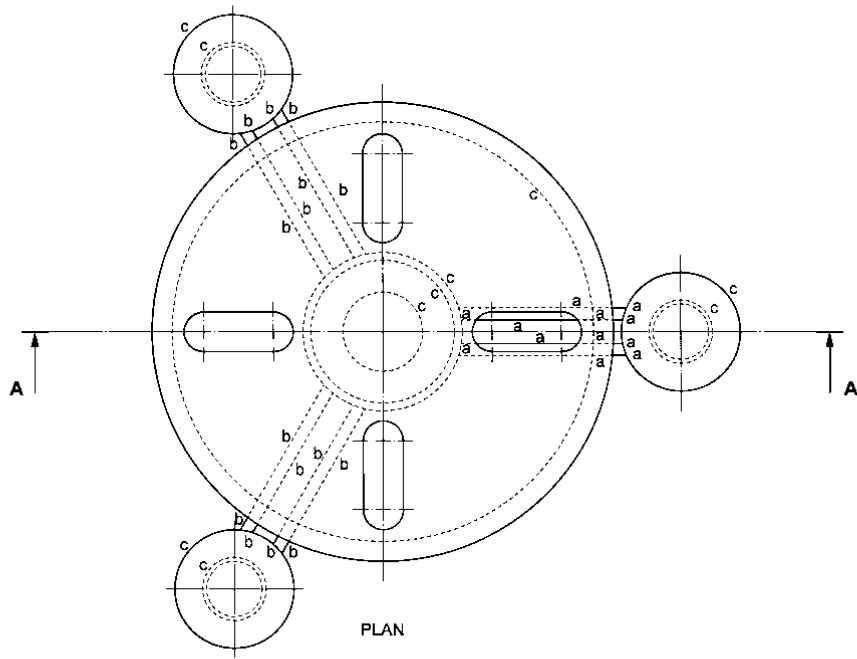
Question 10 – Intersection

Question		Expected Answer/s	Max Mark	Additional Guidance
End Elevation				
	a	Construction for curve, on plan and elevation	1	
End Elevation				
	b	Solid lines 10 vertical, 3 horizontal and 4 sloping 17 (5 for 1), (9 for 2), (13 for 3), (17 for 4)	4	
	c	Hidden detail lines 2 (2 for 1)	1	
	d	Construction of top and bottom curve 10 6 critical, 4 intermediate (4 for 1), (6 for 2), (10 for 3)	3	
	e	Construction of sloping curves 8 critical, 2 intermediate (4 for 1), (8 for 2), (10 for 3)	3	



Question 10 (cont) - Intersection

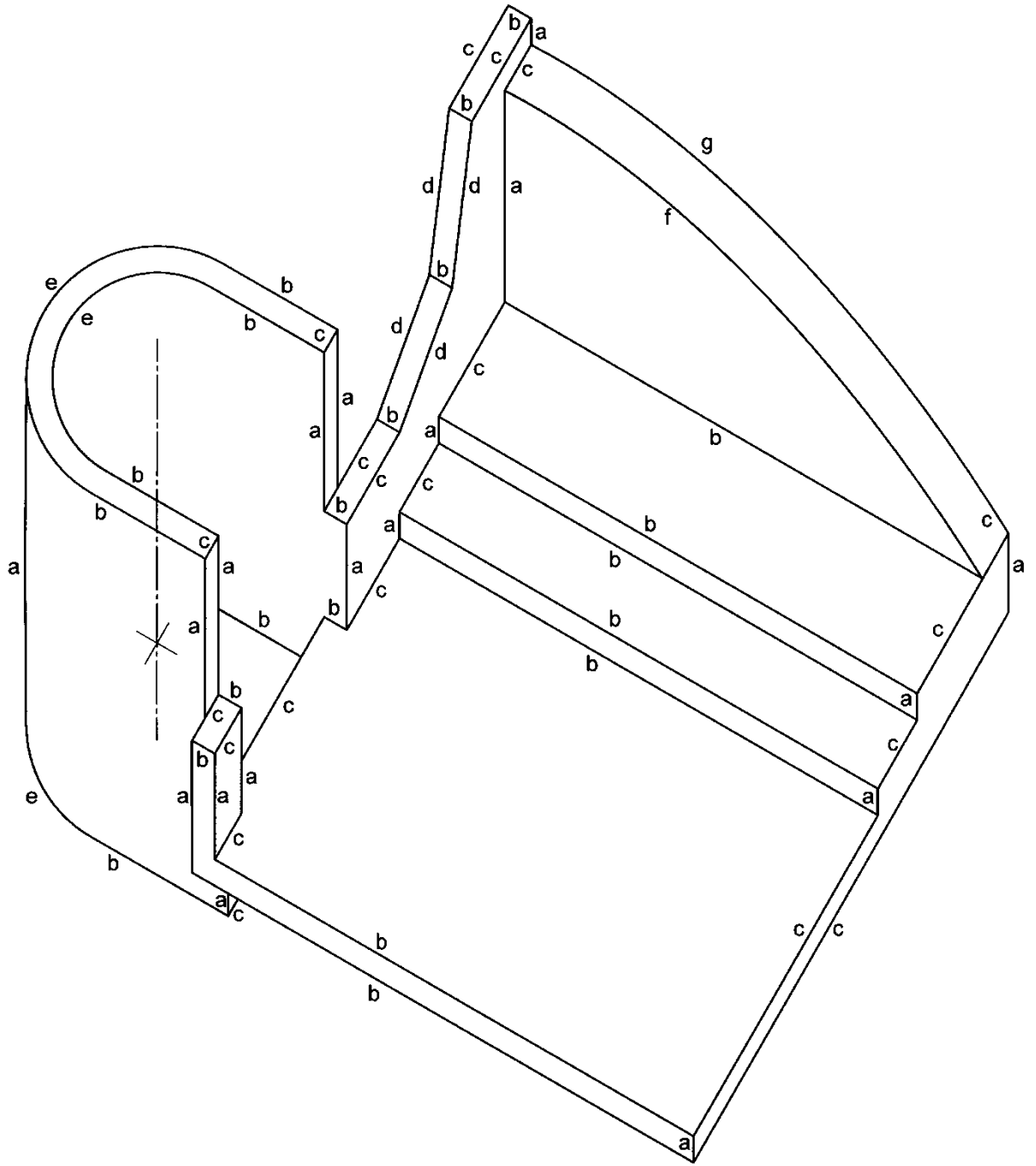
Question		Expected Answer/s	Max Mark	Additional Guidance
Development				
	f	Correct length ($\pm 3\text{mm}$) for 1 mark	1	
	g	Curves, critical heights 6 (3 for 1), (6 for 2)	2	
	h	Curves 11 intermediate points (4 for 1), (7 for 2), (11 for 3)	3	
	i	Outlined correctly, 3 lines for 1 mark	1	
	j	Fair curve 9 at d, e and h (any 4 for 1)	1	
		Total marks	20	



SECTIONAL ELEVATION A-A

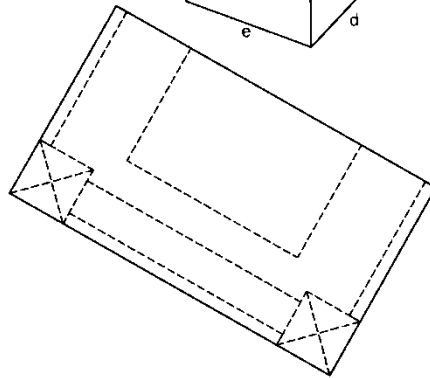
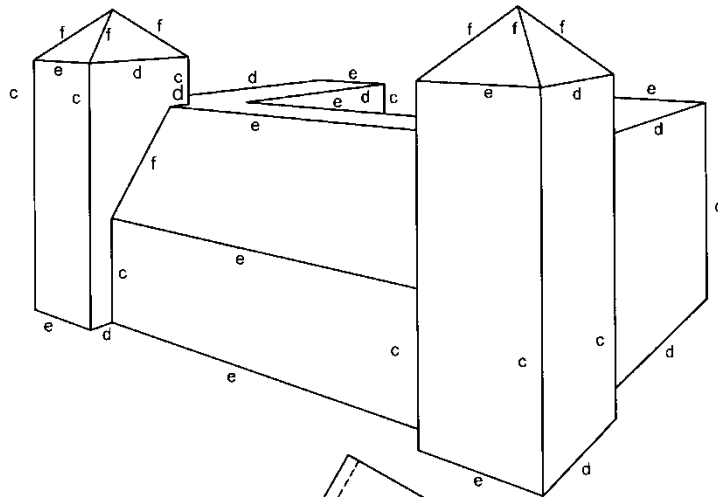
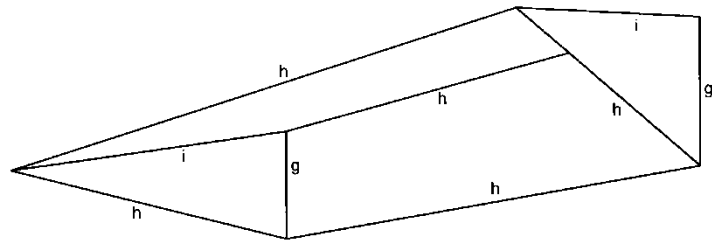
Question 11 - Turntable

Question		Expected Answer/s	Max Mark	Additional Guidance
Plan				
	a	Horizontal lines, full and hidden 12 (6 full and 6 hidden) (6 for 1), (12 for 2)	2	
	b	Sloping lines full and hidden 16 (8 full and 8 hidden) (4 for 1), (10 for 2), (16 for 3)	3	
	c	Circles, full and hidden 13 (3 full and 10 hidden) (6 for 1), (13 for 2)	2	
Sectional Elevation Deck and washer				
	d	Vertical lines 16 (5 for 1), (10 for 2), (16 for 3)	3	
	e	Horizontal lines 13 (6 for 1), (13 for 2)	2	
Base				
	f	Vertical lines 12 (6 for 1), (12 for 2)	2	
	g	Horizontal lines 14 (6 for 1), (14 for 2)	2	
Adjustment Screw				
	h	Horizontal and vertical lines 9 (9 for 1)	1	
	i	Sloping lines 4 (4 for 1)	1	
	j	Hatching 7 areas hatched to BS (opposite direction no herring bone) (3 for 1), (7 for 2)	2	
		Total marks	20	



Question 12 – Planometric

Question		Expected Answer/s	Max Mark	Additional Guidance
Planometric				
	a	Vertical lines 18 (5 for 1), (10 for 2), (15 for 3), (18 for 4)	4	
	b	30° lines 21 (5 for 1), (10 for 2), (15 for 3), (21 for 4)	4	
	c	60° lines 20 (7 for 1), (11 for 2), (15 for 3), (20 for 4)	4	
	d	Sloping lines 4 (2 for 1), (4 for 2)	2	
	e	Part circles top inside and outside, bottom 3 (2 for 1), (3 for 2)	2	
	f	Construction for curve on back wall, 5 points (3 for 1), (5 for 2)	2	
	g	Projection of second curve. Minimum 3 points	1	
	h	Fair curve at f and g (2 for 1)	1	
		Total marks	20	



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Question 13 – Information Kiosk

Question		Expected Answer/s	Max Mark	Additional Guidance
Measured Perspective				
	a	VP1 and VP2 vanishing points to the left and right	1	
	b	Height lines, any one correctly positioned and used	1	
Kiosk				
	c	Vertical lines 9 (2 for 1), (4 for 2), (6 for 3), (9 for 4)	4	
	d	Lines to the right VP 9 (2 for 1), (4 for 2), (6 for 3), (9 for 4)	4	
	e	Lines to the left VP 10 (2 for 1), (4 for 2), (6 for 3), (10 for 4)	4	
	f	Sloping lines 7 (3 for 1), (7 for 2)	2	
Canopy				
	g	Vertical lines 2 (2 for 1)	1	
	h	Lines to the left and right VP 5 (2 for 1), (5 for 2)	2	
	i	Sloping lines 2 (2 for 1)	1	
		Total marks	20	

[END OF MARKING INSTRUCTIONS]