



# **2011 Graphic Communication**

## **Standard Grade – Credit**

### **Finalised Marking Instructions**

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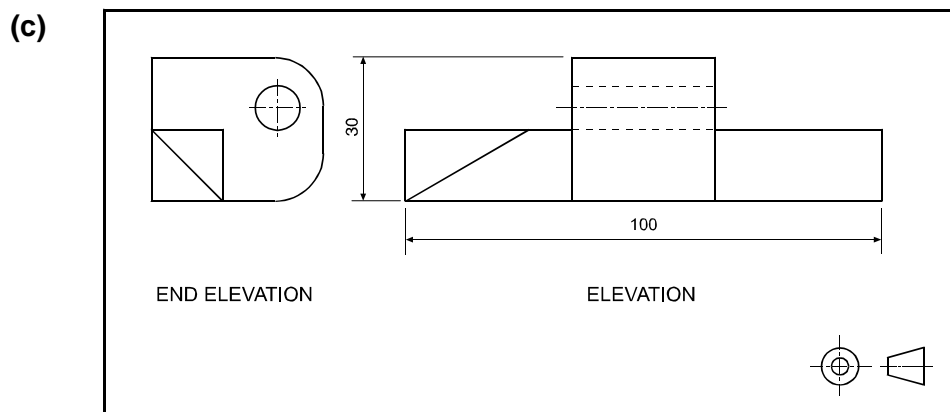
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## 2011 Graphic Communication SG Credit Marking Instructions

- |              |   |   |      |
|--------------|---|---|------|
| <b>1 (a)</b> | 1 | Ability to create a library of commonly used parts/ease of storage/greater accuracy/layer a drawing |      |
|              | 2 | Easier to edit drawings/creation of new design from existing/standardisation                        |      |
|              | 3 | Easier to send drawing to other places (e-mail)   | KI 3 |
| <b>(b)</b>   | 1 | Possibility of data loss. Need to train staff.  |      |
|              | 2 | Possibility of system failure/crash Data security/hacking/viruses etc                               | KI 2 |
| <b>(c)</b>   | 1 | Drum plotter  |      |
|              | 2 | Flatbed plotter   | KI 2 |
| <b>(d)</b>   | 1 | Scanner (any kind – hand held, flatbed etc)   |      |
|              | 2 | Digitiser   | KI 2 |

**TOTAL KI 9**

- |              |           |                                   |      |
|--------------|-----------|-----------------------------------|------|
| <b>2 (a)</b> | 1         | 2                                 |      |
|              | 2         | 6                                 | KI 2 |
| <b>(b)</b>   | Drawing X | Orthographic 3rd angle projection | KI 1 |



**DRAWING X**

KI 2

**TOTAL KI 5**

Height – can accept on end elevation and any height ie '15'.

3	(a)	Section AA	6		
		Section BB	3		
		Section CC	11		
		Section DD	9		KI 4
	(b)	1	The size of the object being drawn/the amount of detail needed in the drawing		
		2	The size of the paper used to produce the drawing		
					KI 2
					<b>TOTAL KI 6</b>
4	1	Zoom/scale			
	2	Fillet/trim round			
	3	Delete			
	4	Hatch/pattern fill			
	5	Chamfer/trim bevel			
	6	Array/box array/rectangle array			
	7	Circle/point circle			
	8	Ellipse			
	9	Trim/break			
	10	Text			
	11	Copy			
	12	Mirror			
					KI 12
					<b>TOTAL KI 12</b>
5	(a)	(i)	DTP/desktop publish/ing/er		
		(ii)	Illustration/paint – 3D modelling		
		(iii)	CAD – written in full ie computer aided drawing/drafting		
					KI 3
(b)	Device 1	Laser printer			
	Device 2	Ink-jet printer			
					KI 2
(c)	(i)	View X	Wire frame		
	(ii)	1	Solid		
					KI 1
					</

## Question 6

### Plan

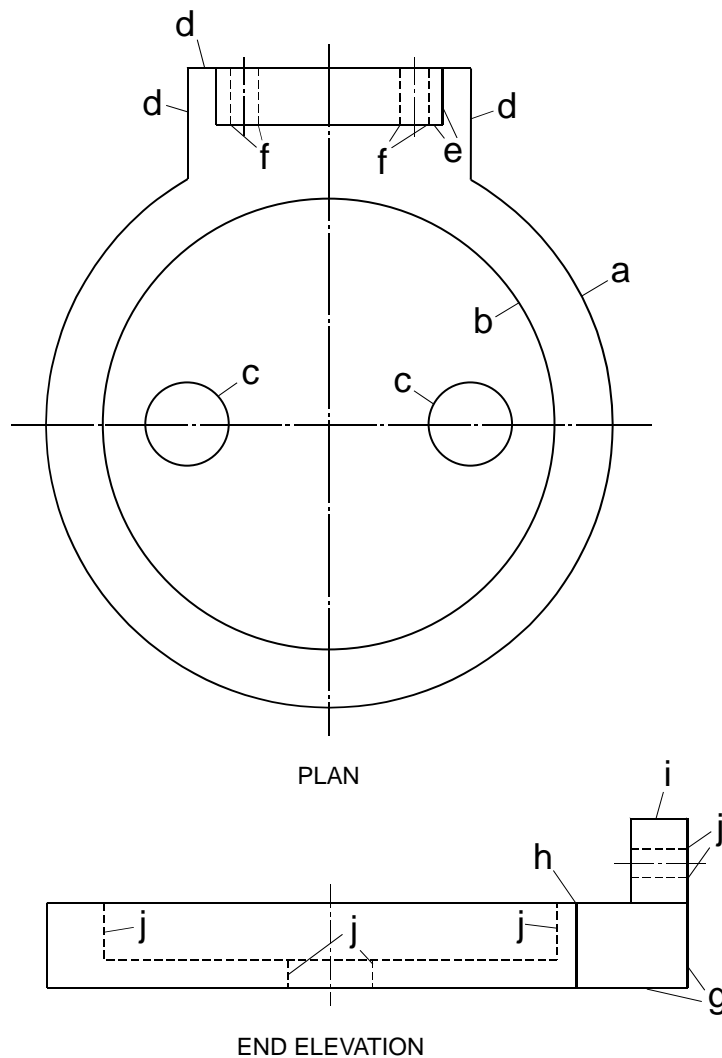
(a)	Outer circle	1
(b)	Inner circle	1
(c)	2 holes (correct size and position)	1
(d)	Back (3 lines)	1
(e)	Rectangle	1
(f)	Holes hidden detail (both)	1

**Total DA 6**

### End Elevation

(g)	Length and breadth	1
(h)	Line	1
(i)	Rectangle	1
(j)	Hidden detail	2
(7 from 7 for 2; 5 from 7 for 1)		

**Total DA 5**



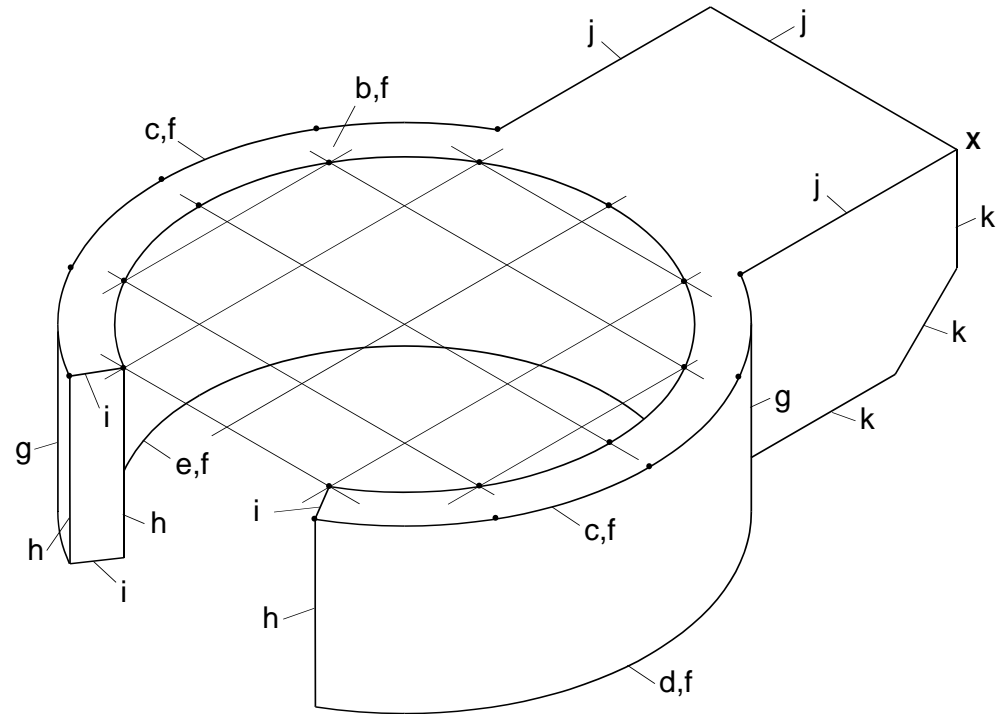
No mark for projection so can accept other positions

### Question 7

#### Isometric

- |     |  |   |
|-----|--|---|
| (a) | Divide circle on plan  | 1 |
| (b) | Establish points for inner circle<br>(11 points for 3; 8 for 2, 4 for 1) | 3 |
| (c) | Establish points for outer circle<br>(10 points for 3; 7 for 2, 3 for 1) | 3 |
| (d) | Part circle (construction evident)                                       | 1 |
| (e) | Part circle (construction evident)                                       | 1 |
| (f) | Good freehand curves<br>(5 for 2 marks; 3 for 1)                         | 2 |
| (g) | Tangent lines (both)   | 1 |
| (h) | 3 vertical lines   | 1 |
| (i) | 3 lines  | 1 |
| (j) | Top of block (3 lines)   | 1 |
| (k) | Side of block (3 lines)  | 1 |

**Total DA 16**

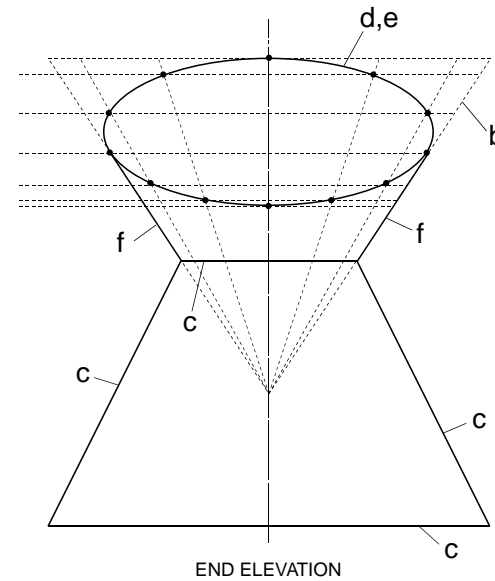


### Question 8 (a)

#### End Elevation

- |     |  |   |
|-----|--|---|
| (a) | Divide plan & project to elevation             | 1 |
| (b) | Generators on end elevation                    | 1 |
| (c) | Outline of bottom cone (4 lines)               | 1 |
| (d) | 12 points on top cone<br>(8 points for 1 mark) | 2 |
| (e) | Good freehand curve                            | 1 |
| (f) | Outside edges                                  | 1 |

**Total DA 7**

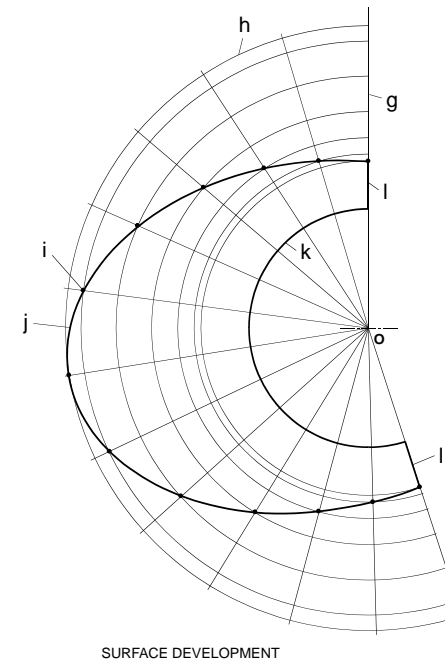


### Question 8 (b)

#### Surface Development

- |     |   |   |
|-----|---|---|
| (g) | True length used to draw arc            | 1 |
| (h) | Arc divided into 12                     | 1 |
| (i) | Find 12 points<br>(8 points for 1 mark) | 2 |
| (j) | Good freehand curve                     | 1 |
| (k) | Semi circle                             | 1 |
| (l) | Edges                                   | 1 |

**Total DA 7**

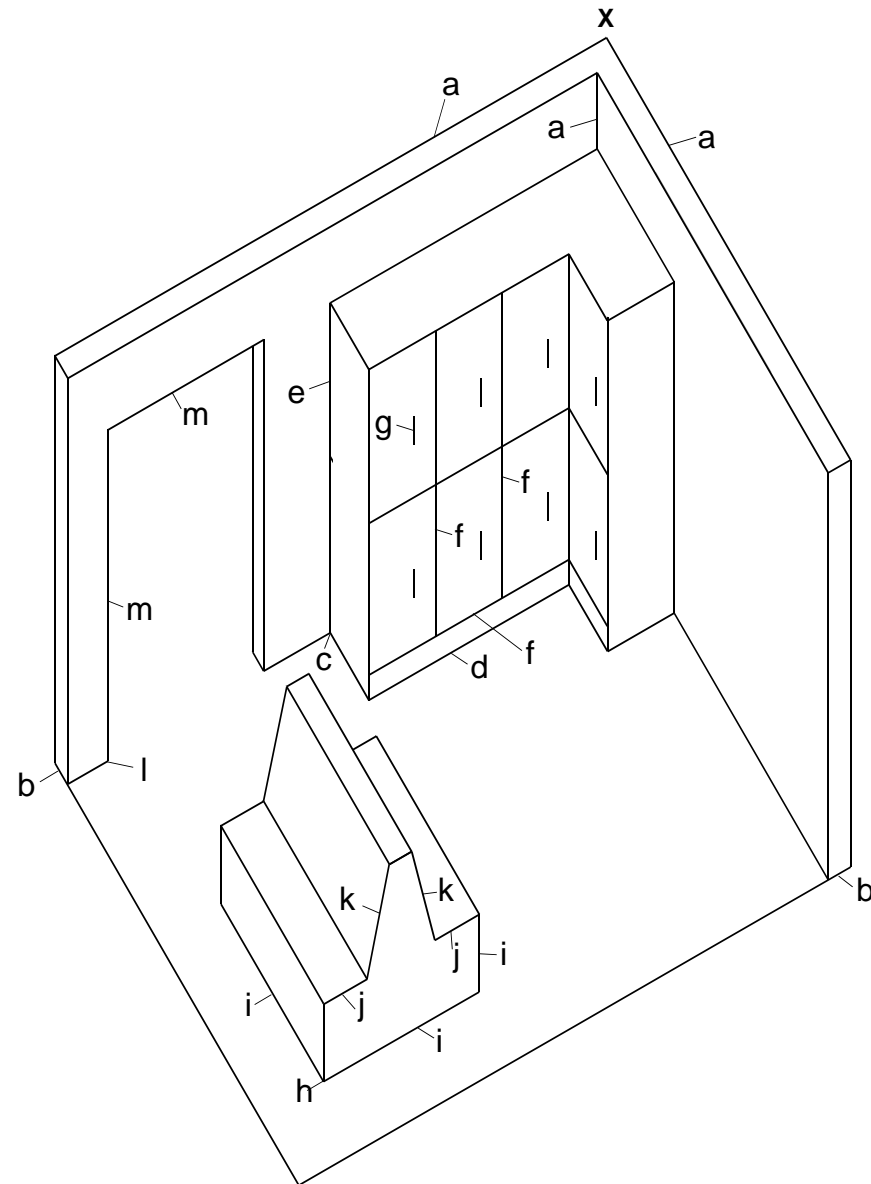


## Question 9

### Planometric

(a)	Length, breadth and height walls (all)	1
(b)	Wall thickness (both)	1
(c)	Position of lockers (from any corner)	1
(d)	Lockers drawn correct size on floor	1
(e)	Height of lockers	1
(f)	Plinth and doors shown	1
(g)	Handles shown	1
(h)	Position of bench	1
(i)	Length, breadth and height	1
(j)	Step in 20mm	1
(k)	Back rest	1
(l)	Door position	1
(m)	Door length and height and depth	1

**TOTAL DA 13**

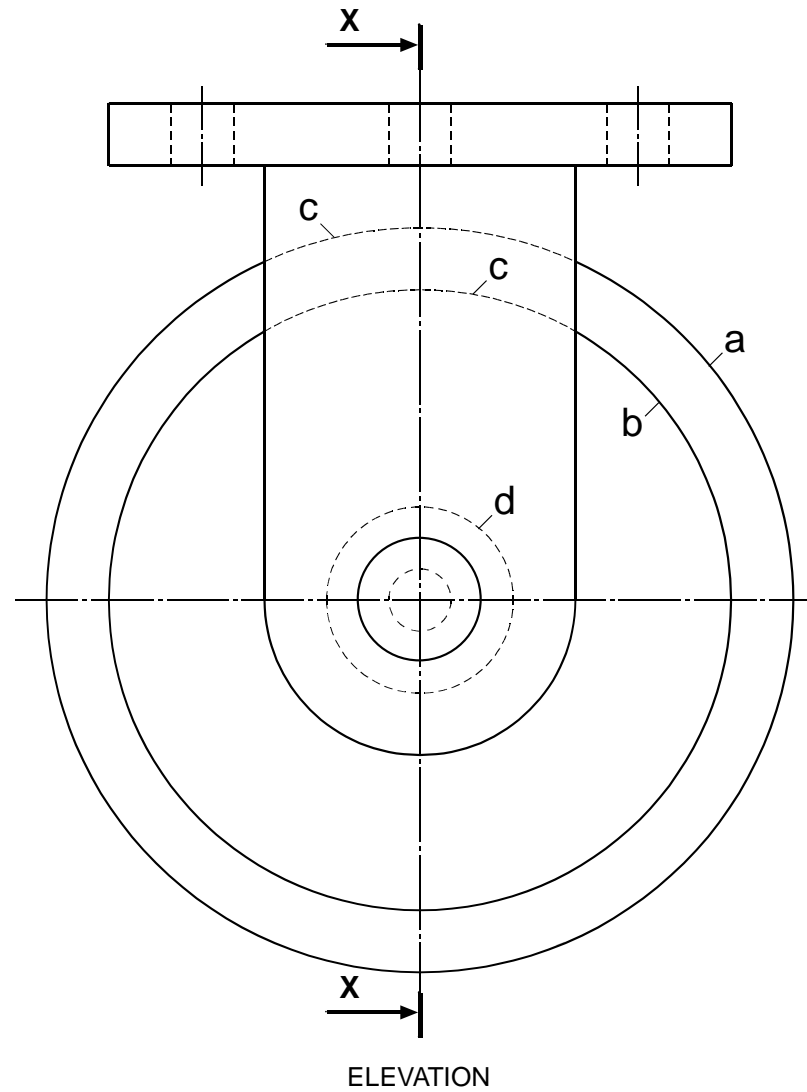


**Question 10 (a)**

**Elevation**

- |     |                           |   |
|-----|---------------------------|---|
| (a) | Circle diameter 120       | 1 |
| (b) | Circle diameter 100       | 1 |
| (c) | Part circles (hidden)     | 1 |
| (d) | Hidden circle diameter 30 | 1 |

**TOTAL DA 4**



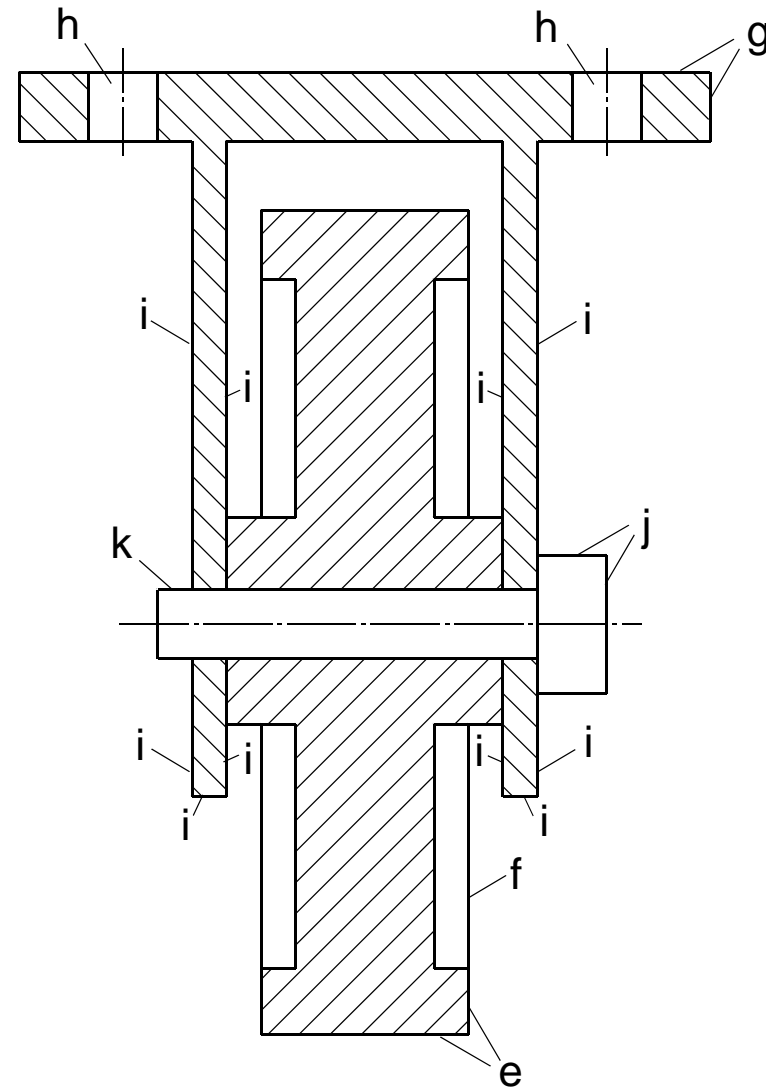


### Question 10 (b)

#### Sectional End Elevation

(e)	Height and breadth of wheel	1
(f)	Recess in wheel (4 for 2, 2 for 1)	2
(g)	Top plate (Breadth and height)	1
(h)	Holes in top plate; both (outline; size + position)	1
(i)	Sides of cradle; 10 lines (10 for 2, 6 for 1)	2
(j)	Head of pin	1
(k)	Body of pin	1
(l)	Hatching 7 areas (6-7 for 2; 4-5 for 1)	2
(m)	Hatching correct BS convention (45° and opposing directions)	1

**Total DA 12**



SECTIONAL END ELEVATION ON X-X

[END OF MARKING INSTRUCTIONS]