



2012 Graphic Communication

Standard Grade – Credit

Finalised Marking Instructions

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**2012 Graphic Communication SG Credit
Marking Instructions**

1. (a) 1 Library of commonly used parts can be created/lead time is reduced.
- 2 Standardisation of designs/easier to edit work/easier to create new design from existing designs.
- 3 Storage and retrieval of designs is easier/easier and quicker to transfer designs between offices/easier to work on collaborative designs in different locations. KI 3
- (b) 1 Possibility of viruses causing work to be lost or corrupted/possibility of system being hacked/training time/training cost/upgrade software/hardware/compatibility.
- 2 Possibility of data loss due to system crash/data security can be a problem.
- 3 Constant need to update software or hardware. KI 3
- (c) Device 1 Digitiser } Digital camera
Device 2 Scanner } not handheld/flatbed scanner as a combination KI 2
- (d) In case of data loss, so that all work is not lost. KI 1
- (e) Pen moves in one axis, paper moves in other axis. KI 1

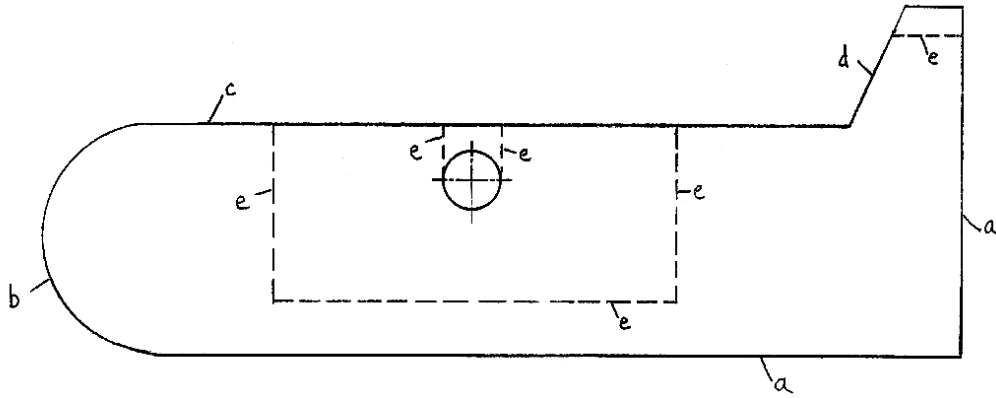
TOTAL KI 10

2. (a) Answer 1 3
- Answer 2 6 KI 2
- (b) Isometric KI 1
- (c) Orthographic KI 1
- (d) To show that the drawing is in third angle projection. KI 1
- (e) Section AA 9
- Section BB 12 KI 2
- (f) Answer 1 The size of the object being drawn
- Answer 2 The size of the paper being used/the amount of detail required KI 2
- (g) The drawing is full size/true size. KI 1

TOTAL KI 10

3. (a) You watch animation, you interact with simulation ie you affect the outcome of the simulation. KI 1
- (b) 1 It is safer than driving a real racing car, ie different dangerous situations can be simulated safely.
- 2 It is cheaper than driving a real car. KI 2
- (c) Aerodynamics of the car can be tested/how the car would behave in a crash situation can be tested. KI 1
- (d) To give a realistic impression of what the interior or exterior of the building would look like/to help with the promotion/sale of the building. KI 1
- (e) Industry Film making
- Example Cartoon production or creating special effects that could not otherwise be created
- Give marks for any valid answer with a correct example. Do not give a mark for the industry unless there is a valid example. KI 2
- (f) Advantage Easier to change features of the design/easier to transport/easier to store
- Disadvantage Cannot be touched/easier to steal designs/need for a computer with the correct software in order to view. KI 2
- (g) Model 1 Wire Frame
- Model 2 Solid/Surface or Surface Rendered KI 2
- TOTAL KI 11**
4. (a) (i) DTP
- (ii) CAD/2D CAD/3D CAD/Modelling
- (iii) Illustration/Paint/Modelling KI 3
- (b) Device 1 Inkjet
- Device 2 Laser KI 2
- (c) Different software applications use the same operating system/data can be imported or exported between the different software applications. KI 1
- (d) Layering Different aspects of a drawing can be drawn separately within the drawing allowing them to be viewed separately or together.
- Example Any valid answer ie building drawing with the walls, foundations, electrics, plumbing etc drawn on separate layers. KI 2
- (e) Advantage Commonly used parts need not be redrawn on each new design/speeds up production of new designs. KI 1
- TOTAL KI 9**

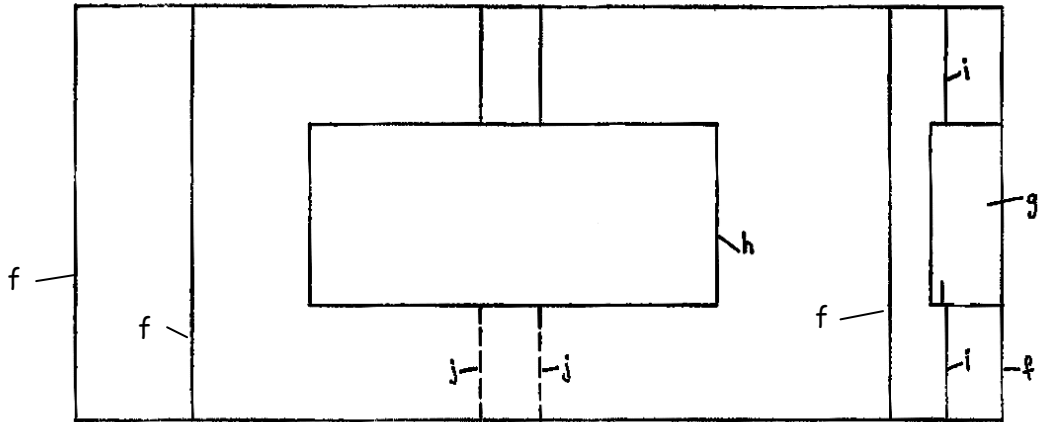
Question 5



Elevation

- (a) base length & height (140 x 60) 1
- (b) semi circle 1
- (c) line shown (120) 1
- (d) sloping line, correct position 1
- (e) hidden detail (5 or 6 lines for 1 mark) 1

DA 5

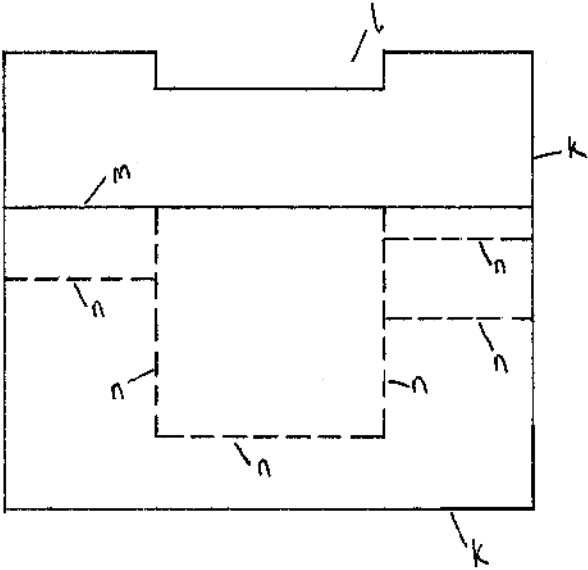


Plan

- (f) length & breadth (3 from 4) 70 mm (lose f if rotated) 1
- (g) sloping section, position & size 1
- (h) insert, position & size (full) 1
- (i) lines shown (both) or if (g) incorrect then give (i) 1
- (j) hidden detail (both lines) 1

DA 5

Question 5 (continued)

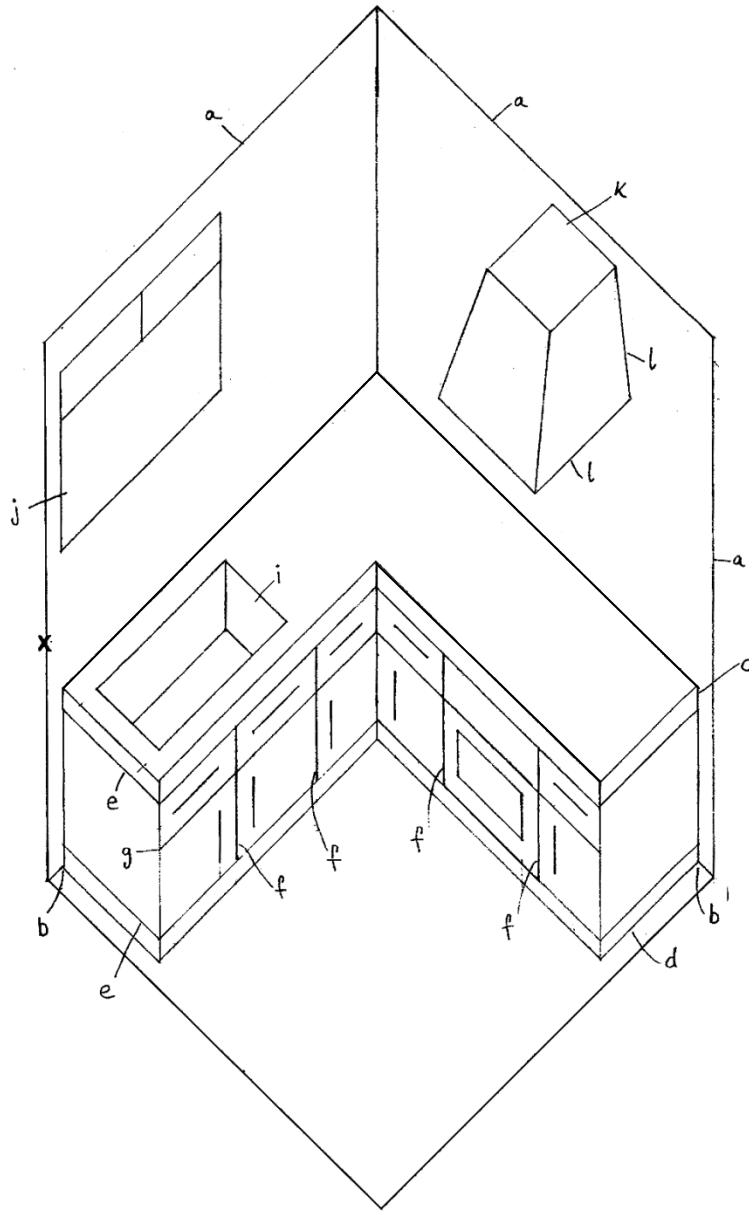


End Elevation

- (k) length & breadth 1
- (l) cut-out shown (size & position) 1
- (m) line shown 1
- (n) hidden detail (5 or 6 lines for 1 mark) 1

DA 4

TOTAL DA 14



Question 6

- (a) length, breadth & height of walls (2 from 3) 1
- (b) position of units from any corner 1
- (c) height of units (consistent throughout) 1
- (d) depth of units (consistent throughout) 1
- (e) kickboard and worktop shown throughout units (ends included and correct height) 1
- (f) position of 4 door vertical lines (all 4) 1
- (g) height of drawers shown throughout units 1
- (h) handles shown (10 represented) and oven door (FTE) 1
- (i) sink position, size and depth relative to one corner 1
- (j) window position and size 1
- (k) cooker hood position and top 4 corners 1
- (l) cooker hood bottom 3 corners (plus 3 diagonal straight lines) 1

Total DA 12

Question 7

End Elevation

- (a) division of plan into 12 imaginary corners (8 allowed) 1
- (b) projection of imaginary corners onto cut & across to end elevation 1
- (c) projection of imaginary corners onto bounce line & end elevation 1
- (d) base section length and height 1
- (e) position of 12 points on ellipse (8 points for 1 mark) 2
- (f) smooth curve 1
- (g) vertical lines 1

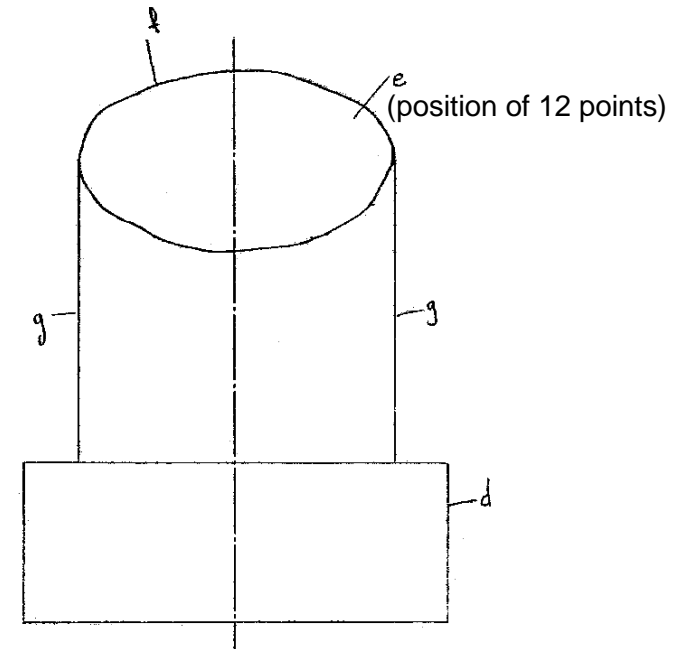
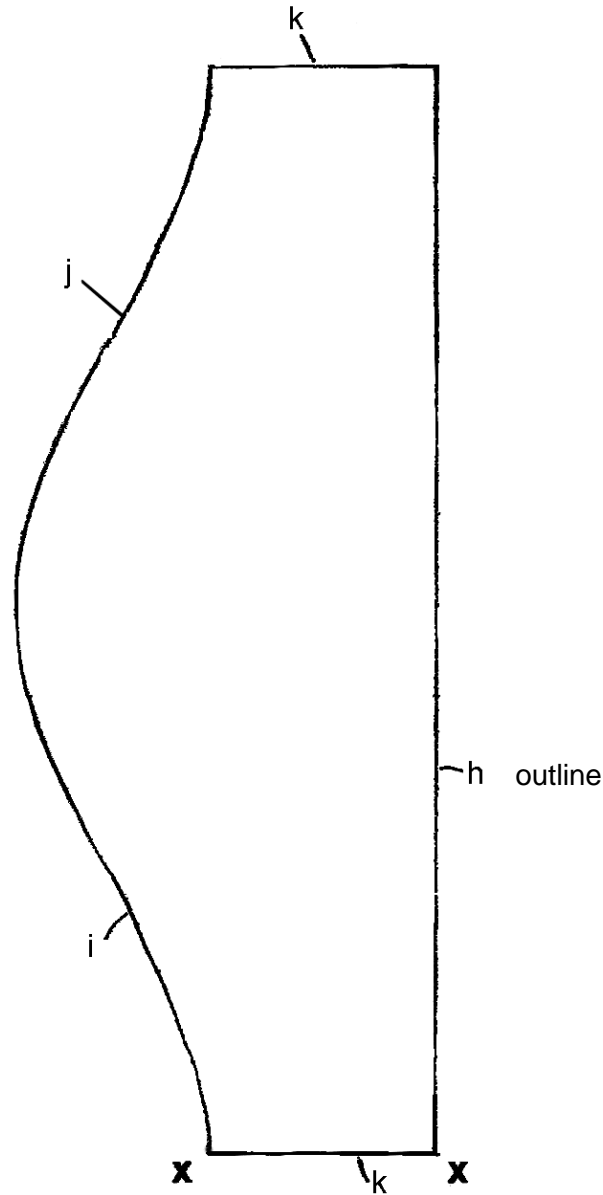
DA 8

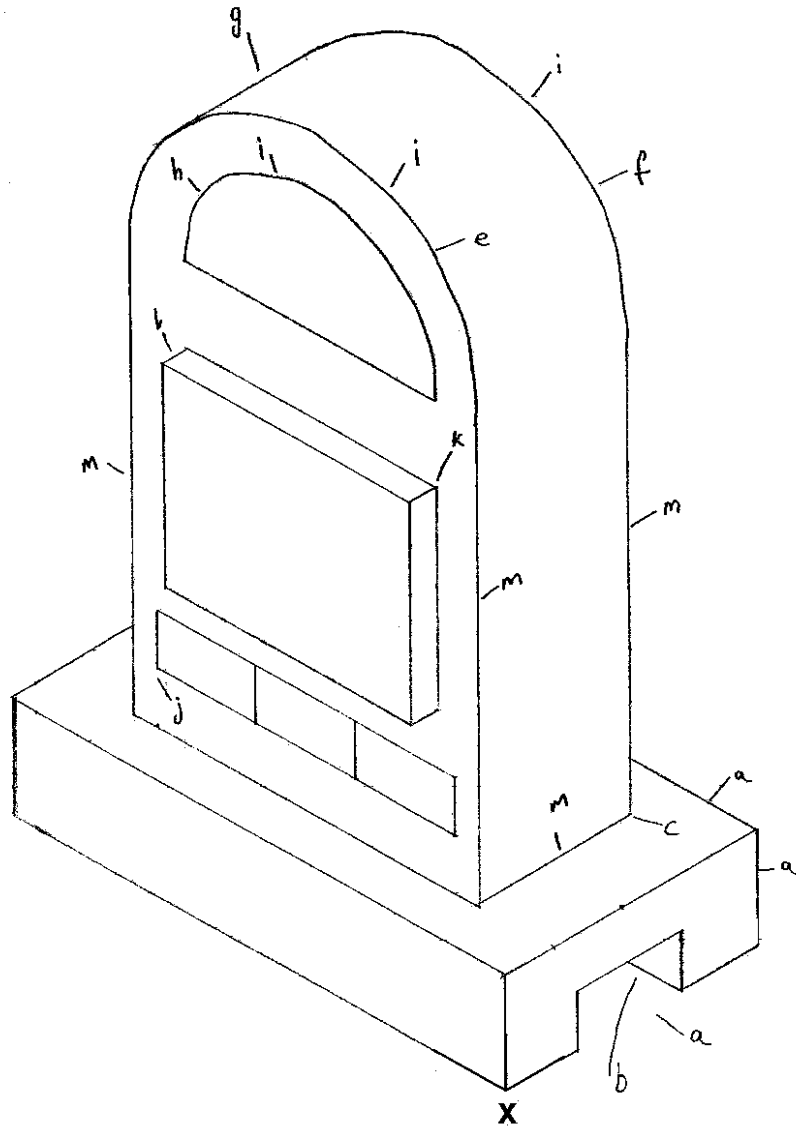
Development

- (h) length of development ($\pm 12\text{mm}$) outline 1
- (i) establish points for 7 different heights ($7 = 3, 5 = 2, 3 = 1$) 3
- (j) smooth curve 1
- (k) end lines 1

DA 6

Total DA 14





Question 8

- | | | |
|-----|---|---|
| (a) | base section length, height & breadth (all 3) | 1 |
| (b) | recess position, size and through line shown | 1 |
| (c) | position of top section correct from any corner | 1 |
| (d) | division of semi circles shown on <u>elevation</u> | 1 |
| (e) | establish points for outside semi-circle (7 for 2, 5 for 1) | 2 |
| (f) | establish points for back curve (all) | 1 |
| (g) | tangent line shown | 1 |
| (h) | establish points for inside semi-circle (7 for 2, 5 for 1) | 2 |
| (i) | smooth curves shown (3 for 2, 2 for 1) | 2 |
| (j) | buttons position and size | 1 |
| (k) | middle section position and size (can be surface detail only) | 1 |
| (l) | correct depth shown | 1 |
| (m) | outside casing lines shown (all 5) | 1 |

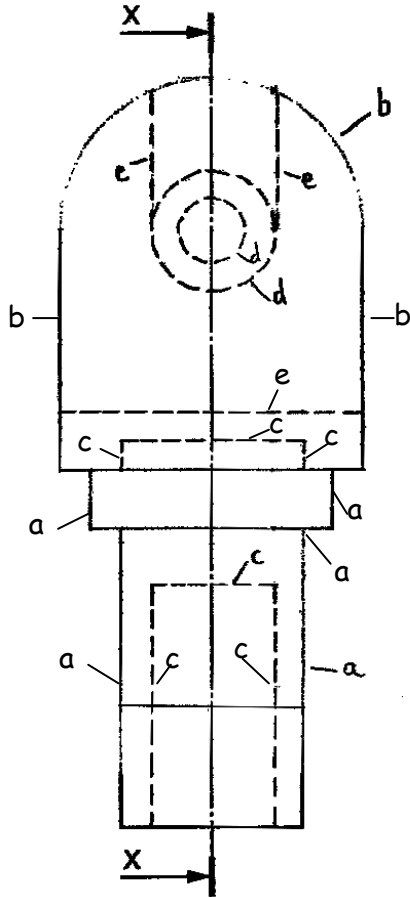
Total DA 16

Question 9

End Elevation

- (a) base height (4 from 5) 1
- (b) body semi-circle (R25) + 2 vertical lines 1
- (c) hidden detail base (3 from 6) 1
- (d) hidden detail pin (2 for 1 mark) 1
- (e) hidden detail slot (all 3) 1

DA 5

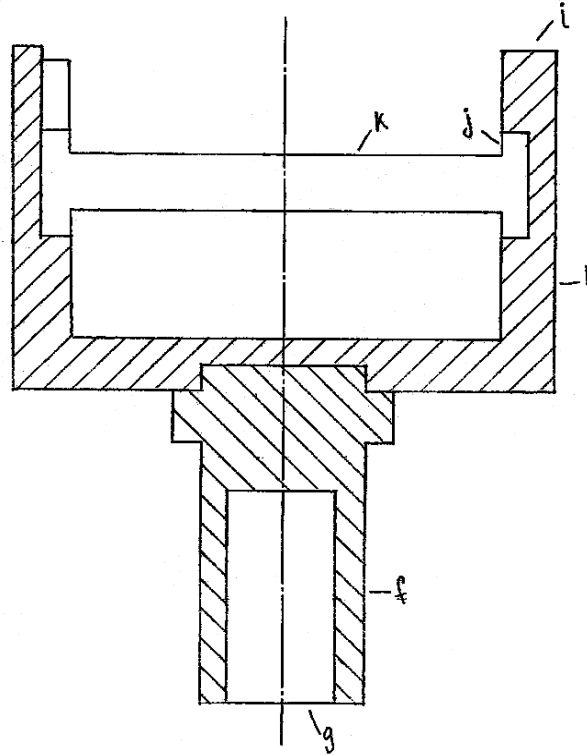


Sectional Elevation on X-X

- (f) base vertical lines (8 for 2, 5 for 1) 2
- (g) base horizontal lines (5 from 7 for 1 mark) 1
- (h) body vertical lines (5 from 7 for 1 mark) 1
- (i) body horizontal lines (5 from 6 for 1 mark) 1
- (j) pin vertical lines (5 from 6 for 1 mark) 1
- (k) pin horizontal lines (5 from 6 for 1 mark) 1
- (l) hatching BS body 1
- (m) hatching to correct BS to base 1

DA 9

Total DA 14



[END OF MARKING INSTRUCTIONS]