

**2006 Graphic Communication**

**Standard Grade – Credit**

**Finalised Marking Instructions**

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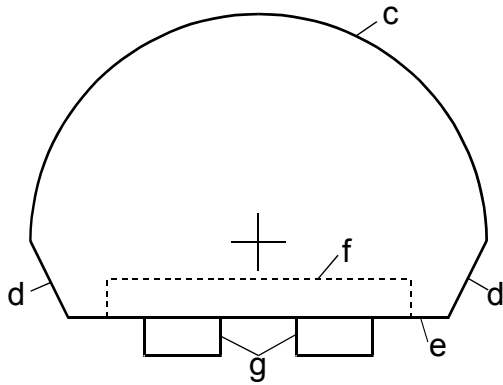
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## Credit

- 1 (a) Drawings are more accurate, easier to edit, standardisation of formats, new designs from existing designs, use of libraries of commonly used parts, reduction of lead-time. Ability to e-mail.  
*Do not accept more than one editing answer.* KI 3
- (b) Work can be lost if the computer crashes, work could be corrupted by viruses, work could be stolen or “hacked”, constant need to update system, constant need to update software. KI 3
- (c) Size of paper used, size of the subject being drawn, British Standards. KI 2
- (d) Inkjet, laser printer, or any type of plotter. KI 2
- (e) Flash drive, Zip drive, and portable hard drive, DVD-ROM, CD-ROM, Pen Drive, Solid State Storage Device/Memory stick. KI 2
- TOTAL KI 12**
- 2 (a) Blue, Red. KI 2
- (b) Yellow, Yellow-green, Blue-green, Blue KI 2
- (c) Would make the room seem smaller, or warmer. KI 1
- (d) Would make the room seem larger, or cooler. KI 1
- (e) Advancing...Any warm colour. Receding...Any cool colour. KI 2
- (f) White Clean, pure.  
Orange Warm, cheerful, sunny, happy, appetising, healthy.  
Blue Cool, reliable, sophisticated, formal, classy. KI 3
- TOTAL KI 11**
- 3 (a) 1 Section, Sectional elevation 2 True shape  
3 Exploded isometric, Exploded view 4 Development KI 4
- (b) Drawing is drawn half size KI 1
- (c) 1. To see the details of the inside of the tap/or any object.  
2. To see the true dimensions of the cut surface of the prism/or any object.  
3. To show all the individual components of an assembly separately, in line with how they fit together. KI 3
- TOTAL KI 8**

- |   |   |                   |
|---|---|-------------------|
| 4 | (a) In simulations you interact with the programme, with animations you only watch the screen.  | KI 1              |
|   | (b) It is safer, cheaper, and modifications can be made much faster.  | KI 2              |
|   | (c) The moving parts of the chair can be demonstrated to show how it works/The moving parts of the chair can be shown without the need to take the actual chair to the clients.   | KI 1              |
|   |   | <b>TOTAL KI 4</b> |
| 5 | (a) Easier to edit, easier to store, easier to transport, can be used to test situations/designs before they are built. <i><b>Do not accept more than one editing answer.</b></i> | KI 2              |
|   | (b) Model can not be touched/no physical interaction, data could be corrupted, could be more easily stolen.   | KI 1              |
|   | (c) Wireframe, Solid, Surface.  | KI 2              |
|   |   | <b>TOTAL KI 5</b> |



**Elevation**

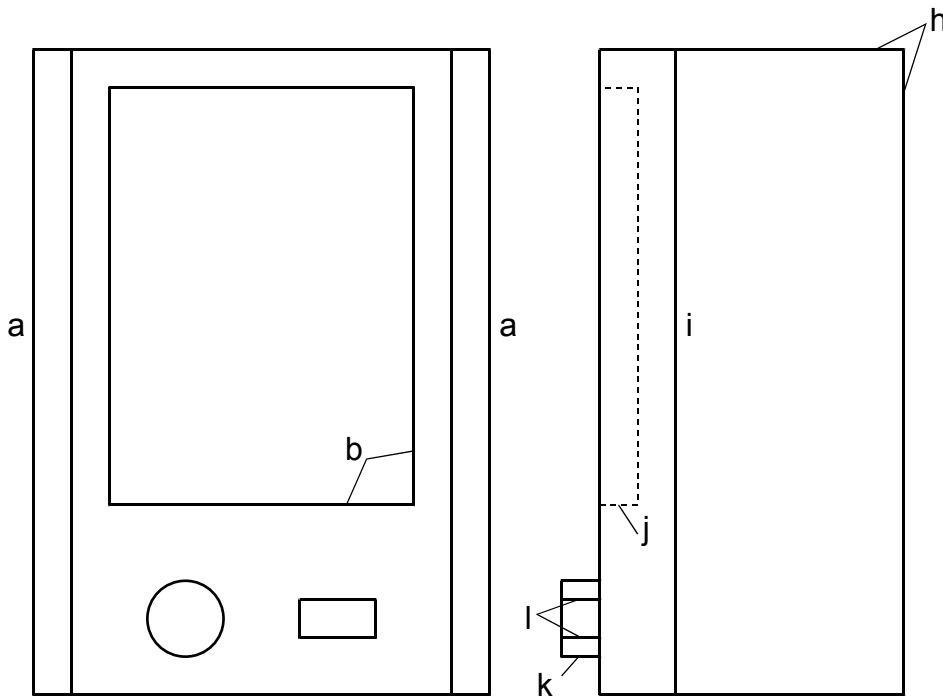
- (a) Height of elevation 1
- (b) Rectangle (l & h) + Position 1

**Plan**

- (c) Semi-circle (R30) 1
- (d) Angled lines 1
- (e) Front surface (correct size) + Position 1
- (f) Hidden detail (l & b) 1
- (g) Two buttons (size & position) (both) 1

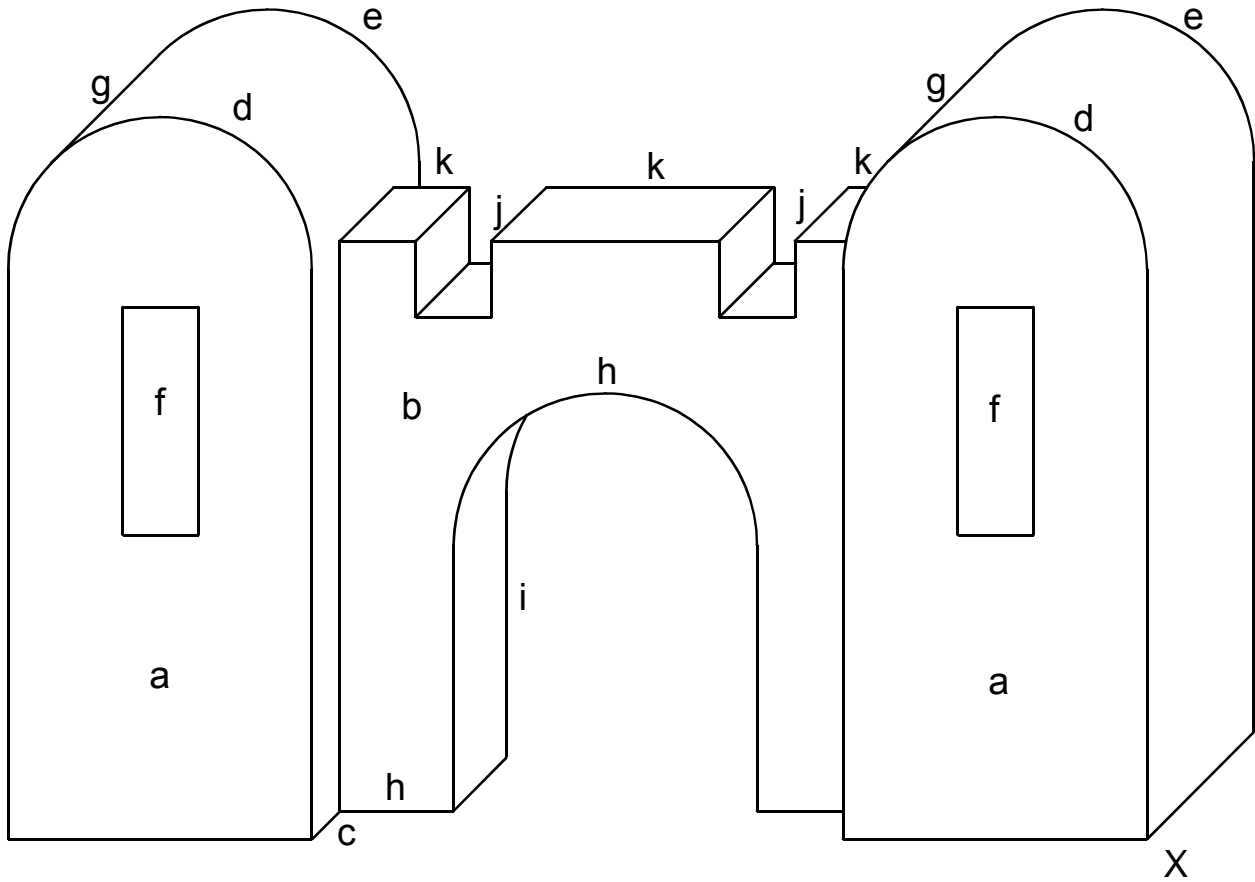
**End elevation**

- (h) Rectangle (h & b) 1
- (i) Line in correct position 1
- (j) Hidden detail (h & b + position) 1
- (k) Round button (size & position) 1
- (l) Rectangular button (size & position) 1



**Elevation**

**End Elevation**



**Question 7**

- |   |          |
|---|----------|
| <b>(a) Crate (l &amp; h) of towers (both)</b>           | <b>1</b> |
| <b>(b) Crate (l &amp; h) of wall</b>                    | <b>1</b> |
| <b>(c) Position of wall</b>                             | <b>1</b> |
| <b>(d) Semi-circle on front of towers (both)</b>        | <b>1</b> |
| <b>(e) Semi-circle on back of towers (both)</b>         | <b>1</b> |
| <b>(f) Windows on towers (both-size &amp; position)</b> | <b>1</b> |
| <b>(g) Tangent lines on towers (both)</b>               | <b>1</b> |
| <b>(h) Correct size and position of arch</b>            | <b>1</b> |
| <b>(i) Rear of arch shown (all three lines)</b>         | <b>1</b> |
| <b>(j) Two castles shown (correct size)</b>             | <b>1</b> |
| <b>(k) Correct position of castles</b>                  | <b>1</b> |
| <b>(l) Depth of castles shown correctly</b>             | <b>1</b> |

**Note: If size not halved – lose marks at c, e, i and l.**

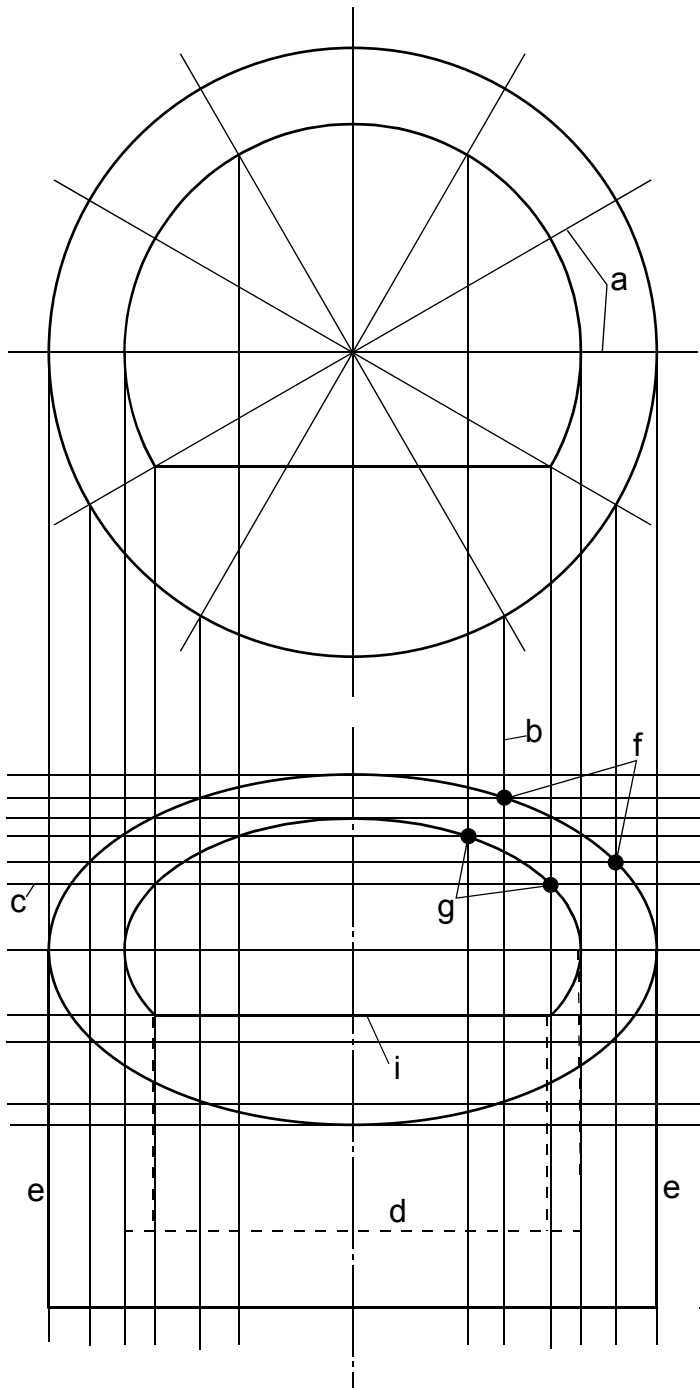
**Question 8**

**Elevation**

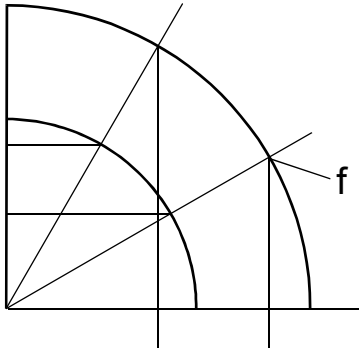
- (a) Div. on Plan (8-12 points) 1
- (b) Project div. to elevation 1
- (c) Project div. to end elevation 1
- (d) Hidden lines 3 of 5 1
- (e) Edges of cylinder 1
- (f) Establish points on outer ellipse 2
- (g) Establish points on inner ellipse 2  
(5/6 for 1 7/9 for 2)
- (h) Good freehand curves 1
- (i) Horizontal edge 1

**Development**

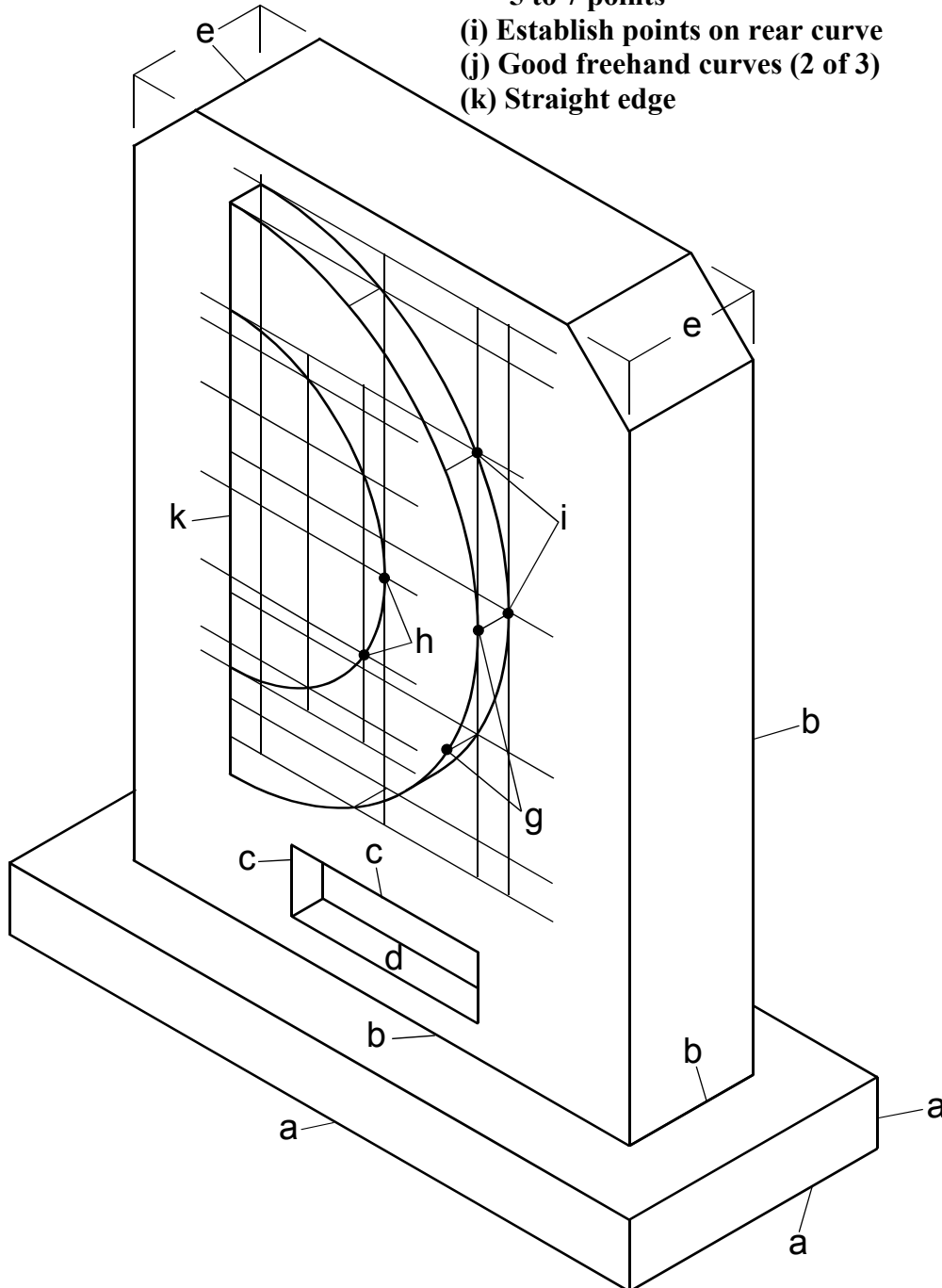
- (j) Length of Dev. ( $\pm 6\text{mm}$ ) 1
- (k) Establish points on curve 3 for 1 2
- (l) Good freehand curve 1
- (m) Outlines of dev. 1



**Question 9**



- (a) Base (l, b & h) 2 for 1; 3 for 2 2
- (b) Isometric crate for body + position (l, b & h) (3 for 1) 2
- (c) Display (l & h) + position 1
- (d) Display (depth) 1
- (e) Corners cut top of body (both) 2
- (f) Construction for iso (elevation) 1
- (g) Construction for iso (outer semi) 1
- 5 to 7 points
- (h) Construction for iso (inner semi) 1
- 5 to 7 points
- (i) Establish points on rear curve 1
- (j) Good freehand curves (2 of 3) 1
- (k) Straight edge 1



**X**  
**Isometric View**  
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### Question 10

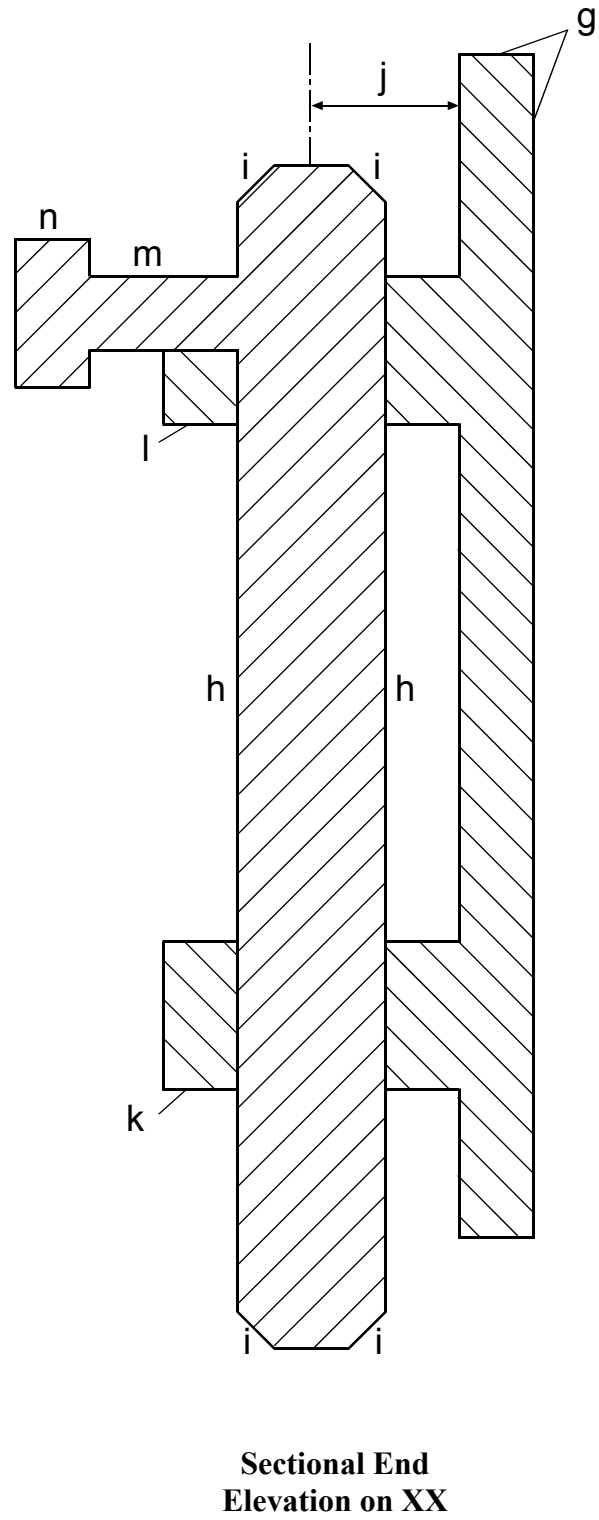
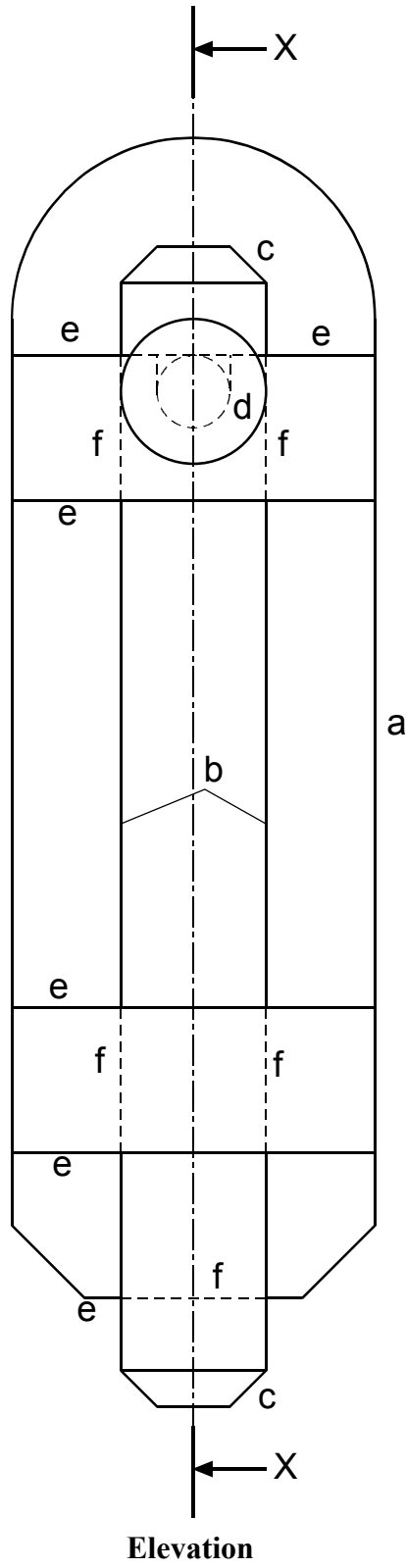
#### Elevation

(a) Back plate (l & h) + Chamfer	1
(b) Bolt (l & h)	1
(c) Chamfers on bolt	1
(d) Circles (one hidden detail)	1
(e) Horizontal lines 6	1
(f) Hidden detail shown 5 of 8	1

#### Sectional End Elevation

(g) Back plate (h & b)	1
(h) Sides of bolt (h & b)	1
(i) Chamfers on bolt (both)	1
(j) Dist of bolt from back plate	1
(k) Lower rectangle (5 lines)	1
(l) Upper rectangle (4 lines)	1
(m) Length of pin + $\phi$ + position	1
(n) Length of grip + $\phi$	1
(o) Hatching shown	1
(p) Hatched to BS convention	1

Question 10



[END OF MARKING INSTRUCTIONS]