# 2010 Graphic Communication 

## Standard Grade - Credit

## Finalised Marking Instructions

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## 2010 Graphic Communication SG Credit Marking Instructions

1 (a) Animations are watched and simulations are interactive/You can affect the outcome in a simulation, you can't in an animation.
(b) $1 \quad$ It is safer/It is cheaper

2 Many different flying situations can be simulated
(c) To use this animation in promotional or sales presentation
(d) To test how the helicopter would behave in a crash situation

## TOTAL KI 5

2 (a) $1 \quad 2$
26
(b) $1 \quad 1$ pt Perspective

2 2pt Perspective
3 Oblique/Planometric/Isometric
(c) To make it easier to understand what the object looks like.
(d) $1 \quad 9$

2 14
(e)

3 (a) 1 Ability to create a library of commonly used parts/ ..... KI 3 standardisation
2 Easier to edit drawings/creation of new design from existing/ storage capacity
3 Easier to send drawing to other places (e-mail)/shorter lead time/links to CAD-CAM
(b) 1 Time and cost of training staff
2 Possibility of data loss/possibility of system failure/crash
3 Data security/hacking/viruses etc
(c) Device $1 \quad$ Scanner
Device 2 Digitiser/Digital camera/Graphics Tablet
(d) To ensure that no data is lost and if system fails then data can be recovered up to that point.
4 (a) 1 Easier to edit/zoom in to view in greater detail
2 Easier to store/transport
(b) 1 Cannot be handled
2 Can only be viewed on a computer/security of the design as it could be easier to steal

(c) Model X Surface rendered

Model Y Wire frame
(d) Solid (FTE from (c))
5 (a) (i) View 1 Exploded Isometric ..... KI 2
View 2 Section/Sectional Elevation/Sectional View/ Sectional
(ii) Purpose of View 1 To show how the parts are assembled ..... KI 2
Purpose of View 2 To show details of the inside of the assembly that may not be obvious in the normal elevation. To give information that you might not see in the normal elevation.
(b) Plan 3 Block/Location ..... KI 2
Plan 4 Site
(c) Floor ..... KI 1
(d) North Point ..... KI 1
(e) The drawing is drawn half size ..... KI 1

## Question 6

## Elevation

(a) Base length \& height (both) $\mathbf{1}$
(b) Body length \& height (both) $\mathbf{1}$
(c) Circle \& semi circle \& centre $\mathbf{1}$
(d) Sloping line (start \& angle) $\quad \mathbf{1}$

## Plan

(e) Inner circle (FTE) 1
(f) Body length \& breadth 1
(g) Body length \& breadth 1
(h) Hidden detail $(6$ from 8) $\mathbf{1}$

## End Elevation

(j) Body height \& breadth 1
(k) Body height \& breadth \& projection $\quad 1$
(l) Horizontal line 1
(m) Slot - size and position $\mathbf{1}$
(n) Hidden detail (FTE) (6 for 2, 3 for 1) 2

Total DA




## Question 7

Plan
(a) Correct width 1
(b) Project cut from elevation (all 3)
(c) Cut surface shown
(3 lines) 1
(d) Edges to cut (outlined) $\mathbf{1}$
(e) Flat surface, length \&

Development
(f) True length established $\mathbf{1}$
(g) True length used
(h) Original base lengths 1
(i) Transfer of inner cut

5 heights
(j) Transfer of base cut $\quad 1$
(k) Outline of inner cut
(l) Outline of base cut $\mathbf{1}$

4 lines
(m) Outer edges $\mathbf{1}$

Total DA 13



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## Question 8

## Plan

(a) Circle

1
(b) Line

## End Elevation

(c) Base 1
(d) Sides to cut (outline) $\mathbf{1}$
(e) Generators on plan $\mathbf{1}$
(f) Generators projected to elevations $\mathbf{1}$
(g) Establish points on curve (7 from 9) $\mathbf{1}$
(h) Smooth curve (FTE) 1

## True Shape

(i) Correct projection $\mathbf{1}$
(j) Line 1
(k) Establish points on curve (7 from 9) $\mathbf{1}$
(l) Smooth curve (FTE) $\mathbf{1}$

Total DA


## Question 9

## Isometric View

(a) Isometric crate for "bangle" (l, b \& h) 1
(b) Construction for circle1
(c) Establish points for curve (8 for 1) 2
(d) Establish points for rear curve1
(e) Good freehand curve (1 only) 1
(f) Raised watch face (l, b \& h) 2
(g) Indent shown on surface (l \& b) $\quad \mathbf{1}$
(h) Indent depth shown 1
(i) Vertical lines (both) 1
(j) Sloping lines (2 for 1, 4 for 2 ) 2
(k) Split verticals (correct size and $\quad \mathbf{1}$
(I) Split angled lines (all 3) 1
(m) Lines at 30 degrees (all 4) $\mathbf{1}$
(n) Lines at rear (2 from 3)

Total DA 17


ELEVATION

## Elevation

(a) Vertical lines (both)
(total height across suction cup) 1
(b) Hidden lines (both) (FTE) $\mathbf{1}$
(c) 4 horizontal lines 1
(d) 2 sloping lines $\mathbf{1}$
(e) Hidden detail (4 from 7) 1

## Sectional End Elevation

Suction Cup
(f) Horizontal lines (6 from 9) $\mathbf{1}$
(g) Vertical lines (3 from 4) $\mathbf{1}$
(h) Sloping lines (3 from 4)

## Support Arm

(i) Horizontal lines (all 3) 1
(j) Vertical lines (3 from 5) $\mathbf{1}$
(k) Horizontal lines (6 from 8) 1

## Cradle

(l) Vertical lines (5 from 7) $\quad \mathbf{1}$
(m) Semi-circle 1
(n) Hatching shown correct to BS

Total DA 14

[END OF MARKING INSTRUCTIONS]

