# 2009 Graphic Communication 

## Standard Grade - Credit

## Finalised Marking Instructions

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## 2009 Graphic Communication SG Credit Marking Instructions

1 (a) 1 Designs are easier to edit/Drawings are more accurate/ Standardisation of drawings

2 New designs from existing/Library of commonly used parts can be created/Reduced lead time

3 Drawings are easier to store/Drawings can be sent to other locations by e-mail
(b) 1 Time taken to learn how to use the software/Cost of the software, continual need to update software

2 Accidental data loss/Security of data (hacking)
3 Viruses
(c) (i) DTP
(ii) CAD
(iii) Ilustration/Paint/3D modelling package
(d) Scanner/Digitiser/Digital Camera
(e) The different software use the same operating system/Data can be imported between the different software packages.

TOTAL KI 11

2 (a)

| AREA | COLOUR | REASON FOR CHOICE |
| :---: | :---: | :---: |
| Interior walls | Yellow | Bright and cheerful |
| Floor covering | Blue | Cool and reliable/ <br> contrast with walls |
| Ceiling | White | Represents cleanliness |
| Brochure Display Area | Blue-Violet | In harmony with the floor <br> (Blue)/contrast with walls |
| Shop Front | Red | Exciting/Vibrant/Active |
| First Aid Cabinet | Green | Associated with safety |

(b) Advancing: Red/Yellow

Receding: Blue/Blue-Violet/Green KI 2
(c) Green/Blue-Green/Blue-Violet/Violet KI 1
(d) Add a primary and secondary colour together KI 1
(e) Visual excitement

3 (a) 1 Ease of editing/Ease of testing
2 Ease of storage/Ease of transporting KI 2
(b) Computer models cannot be touched, no physical interaction

Could be more easily stolen, data could be corrupted KI 2
(c) 1 Wireframe/Solid

2 Surface/Surface-rendered KI 2
(d) In simulation you interact with the software, in animation you only view the images.

You can affect the outcome in simulations, you can't in animations.
(e) The animation could be used for promotional purposes/To help in the marketing of the car.
(f) To test the car's aerodynamics/To test how the car would react in a crash situation.

4 (a) (1) 2
(2) 6
(b) Isometric
(c) (1) The size of the object being drawn
(2) The size of the paper being used for the drawing/The amount of detail required for the drawing
(d) Ease of reading the drawings/Drawing can be easily understood because the same symbols and conventions are used no matter who does the drawing.
(e)

## Drawing X




ELEVATION

## Question 5

(g) Length + width
(h) Handle position length + width

(i) Body length + width
(j) Width of flat (2 lines)
(k) Lens hidden detail
(l) Handle lines (both; 1 hidden)
(a) Correct projection
(b) Height + width
(c) Body height + width
(d) Lens hidden detail (3 lines)
(e) Handle (4 lines)
(f) Slope on handle (2 lines)



Question 6 (a)
(a) Divide plan (generators)


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## Question 6 (b)

(g) True length used to draw arc
(h) 12 div; correct length 12


SURFACE DEVELOPMENT


## Question 7

| (a) | Length + breadth of crate | 1 |
| :---: | :---: | :---: |
| (b) | Height | 1 |
| (c) | Height | 1 |
| (d) | Construction for full circle | 1 |
| (e) | Establish points for circle (8 points for $1 ; 12$ for 2 ) | 2 |
| (f) | Establish part curve | 1 |
| (g) | Tangent lines (both) | 1 |
| (h) | Establish points on curve | 1 |
| (i) | Establish part curve | 1 |
| (j) | Good freehand curves <br> (2/4 for $1 ; 4 / 4$ for 2 ) | 2 |
| (k) | Lines (both) | 1 |
| (l) | Buttons as surface detail + pos | 1 |
| (m) | Button 10 mm depth | 1 |
| (n) | Button 5 mm depth $\mathbf{D A}$ | 1 16 |



## Question 8

(a) Construction to apex 1
(b) Establish corners of cut (4 points for $1 ; 6$ for 2 ) 2
(c) Outline of cut $\quad 1$
(d) Edges to cut 1

DA 5
(e) Correct width + apex 1
(f) Establish corners of cut and outline
(g) Outline edges (visible) $\mathbf{1}$
(h) Hidden detail 1

DA 4
(i) Project from surface at $90^{\circ}$
(j) Correct widths of all $3 \quad \mathbf{1}$
(k) Outline of true shape $\mathbf{1}$ DA 3


## Question 9 (a)




## Question 9 (b)

| (a) | Height + width | $\mathbf{1}$ |
| :--- | :--- | :---: |
| (b) | Height + width | $\mathbf{1}$ |
| (c) | Hole (outline and correct |  |
|  | position) | $\mathbf{1}$ |
| (d) | Support in correct position | $\mathbf{1}$ |
| (e) | Support outline (5 lines) | $\mathbf{1}$ |
| (f) | Recess (all 3 lines; outline) | $\mathbf{1}$ |
| (g) | Pin head (correct size and |  |
|  | position) | $\mathbf{1}$ |
| (h) | Lines | $\mathbf{1}$ |
| (i) | Hatching shown | $\mathbf{1}$ |
| (j) | Hatching correct to BS conv | $\mathbf{1}$ |
|  | DA | $\mathbf{1 0}$ |



SECTIONAL END ELEVATION ON A-A

