# 2009 Graphic Communication 

## Advanced Higher

## Finalised Marking Instructions

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1. Please refer to the Leaflet for use with Question 1.

Study the "Insight" leaflet.
State three design elements that have been applied to the leaflet and describe the effect produced by each.

1. Colour The leaflet is made up of a range of background colours ie white, orange, brown and pink.
The use of colour for text contrasts well with the coloured backgrounds ie brown against white, black against orange, white against pink.

The feeling is of warmth and richness, but at the same time vibrant.
2. Shape The predominant shape is rectangular. There is however a contrast created by using rectangular shape both horizontally and vertically. The larger rectangular sections compliment the smaller areas, with the circular and floating elements adding contrast and interest. The large pink rectangle highlights/sets apart the competition feature from other elements on the page.
3. Line Line has been applied to this page in a number of ways. Small black dots have been used to provide a framework and to organise and separate features on the page. The bold orange dots draw attention to the Podcast feature, as do the large grey dots between the ears, which also create a sense of movement.
4. Mass/ The large bold headline appears rather heavy, as does the orange Weight circular block of colour, the floating block of chocolate and the pair of ears. These elements provide contrast and draw the reader's attention to these features.
5. Size $\quad$ There are several large elements on the page. The most obvious being the headline, the block of chocolate, the circular shape around the dog and the pink rectangle are all very visible and as such draw the reader's attention directly to them first. These may be the most important features. The large text between the two fairly large ears creates a contrast between these two elements which creates interest to the piece.
6. Texture Other than the glossy appearance of the page there is no evidence of texture on this page.
7. Value The creation of dark to light values ie the large block of chocolate and pale brown associated text leads the eye in the direction of the dark to light. This creates a sense of movement and draws the reader down the page.

## 3 marks each

1 mark for element identified
2 marks for good explanation must relate to/identify feature on leaflet
1 mark for fair explanation
2. Describe, with the aid of thumbnail sketches, the DTP terms listed below.

| Term | Orphan |
| :--- | :--- |
| Description | A word, or line, belonging to a following paragraph left on its <br> own at the bottom of a page of column. |
| Term | Text Runaround |
| Description | Technique of setting text to follow the contour of an image or <br> object. |
| Term | Bleed |
| Description | A part of an image, which deliberately extends over the edge of <br> the area to be printed. |
| $\mathbf{1}$ mark for an appropriate thumbnail |  |

3. A commercially produced design proposal for a promotional leaflet is shown below.
(a) In the position indicated, produce an alternative full size visual design using your knowledge of Design Principles.

| balance | contrast | alignment |
| :--- | :--- | :--- |
| proportion | rhythm | proximity/unity |
| white space |  |  |

The visual must include annotated Design Principles to show how they have been used.

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3 marks for a well produced visual
Layout
3 marks for an excellent visual
2 marks for a well produced visual 1 mark for a good visual
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2 marks for the use of colour in the visual
Colour
2 marks for colour being very well used
1 mark for good use of colour
(b) Identify and describe two Design Principles used in your alternative design describing the impact they had on your design.

1 mark for identifying a Design Principle used in the candidates visual 1 mark for the description of how the Design Principle was used in the candidates visual (must be related to the candidates visual).
4. A 3D CAD solid model of a component is shown.

With the aid of sketches explain how this 3D CAD solid model of the component will be produced.


Sketches/Explanation re creation of:

| Rectangular base | (1 mark) |
| :--- | :--- |
| Shaped recess | $\mathbf{( 1}$ mark) |
| Cylindrical Pin | $\mathbf{( 1 ~ m a r k )}$ |
| Rectangular slot | $\mathbf{( 1 ~ m a r k )}$ |
| Arched slot | $\mathbf{( 1} \mathbf{~ m a r k})$ |

The terms - Union/Subtract/UCS should be evident in the above
Additional Exemplification

| New sketch - rectangle - extrude | (1 mark) |
| :--- | :--- |
| New sketch - draw recess - extrude as a cut | $\mathbf{( 1} \mathbf{~ m a r k})$ |
| New sketch - cylindrical pin - extrude | $\mathbf{( 1} \mathbf{~ m a r k})$ |
| New sketch - rectangular slot - extrude as a cut | $\mathbf{( 1} \mathbf{~ m a r k})$ |
| New sketch - arched slot - extrude as a cut | $\mathbf{( 1}$ mark) |

5. Three commercial printing processes are given below.

- Lithography
- Screen Printing
- Flexography

For each printing process state an advantage and an appropriate application.

## Lithography

| Advantage | Good reproduction quality especially photographs <br> Cheap printing process/Economical <br> Versatile/Can be printed on a range of papers <br> High printing speed |
| :--- | :--- |
| ApplicationBusiness cards, stationery, menus, brochures, posters, magazines, <br> newspapers. |  |

## Screen Printing

Advantage Economical for short runs
Can virtually print on any material
Stencils are easy to produce
Application $\quad T$ shirts, posters, plastic and metal signs.

## Flexography

| Advantage | High speed high volume <br> Cost efficient <br> Fast drying inks |
| :--- | :--- |
| Inks work well on non-porous materials <br> Alteration to the design can be made quickly <br> Can print continuous patterns eg gift wrap and wallpaper |  |
| Application | Paper and plastic bags, milk cartons, disposable cups, envelopes and <br> newspapers, less expensive magazines, paper back books |

1 mark for each advantage
1 mark for each application
6. Measured Perspective - Monument (16 marks)
(a) Location of V1 \& V2 (both required) 1
(b) VP1 + VP2 (both required) 1
(c) Height line (H1) (either left or right) 1
(d) Top curve 2
(e) $\begin{aligned} & 10=2,8-9=1 \\ & \text { Smooth curve }\end{aligned}$

Good $=1$
(f) Depth of base (inner curve) 1

4 point $=1$
(g) Smooth curve

Good $=1$
(h) Top Oct 2
7 = 2, 5-6 = 1
(i) Base depth

2
4 verticals \& 3 edges
$7=2,5-6=1$
(j) Height line H2 (base of needle)
(k) Needle Base 1

2 lines (both required)
(l) Height line H3 or box section (needle top) 1
(m) Angled lines 1

3 lines

Interpenetrating pipes (13 marks)

## End Elevation

(a) Vertical edges Sq Pipe (6 visible + 3 Hidden) 2 8-9 = 2, 5-7 = 1
(b) Triangular Pipe (5 Hor. Visible + 2 Hidden) $\square 2$ $6-7=2,4-5=1$
(c) Front Visible Edges (Triangular) - 6 points 2 $6=2,4-5=1$
(d) Back Hidden Edges - 8 points 2 8 = $2,5-7=1$

## Development

(e) True length of panels

1
(f) 12 points intersecting surface $10-12=2,7-9=1$
(g) Intersecting edge (6 lines)
$4-6=1$
(h) Perimeter (6 lines) $4-6=1$

Total 13


END ELEVATION



DEVELOPMENT

## 8. Oblique Cone (16 marks)

Plan
(c) Curve
(e) Line

## Development

(h) Curve
(a) Small Ellipse $\quad \begin{aligned} & 11-12=2,8-10=1\end{aligned}$
(b) Large Part Ellipse
$14-12=2,8-11=1$
1
Good $=1$
1
3 for 1 (2 angled +1 hidden)
(e) True length construction
(f) Generators
(g) Top Curve 2
$7=2,5-6=1$ 1

Good = 1
(i) Bottom Curve

6 sets of points, $6=2,5=1$
(j) Extra 2 points (both required)1
(k) Curve 1

Good $=1$

