2011 Graphic Communication

Advanced Higher

Finalised Marking Instructions

1. Please refer to the **"Events at The O_2"** leaflet.

Identify and describe **three Design Principles** that make an impact.

Some exemplar answers:

Contrast	*Circular shape around O2 part of the headline contrasts with the rectangular image that it overlaps and is very effective in grabbing attention.* *Circular shapes on right side of page contrast with the large rectangular image in the centre.* *Text bottom right is right justified and aligned at an angle which contrasts with the majority of body text which is left aligned and placed vertically.*
White space	*Is evident around the headline and also around the column of text on the left side of the page. The column of text has a large area of white space to its right.* *Not an overly busy page for the reader.*
Rhythm	*The size and style of sub headline is repeated thus creating rhythm ie upper case bold sans serif font with blue text underneath. The effect is that the reader is drawn around the page from one article to the next.*
Balance	*Elements are not uniformly placed on the page. The page therefore has an asymmetrical layout which makes it interesting for the reader.*
Alignment	*Nearly all of the text is left aligned with the exception of the block of text lower right which is right aligned. The effect created makes the text lower right more noticeable.*
Proximity/Unity	*Is the grouping of related elements and content together. On the right page text and images that are related are grouped in close proximity to each other. This makes it easier for the reader to make a connection between images and text.*
Proportion	*The large image in the centre dominates the page giving it importance. This tells the reader that this is the most important feature.*

One mark for identifying correctly a Design Principle
(balance, proportion, white space, contrast, rhythm, alignment, proximity and unity)

One mark for correctly describing the Design Principle

No ½ marks **(6)**

2. Please refer to the **"Events at The O_2"** leaflet.

Annotate the leaflet to show:

Footer
Bleed
Headline
Gutter
Reverse Text
Rule

One mark for correctly annotating the leaflet to show:

Footer, Bleed, Headline, Gutter, Reverse Text and Rule.

No ½ marks **(6)**

3. Study the **"Events at The O_2"** leaflet.

Identify and describe **three Design Elements** that make an impact on this page.

One mark for identifying correctly a Design Element
(line, size, colour, mass, weight, texture, shapes and value)

One mark for correctly describing the Design Element

No ½ marks **(6)**

4. Two different types of balance are shown in the graphic items below. With reference to Design Principles:

(a) name the type of balance;

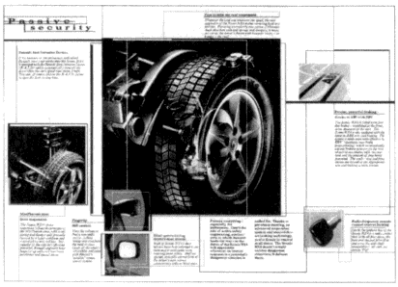
(b) describe how the balance is applied in each composition.

1 Name of balance *Asymmetrical*

Description
Asymmetry allows for a great variety of design solutions, the best being when the whole page seems to work with no one element taking precedence over another. A graphic has been placed on the right with another graphic and text at top left. The header helps to create an asymmetrical layout by placing it in the near centre of the page.

2 Name of balance *Radial*

Description
The elements of the page radiate from or swirl around in a circular or spiral path. Parts of the page are radiating out from the left hand side towards the right hand side of the layout.



One mark for naming the balance correctly

One mark for a correct description of how the balance is applied

No ½ marks **(4)**

5. The following commands are associated with Computer-Aided 3D Modelling.

- Solid Primitive
- Boolean Intersection
- Ruled Surface
- Revolution

Describe, with the aid of sketches, any **three** of the 3D modelling commands.

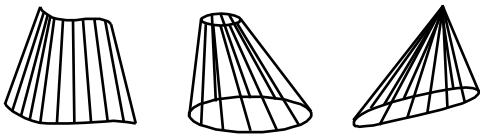
Solid Primitive – *Solid primitives include: Box, sphere, cylinder, cone, wedge or torus*

- *A cylinder similar to an extruded circle or ellipse but without a taper.*
- *A cone is a solid primitive with a circular or elliptical base tapering symmetrically to a point perpendicular to its base.*
- *A torus is defined by two radius values, one for the tube and the other for the distance from the centre of the torus to the centre of the tube.*

Boolean Intersection – *INTERSECT allows the user to create a composite solid from the common volume of two or more overlapping solids. INTERSECT removes the non-overlapping portions and creates a composite solid from the common volume.*

regions before INTERSECT | regions after INTERSECT | solids before INTERSECT | solids after INTERSECT

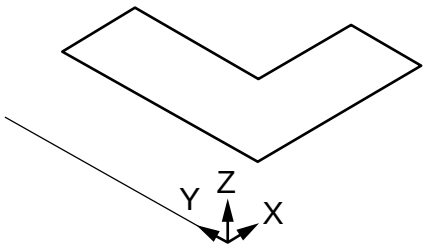
Ruled Surface – *RULESURF constructs a polygon mesh representing the ruled surface between two curves. The objects you select define the edges of the ruled surface. The objects can be points, lines, splines, circles, arcs, or polylines. If one of the boundaries is closed, then the other boundary must also be closed. You can use a point as the other boundary for either an open or a closed curve, but only one of the boundary curves can be a point. For closed curves, the selection does not matter.*

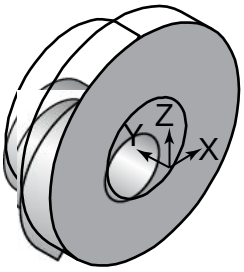


Examples of ruled surfaces

For closed polylines, the ruled surface starts at the last vertex and proceeds backward along the segments of the polyline.

Revolution – *A solid can be created by revolving a 2D shape about an axis.*





One mark for each sketch
One mark for each explanation

No ½ marks **(6)**

6. Describe the printing terms listed below:

- Crop marks
- Pantone ©
- CMYK
- Registration

Crop Marks

Crop marks refer to the printing marks at the corners of a document to indicate where the page is to be trimmed.

Pantone ©

Pantone © is a colour matching system – standardised colour reproduction. By standardising the colours, different manufacturers in different locations can all refer to the Pantone © system to make sure colours match without direct contact with each other.

CMYK

When the final proof has been agreed, the designer will make up "Colour Separations". These split the image up into constituent colours for four colour printing. There will be one separation for Cyan, Magenta, Yellow and Key (Black).

Registration

Registration is the method of correlating overlapping colours on one single image.
Registration employs the alignment of specific marks on the document.

One mark for a good description of each printing term

No ½ marks **(4)**

7. Describe the following Paper/Printing terms.

- Opacity
- Paper Weight

Opacity

Opacity is the degree to which ink printed on one-side shows through to the other side.

The transparency of the paper has to be taken into consideration before printing.

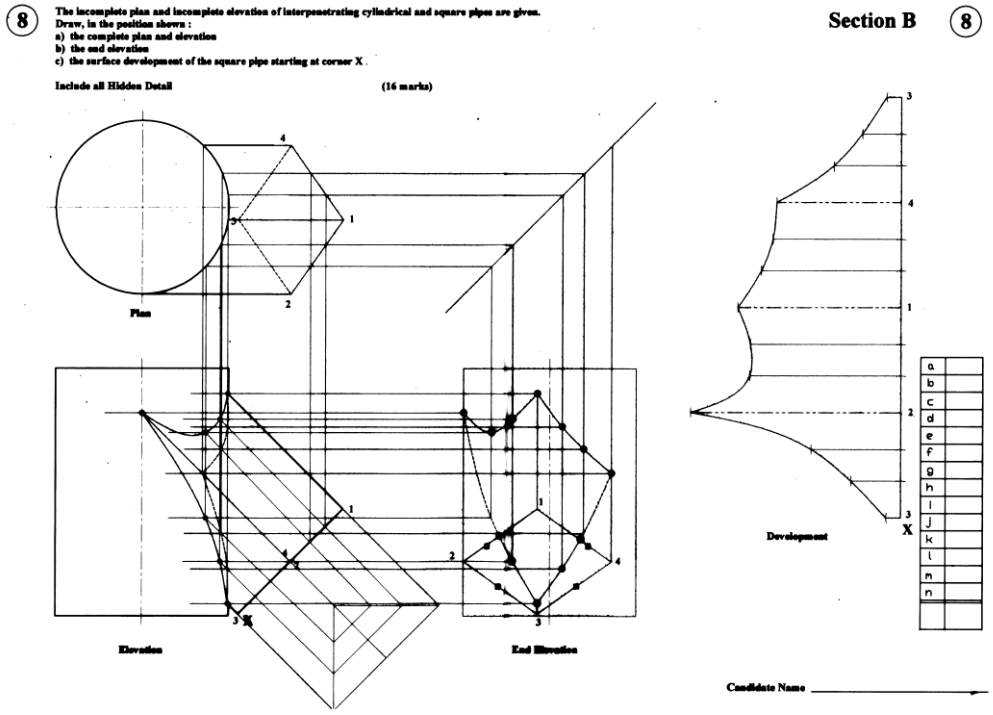
Paper Weight

grammes per square metre/gsm

One mark for each explanation

No ½ marks **(2)**

8. Interpenetrating Pipes



Plan

(a) Square Pipe 3 visible + 2 hidden 1
3-5 = 1

Elevation

(b) Front detail – 7 points & curve 2
6-7 = 2, 4-5 = 1

(c) Back detail – (hidden) 7 points & curve 2
6-7 = 2, 4-5 = 1

End Elevation

(d) Cylinder outline 4 edges 1
3-4 = 1

(e) Square end (diamond) 4 edges 1
3-4 = 1

(f) Visible edge pipe 2
(12 points & 4 curves)
11-12 = 2, 8-10 = 1

(g) Hidden edge pipe (start, middle, end) 2
(6 points & 2 curves)
6 = 2, 3-5 = 1

(h) 3 vertical edges – square pipe 1
2-3 = 1

Development

(i) True length panels ± 1 per panel 1

(j) 13 points & curve 2
10-13 = 2, 7-9 = 1

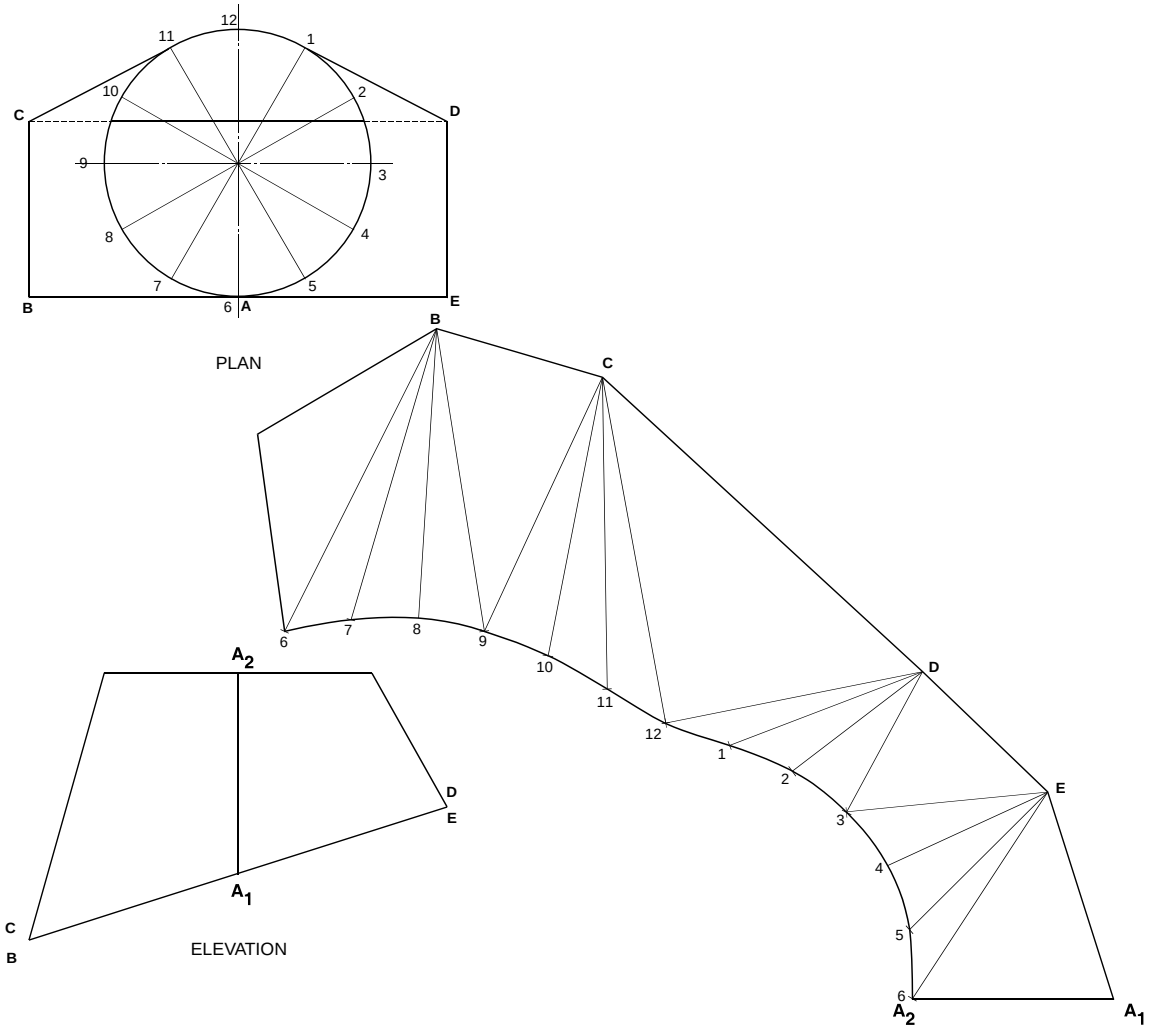
(k) Perimeter (3 lines) 1
2-3 = 1

Total 16

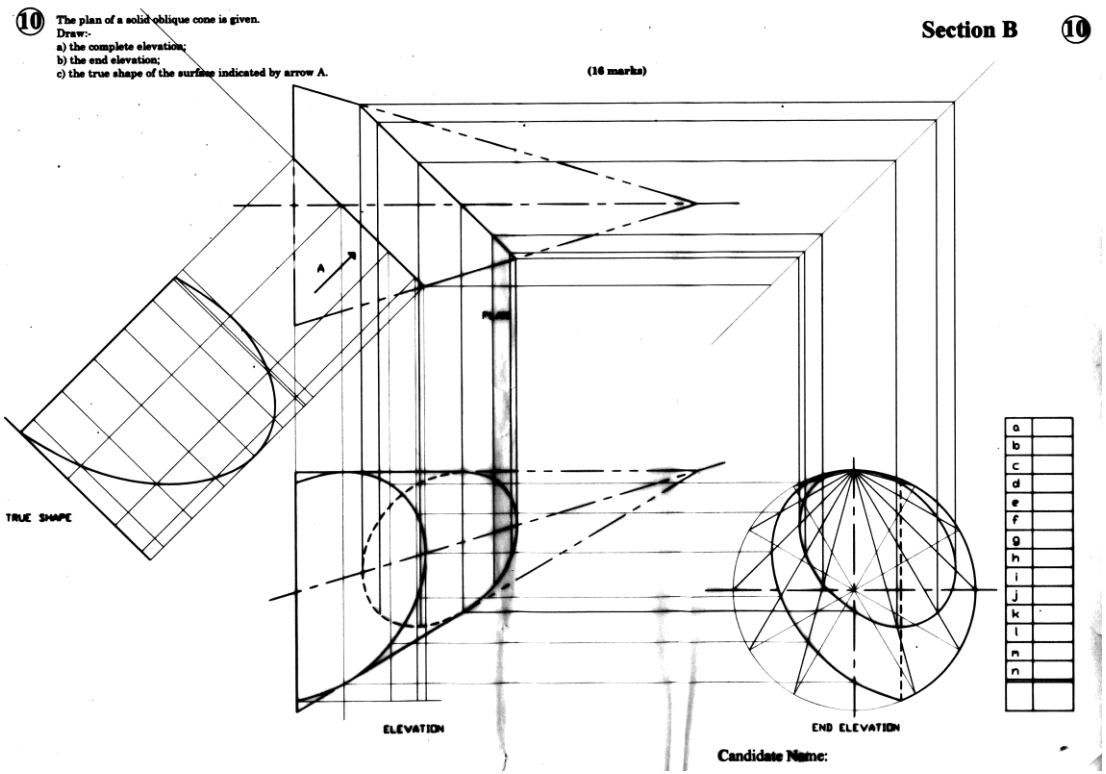
9. Transition

(a)	True Lengths 12-14 = 3, 9-11 = 2, 6-8 = 1	3
(b)	Perimeter 7 = 3, 5-6 = 2, 3-4 =1	3
(c)	13 points 13 = 7 11-12 = 6 9-10 = 5 7-8 = 4 5-6 = 3 3-4 = 2 1-2 = 1	7
(d)	smooth curve	1

Total 14



10. Oblique Cone



Elevation

(a)	Whole ellipse surface 11-12 = 3, 9-10 = 2, 7-8 = 1	3
(b)	Part surface ellipse 5-7 = 1	1
(c)	Extra points of part surface Construction lines as well	1
(d)	Cone outline Need all 2 lines to get the mark	1

End Elevation

(e)	Whole ellipse surface 11-12 = 3, 9-10 = 2, 7-8 = 1	3
(f)	Part surface ellipse 5-7 = 1	1
(g)	Hidden Line	1
(h)	Arc	1
(i)	Extra points	1

True Shape

(j)	Curve 6-7=2, 4-5=1	2
(k)	Line 2 points	1

Total 16

[END OF MARKING INSTRUCTIONS]