

**2005 Graphic Communication**

**Advanced Higher**

**Finalised Marking Instructions**

**These Marking Instructions have been prepared by Examination Teams for use by SQA Appointed Markers when marking External Course Assessments.**

## Question 1

Sketch of alternative design:

The given Heading, sub headings and graphic items included

Layout is clear, easily understood and good use made of grid structure

Visual Quality

Excellent	1½
Good	1
Fair	½

Principles of design

Sketch should include three principles from the following:

**Balance** - *Relevant use within the design*

*Visual weight – is the product of its size and tonal colour- how dark or light it is. We are looking for a point or axis about which the weight of the different elements is balanced. Balance can be either symmetrical or asymmetrical*

**Contrast** - *Relevant use within the design*

*Can be used through typeface choices, line thickness, colours, shapes, sizes, space, etc. Contrast provides a means of emphasising what is important or leading the reader's eye*

**Proportion** - *Relevant use within the design*

*Proportion relates to size in a design and the manner in which the size relationships work within the composition.*

**White space** - *Relevant use within the design*

*White space in a busy design gives the reader a rest. It works best when it is clearly demarcated and has a recognisable shape.*

**Rhythm** - *Relevant use within the design*

*Rhythm is the use of elements like lines, shapes and space to give the design vitality. It is the use of repetition to unify and add visual interest.*

**Alignment** - *Relevant use within the design*

*Alignment is the visual connection with another element on the page.*

**Proximity/Unity** - *Relevant use within the design*

*The grouping together of related items into close proximity creates organisation. Relates to using the elements within the design to create a sense of oneness and consistency in a design to make it interesting.*

**½ mark for identifying the principle**

**1 mark for description of how the principle has been applied**

**(8)**

## Question 2

Explain how the following design **elements** are used in Desktop Publishing.

### (a) Texture

*For desktop publishing, actual texture is the feel of the paper. Is it rough or smooth to the touch? Textures can also be visual. On the Web, especially, backgrounds that simulate familiar fabrics, stone, and other textures are common. Certain printing and finishing techniques such as thermography and embossing can add both actual and visual textures to a printed piece.*

### (b) Mass/Weight

*Mass is size. There is physical size and visual size. Size can be relative. A physically small brochure can have a great deal of mass through the use of heavy text and graphic elements. A physically large brochure can appear smaller, lighter by using text and graphics sparingly.*

**(2)**

### Question 3

In Computer Aided 3D Modelling lights are frequently used to enhance a rendered image.

(a) Describe the following lighting types:

- (i) Distant - *does not have a source or a target. It is calculated as a direction. It is much like a light source like the sun. It is perceived to be so large that the light does not decrease in strength or have any edges. Direction can be specified manually or by using the sun angle calculator. Very useful for architectural models.*
  
- (ii) Spot - *has a target and a location. This means it can be positioned and pointed at any features that you wish to accentuate. Has a hot spot feature, which controls the angle of the cone of light. Dramatic effects can be created*

The following lists terms associated with the lighting types given in (a) above.

- Ambient
- Intensity
- Attenuation

(b) Explain the meaning of **one** of the terms listed above:

**Ambient** - *Light with no source or direction. Ambient light is used to simulate indirect light, such as the atmospheric light that permeates outdoor scenes. It may also be used to simulate radiosity, which is the colour that bounces off brightly coloured objects. Ambient colour controls the colour of objects in areas of shadow, whenever ambient light is present.*

**Intensity** - *Brightness of the light. If the value is set to zero the light will be turned off. The intensity of light at its point of origin affects how brightly the light illuminates an object. A dim light cast on a brightly coloured object shows only dim colours.*

**Attenuation** - *How quickly the light will fade. Sometimes referred to as fall off. Options are none, inverse, linear and inverse square. None would ensure the light does not fade. In the real world, light diminishes over distance. Objects far from the light source appear darker; objects near the source appear brighter. This effect is known as attenuation.*

(5)

#### Question 4

The table below is taken from the Scottish Executive's information on the *Supporting People* initiative.

<b>Supporting People Purple</b>
<b>Pantone matching system</b>
2603
<b>Four colour set (CMYK)</b>
C 79%
M 100%
Y 0%
K 6%
<b>Web safe RGB references for on screen applications</b>
R 102
G 0
B 102
<b>HTML reference</b>
660066

The table describes the definition of the colour purple according to four different standards

- (a) Explain why four different colour standards required  
(2)

*To ensure that the correct colour is used no matter what the media, and also to stop people establishing their own interpretation on the colour – corporate identity.*

- (b) State what the initials CMYK stand for

*Cyan 79%, Magenta 100%, Yellow 0, and Black or Key 6%*

- (c) Outline the effect of the four different standards being applied to the colour purple.

*The exact match of the colour will be reproduced regardless of the media used.*

(4)

### Question 5

Typefaces can generally be classified into two major groups Serif and Sans Serif.

- (a) Explain with the aid of sketches, the difference between the two typeface groupings.

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*Serif is a term for characters that have a line crossing the free end of a stroke*

*Sans Serif, sans means without, it is a typeface without serifs*

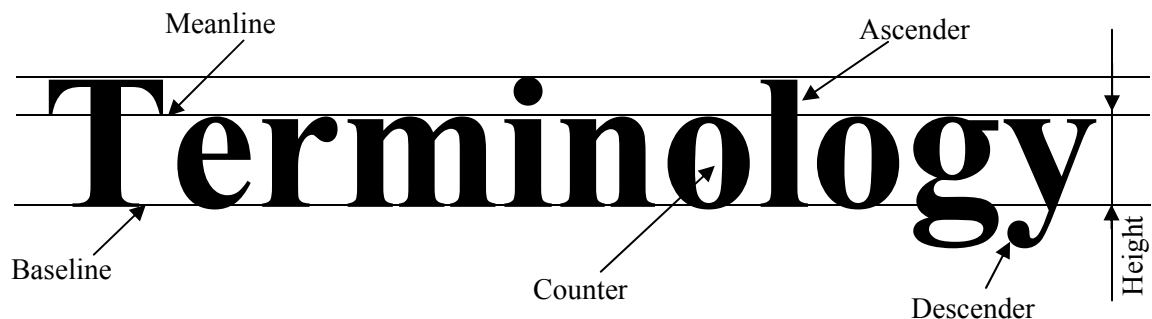
- (b) State the purpose of Serifs

*It is easier to read an extended amount of text when it is set in a serif typeface. The serif leads the eye from one character to the next, linking the letters into words. Gives the impression of formality.*

- (c) Justify the use of a Sans Serif type face.

*Sans serif type is more legible and is best used for headlines*

- (d) From the given list, label the text below with the correct Typographical term.



Typographical Terms:

- 1 X-height
- 2 Counter
- 3 Descender
- 4 Mean Line
- 5 Baseline
- 6 Ascender

(12)

**Question 6**

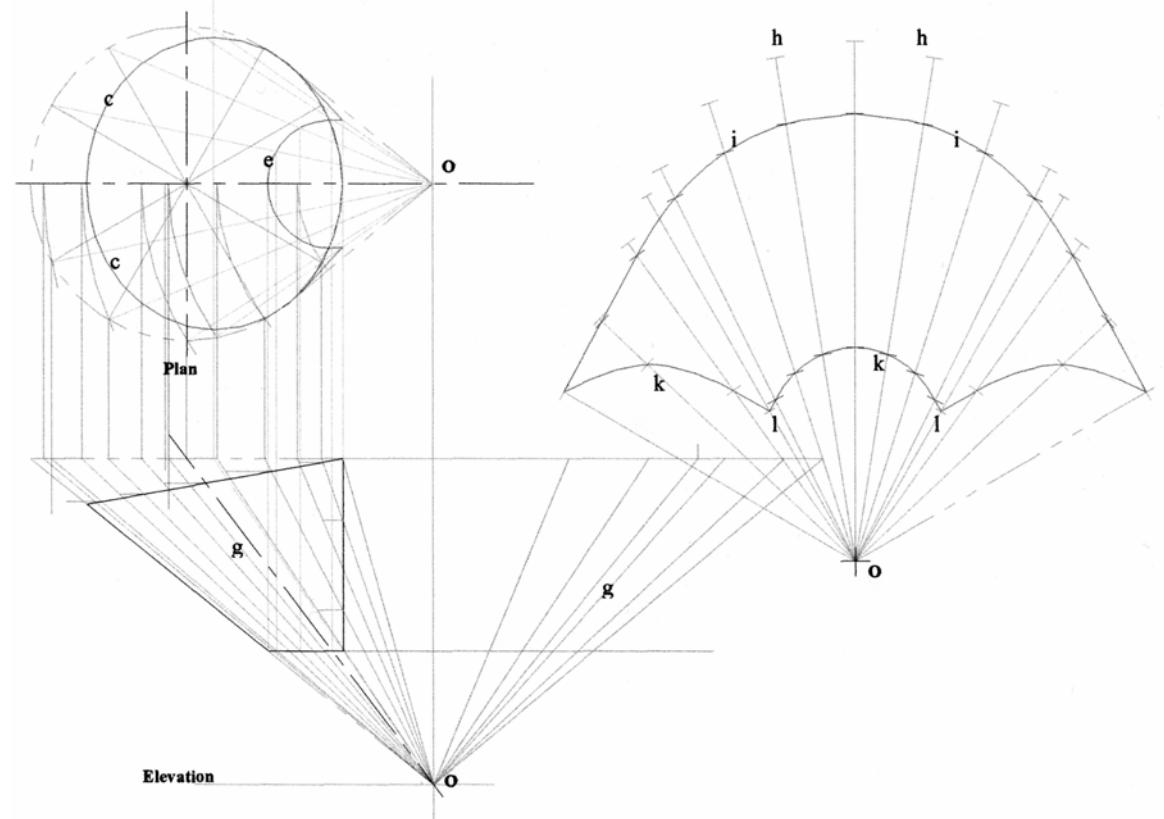
**Plan**

- (a) Plan view (12 segments)
- (b) 12 points - large ellipse (const.)  
9 - 12 = 2, 6 - 8 = 1½, 3 - 5 = 1, 1 - 2 = ½
- (c) Elliptical curve
- (d) 9 points (horizontal cut)  
7 - 9 = 1, 4 - 6 = ½
- (e) Small ellipse & vertical line
- (f) 2 angular lines (conic outline)

**Development**

- (g) True lengths of generators in elevation -  
for clearly showing construction & true length  
4 - 5 = 2, 2 - 3 = 1
- (h) 13 true lengths (original outline) - Development  
10 - 13 = 2, 6 - 9 = 1½, 3 - 5 = 1, 1 - 2 = ½
- (i) 13 true lengths (Cut)  
10 - 13 = 2, 6 - 9 = 1½, 3 - 5 = 1, 1 - 2 = ½
- (j) Smooth curve  
Good = 1  
Fair = ½
- (k) 11 true lengths (internal curves)  
9 - 11 = 2, 6 - 8 = 1½, 3 - 5 = 1, 1 - 2 = ½
- (l) Additional 2 points
- (m) Smooth curve  
Good = 1  
Fair = ½

**Marks**



**Total**

**(18)**

### Question 7

Marks

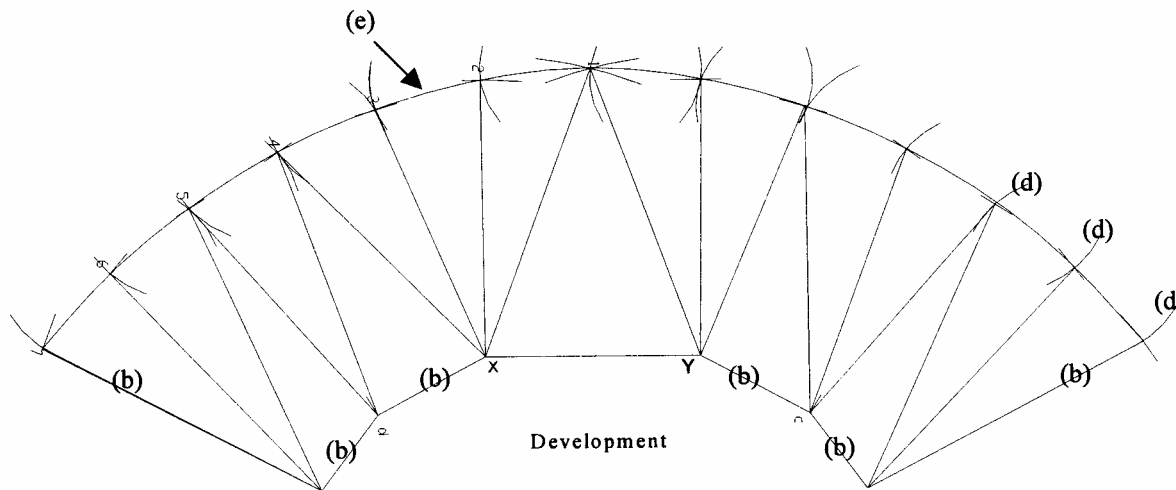
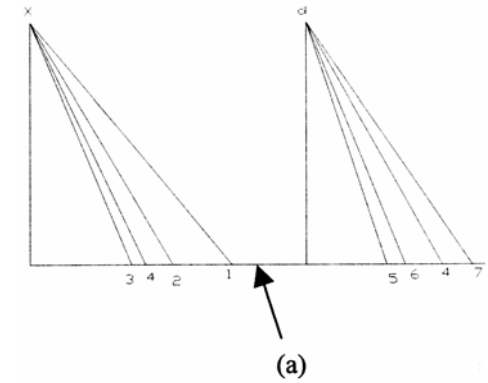
- (a) True length construction  $6-8=2$ ,  $4-5=1\frac{1}{2}$ ,  $3=1$ ,  $2=\frac{1}{2}$
- (b) Straight line perimeter, 6 points @  $\frac{1}{2}$  each
- (c) Cut at Seam @  $\frac{1}{2}$
- (d) Development construction, 13 points @  $\frac{1}{2}$  each
- (e) Smooth curve @ 1 or a  $\frac{1}{2}$

Good = 1

Fair =  $\frac{1}{2}$

Total

(13)

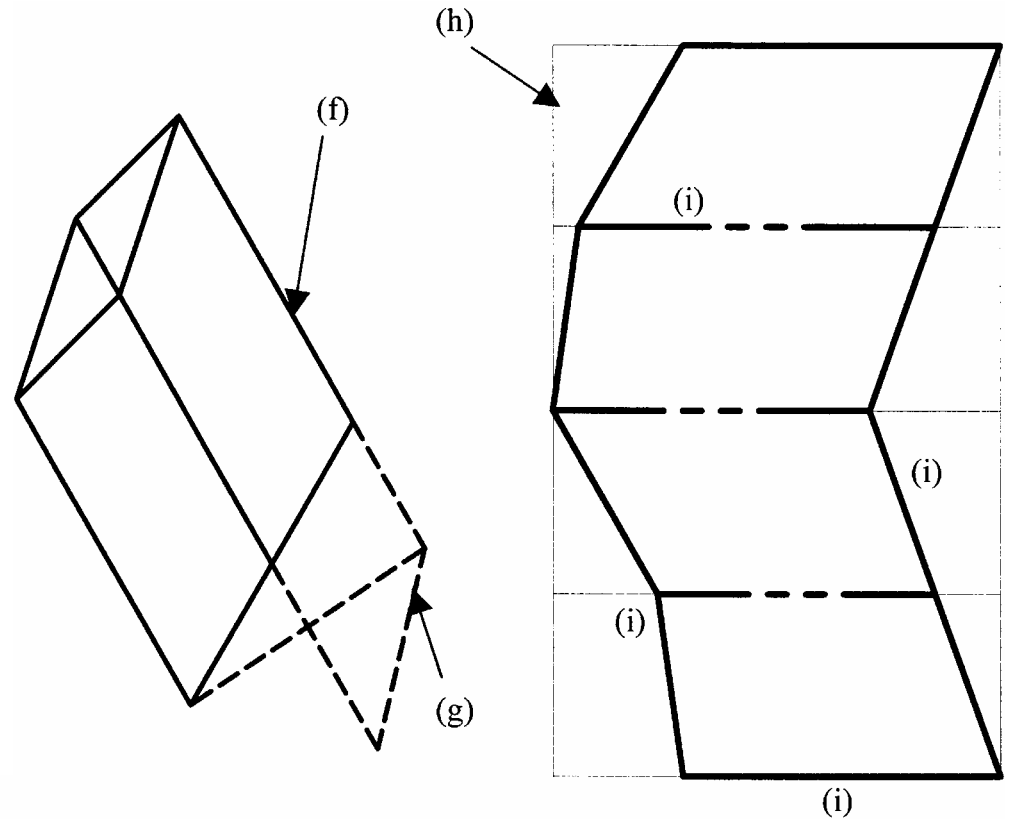


**Question 8**

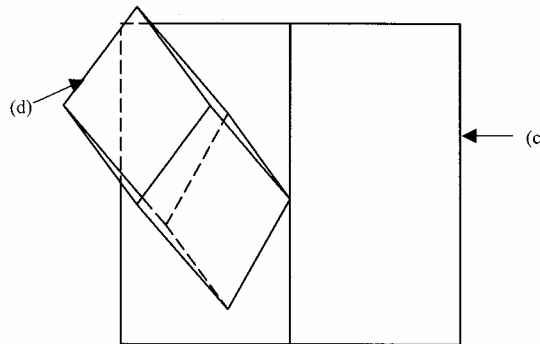
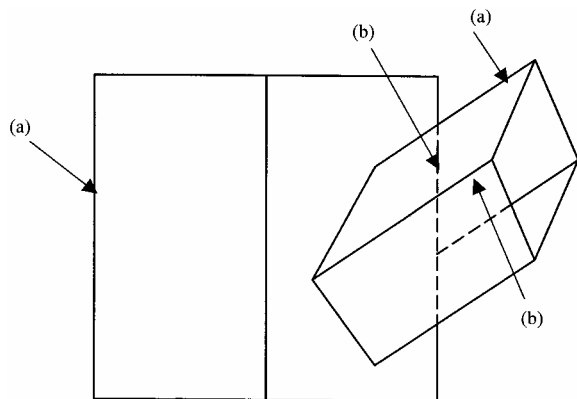
- (a) Elevation- full lines  
9 = 3, 7-8 = 2½, 5-6 = 2, 4 = 1½, 3 = 1, 2 = ½
- (b) Elevation- hidden lines 2 @ ½ each
- (c) End Elevation large tube, 4 full and 2 hidden lines  
5-6 = 2, 4 = 1½, 3 = 1, 2 = ½
- (d) End Elevation small tube, 10 full and 3 hidden lines  
11-12 = 4, 9-10 = 3, 7-8 = 2½, 5-6 = 2, 4 = 1½, 3 = 1, 2 = ½
- (e) Auxiliary view projected at correct angle @1
- (f) Auxiliary view full lines  
9 = 3, 7-8 = 2½, 5-6 = 2, 4 = 1½, 3 = 1, 2 = ½
- (g) Development - construction of true shape on Auxiliary view or Plan
- (h) Development - construction of four panels  
4 = 1, 2 = ½
- (i) Development 10 full and 3 fold lines  
10-13 = 2½, 7-9 = 2, 5-6 = 1½, 4 = 1, 3 = ½

**Marks**

**(18)**



**Total**



Note: Follow through:  
If no auxiliary view then marks for (h) only  
If auxiliary view drawn then check sizes for (i)

[END OF MARKING INSTRUCTIONS]