

Candidate Name	Centre Number	Candidate Number

WELSH JOINT EDUCATION COMMITTEE
General Certificate of Secondary Education



CYD-BWYLLGOR ADDYSG CYMRU
Tystysgrif Gyffredinol Addysg Uwchradd

140/02

DESIGN AND TECHNOLOGY

PAPER 2

FOCUS AREA: GRAPHIC PRODUCTS

(Foundation Tier – Grades G to C)

P.M. TUESDAY, 5 June 2007

(1½ hours)

	Leave Blank
Question 1	
Question 2	
Question 3	
Question 4	
Question 5	
TOTAL MARK	

ADDITIONAL MATERIALS

You will need basic drawing equipment and coloured pencils for this examination.

INSTRUCTIONS TO CANDIDATES

Write your name, centre number and candidate number in the spaces at the top of this page.

Answer **all** questions.

Write your answers in the spaces provided in this booklet. Where the space is not sufficient for your answer, continue the answer at the back of the book, taking care to number the continuation correctly.

INFORMATION FOR CANDIDATES

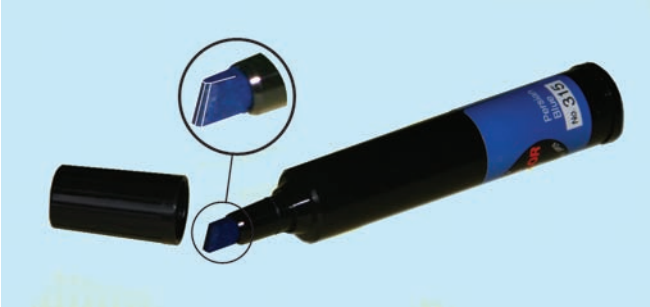
The number of marks is given in brackets at the end of each question or part-question.

No certificate will be awarded to a candidate detected in any unfair practice during the examination.

Answer **all** questions in the spaces provided.

1. (a) The photographs below show pieces of graphics equipment.
Study each photograph and then **complete** the sentence with the *full name* of **each** piece of equipment.

(i)



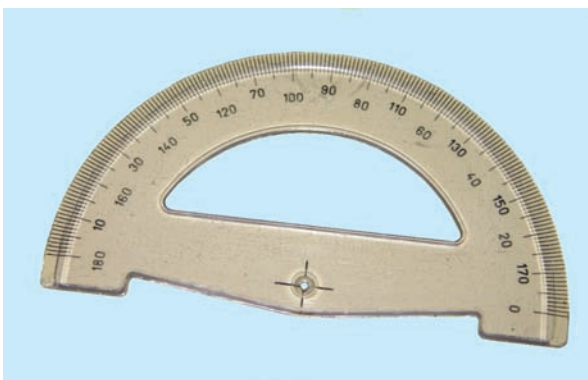
The full name of this piece of equipment is a [1]

(ii)



The full name of this piece of equipment is a [2]

(iii)



The full name of this piece of equipment is a [1]

(b) **Study** the photographs below of a disposable camera with its packaging.
The plastic camera is covered by a card case.



The camera without any of its packaging case.



The camera in its card case as it is meant to be used.

(i) **Give one** reason why the company has decided to cover the plastic camera with a card case. [2]

.....
.....

(ii) The card case for the camera is made from 350 micron white boxboard card. **Give two** reasons why this is the most appropriate material. 2 × [2]

Reason 1:

.....

Reason 2:

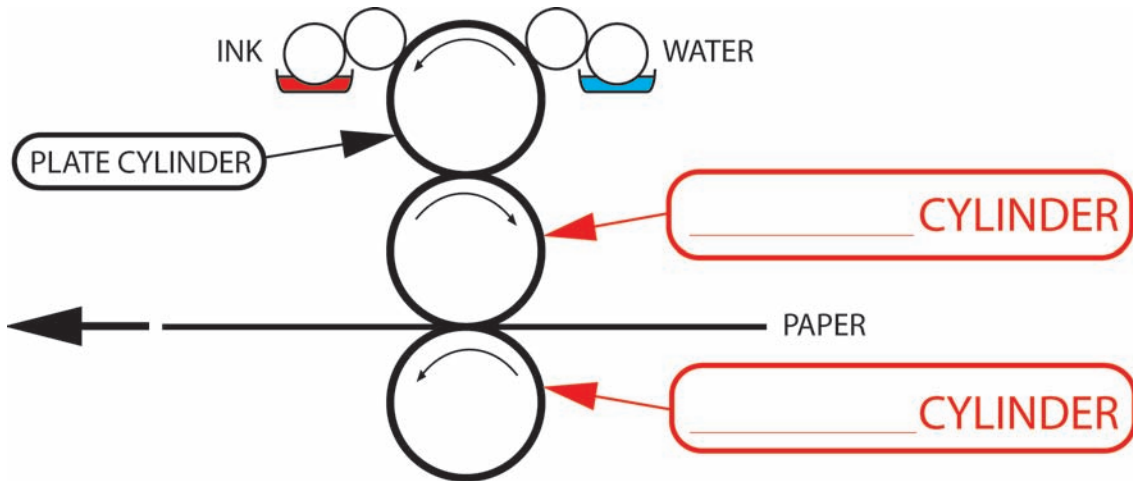
.....

(iii) The card case for the camera is made from a folded net. Die cutting is used to cut out the net. **Describe** the process of die cutting using notes and diagrams. [4]

.....
.....
.....
.....
.....
.....

- (c) The card case for the camera is printed using the offset lithographic printing process. A labelled diagram of the main parts of an offset lithographic printing press is given below.

Complete the diagram by putting the correct term in the **two** unfinished labels. [4]



- (d) Lithographic printing uses oil based ink and water to print. **Explain** how the **two** liquids work in the printing process. [3]

.....

.....

.....

.....

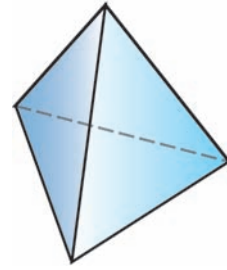
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2. The diagram on the right shows a package for a product.



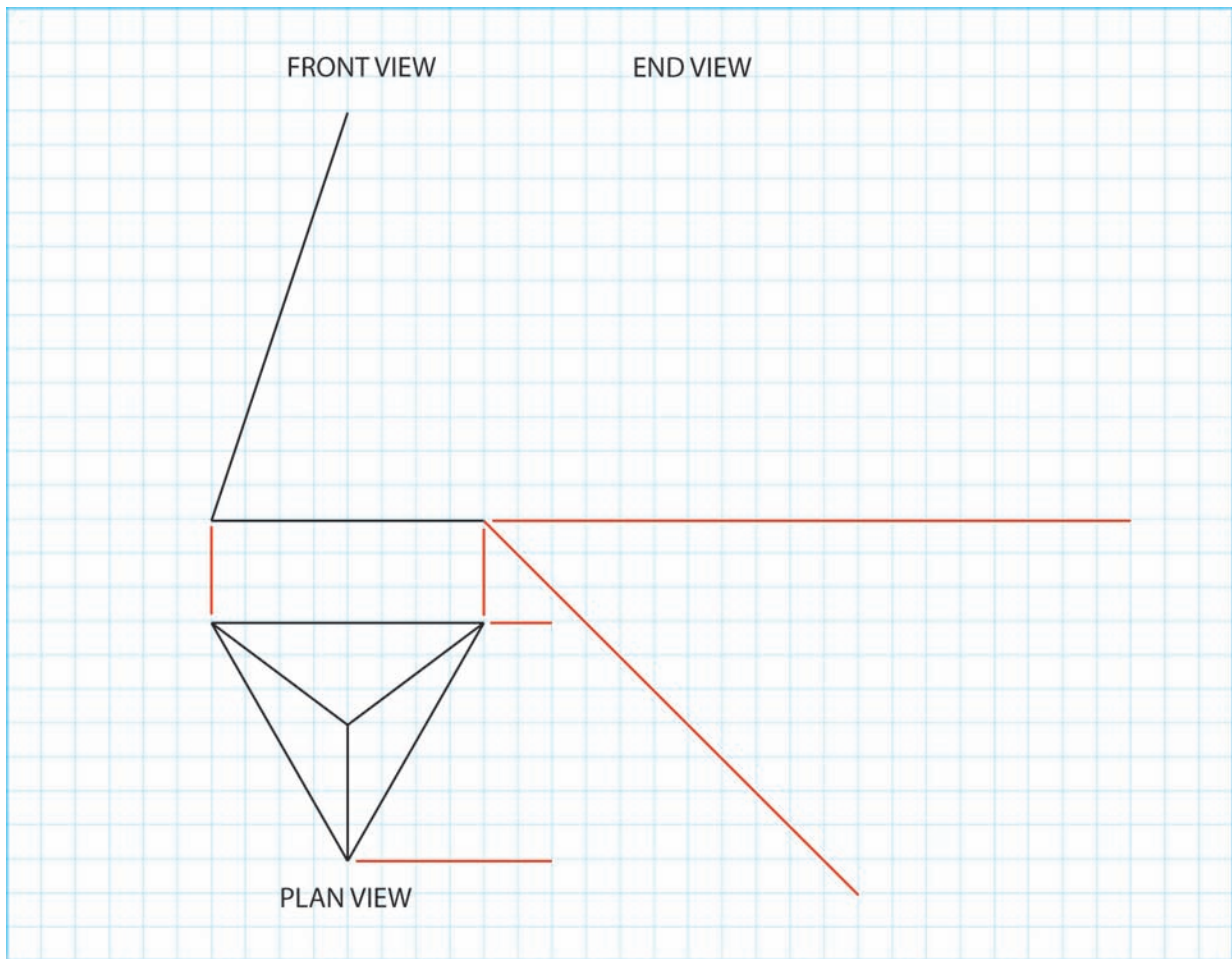
(a) **State** the full name of the shape of this package.

.....

[2]

(b) A partly completed orthographic drawing of the package is shown below.

Accurately complete the front view and the end view showing all projection lines. [9]

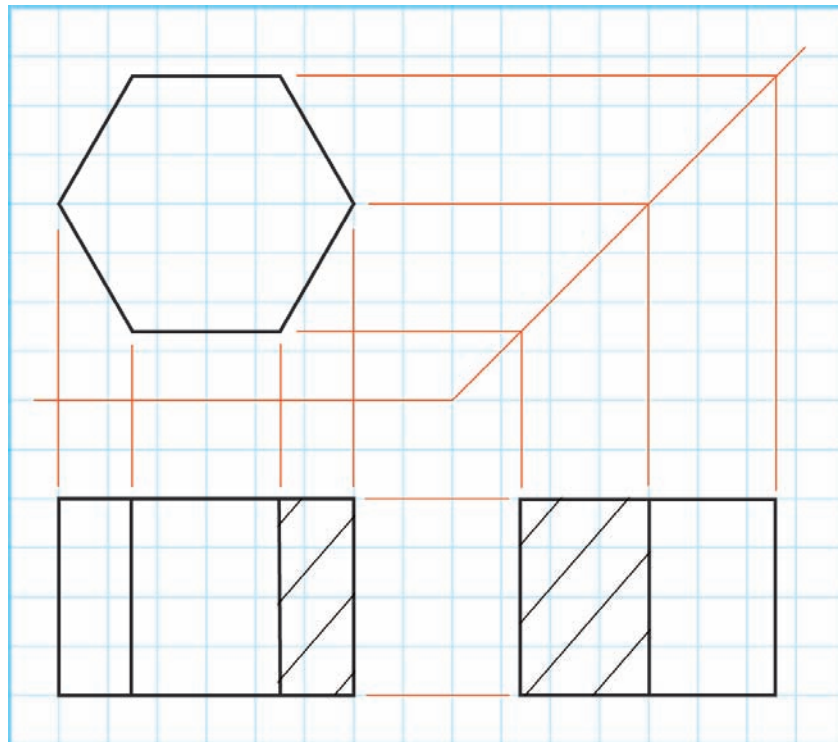


(c) **Give one** reason why designers use orthographic drawings. [2]

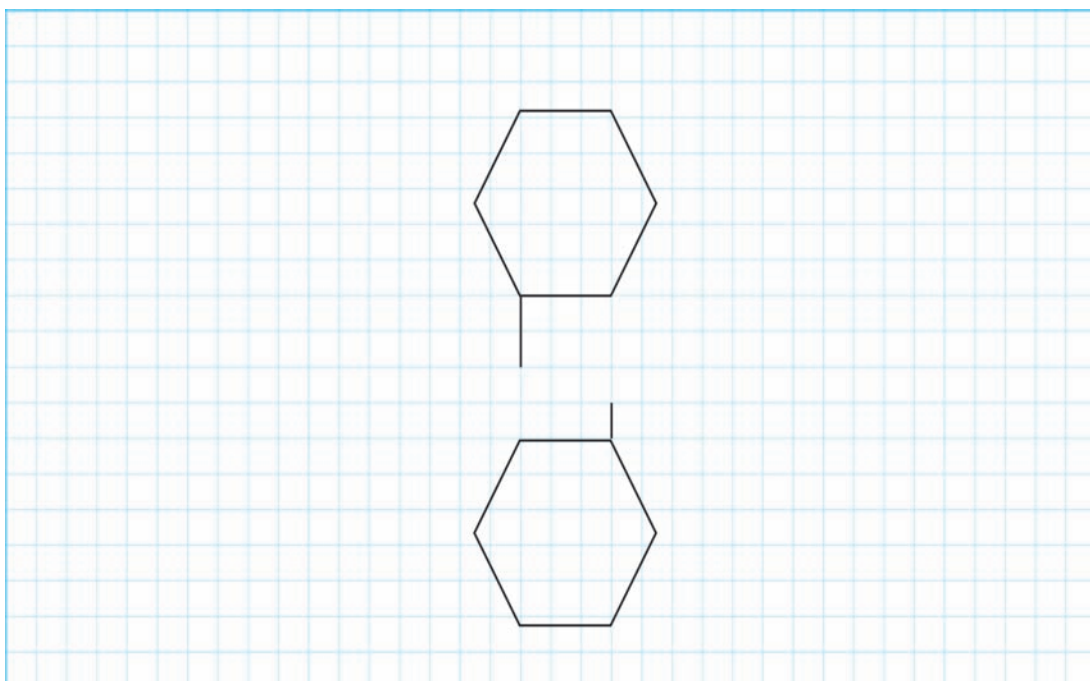
Reason :

.....

(d) An orthographic drawing of a different card box is shown below.



- (i) **Underline** the correct angle for the projection FIRST ANGLE THIRD ANGLE [1]
- (ii) **State** the full name of the shape of the box. [2]
- (iii) A partly drawn net for the box is shown below. **Complete** the net. [6]
Do not include any glue tabs on your drawing.



3. (a) From the list below, choose the **four** process colours used in full colour printing. [4]

Red Blue Cyan Green Magenta Black Yellow

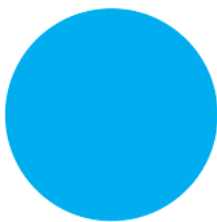
Colour 1:

Colour 2:

Colour 3:

Colour 4:

(b) In the space provided, **write** the names of the process colours shown below. [4]

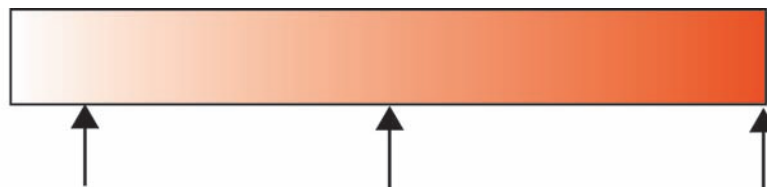


Colour name:



Colour name:

(c) Colours are often described as a percentage colour e.g. 25% red. **Look** at the coloured strip below and **label** the points indicated with their percentage colour. [3]



..... % RED % RED % RED

(d) Colours are linked to words.

From the list below, **choose** the colour that best represents the words listed in the table. [3]

RED

WHITE

BROWN

PURPLE

Words	Name of the colour
Luxury.
Power, danger.
Earth, nature.

4. (a) Some font categories are listed below. **Complete** the table by adding the category to which **each** font belongs. [4]

DECORATIVE MODERN OLDSTYLE SANS SERIF SCRIPT

Example of a font	Category
Gloves keep your hands warm.
Gloves keep your hands warm.
<i>Gloves keep your hands warm.</i>
<i>Gloves keep your hands warm.</i>

- (b) Fonts are measured in points. **State** approximately how many points there are in one millimetre. [1]

.....

- (c) Fonts are suitable for a particular use. The image alongside is a frame from a children’s comic book that gives information about animals.

From the list below, **select** the most appropriate font to be used in the speech bubble and **give two** reasons why you have chosen it.



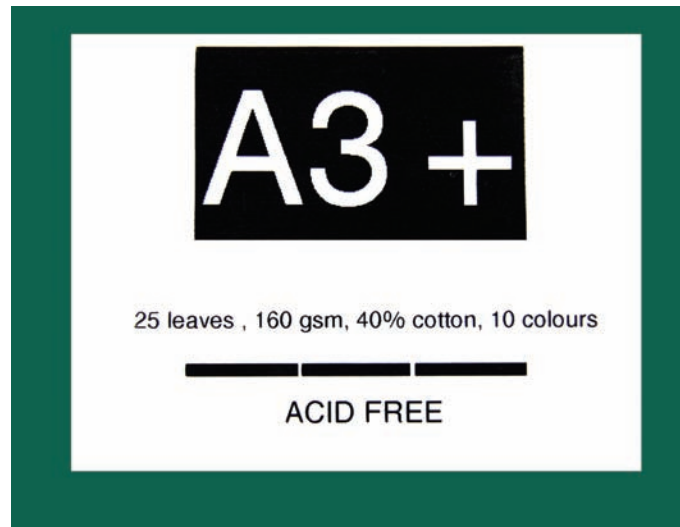
BANK GOTHIC POSTER BODONI COMIC SANS *JOKERMAN*

Selected font : [2]

Reason 1: [2]

Reason 2: [2]

(d) A label from a pack of paper is shown below.



(i) **State** what is meant by *25 leaves*. [2]

.....

.....

(ii) **State** what is meant by *160 gsm*. [2]

.....

.....

(iii) **State** what is meant by *A3+*. [2]

.....

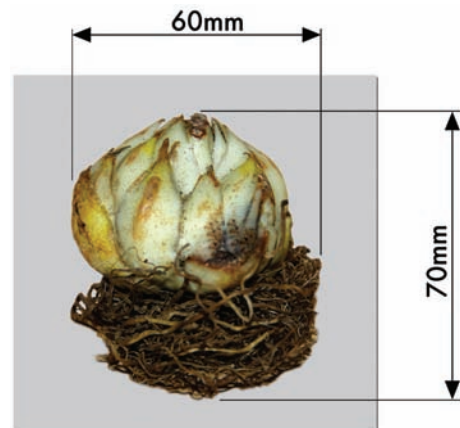
.....

(iv) **State** how many sheets of A4 paper can be made from one A3+ sheet. [1]

.....

5. A garden centre sells flower bulbs in the spring. A photograph of a bulb is shown alongside with its overall sizes. Packaging for the bulbs is needed.

The name of the garden centre is 'GROW'.



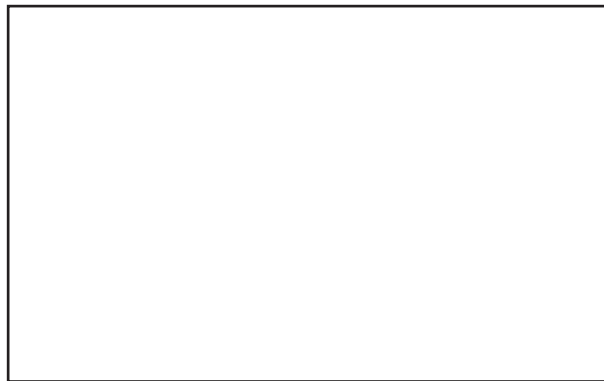
- (a) A logo is needed for the package.

In the rectangle below, **design** a logo using the name 'GROW' or an image to represent the name. The logo must fill the rectangle.

Marks will be awarded for:

- designing a logo that uses the name or an image to represent the name;
- using all the space available;
- quality of drawing;
- quality of use of colour.

[3]
[1]
[2]
[2]



(b) The package needs to hold two bulbs.

- (i) **Design** a package that:
 - holds two bulbs;
 - is made from folded card that is protected from moisture;
 - has the logo of the garden centre printed on it;
 - is decorated to make it look appealing;
 - has space on the package to include planting instructions.

Marks will be awarded for:

- holding two bulbs; [1]
- showing the space for the logo; [1]
- showing the decoration to be printed on the package; [2]
- showing the space for the planting instructions; [1]
- showing how the folded card package can be made. [3]

(ii) **State** the specification of the card to be used to make the package. [1]

.....

(iii) **State** how the card can be protected from moisture. [1]

.....

- (c) **Make** an accurate drawing of the net of your design for the package.
You should show both fold lines and cutting lines.
You must add the **three** (3) most important dimensions to your drawing.

[7]

