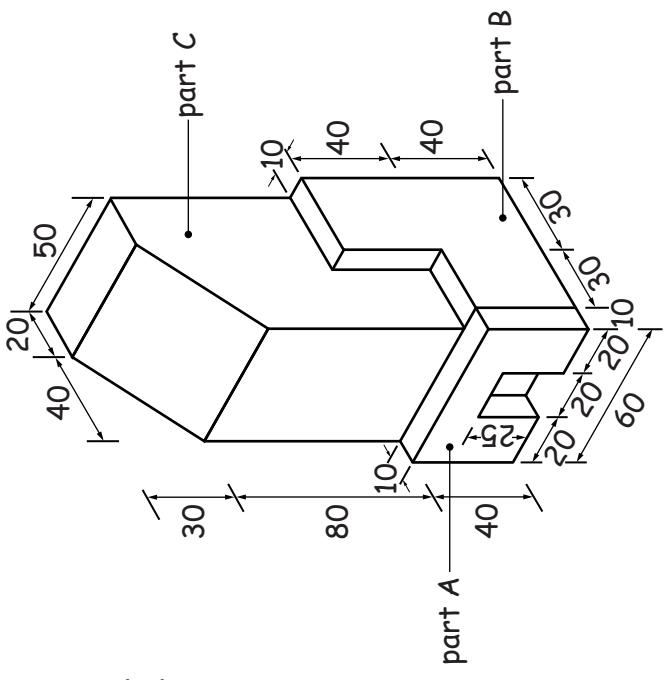
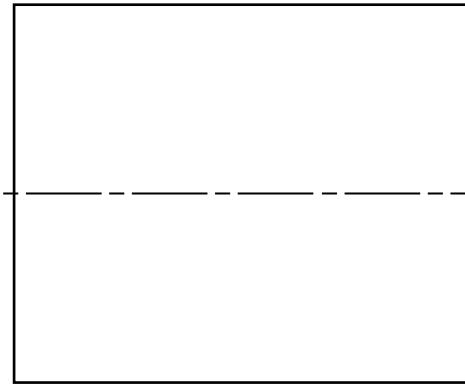
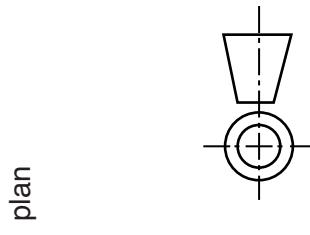
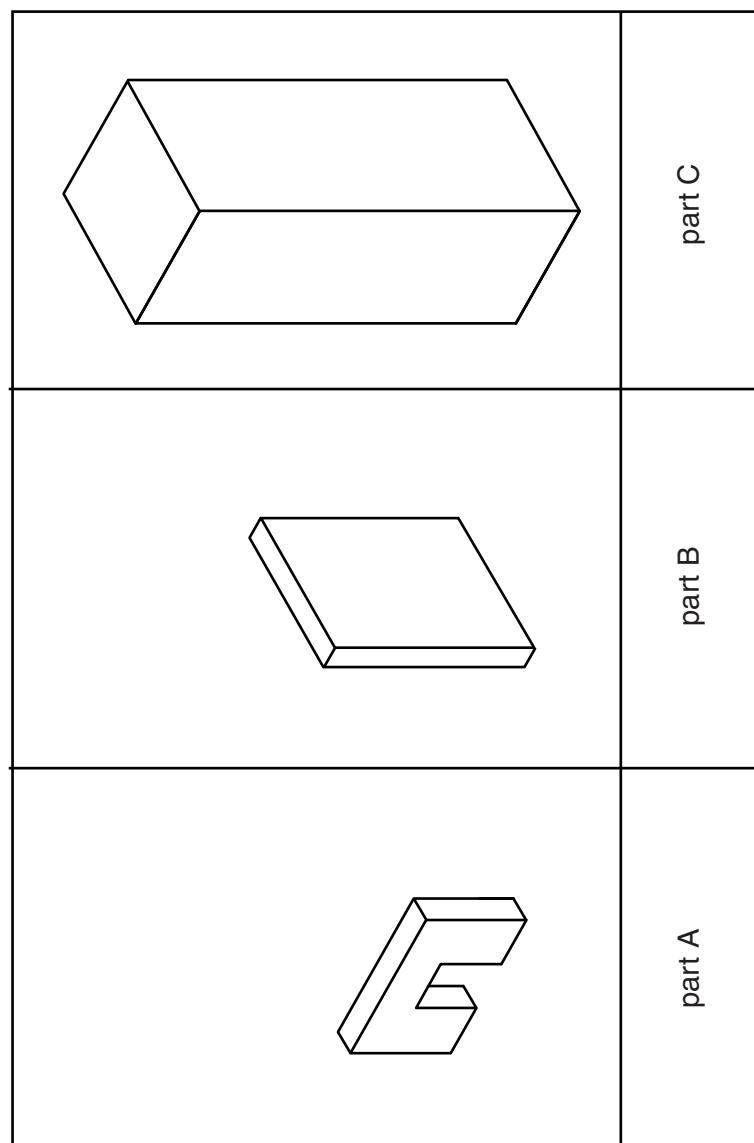


Section A
Answer all questions in this section.

A sketch of a model of a hotel is shown to the right.
The model is made from three pieces of styrofoam.

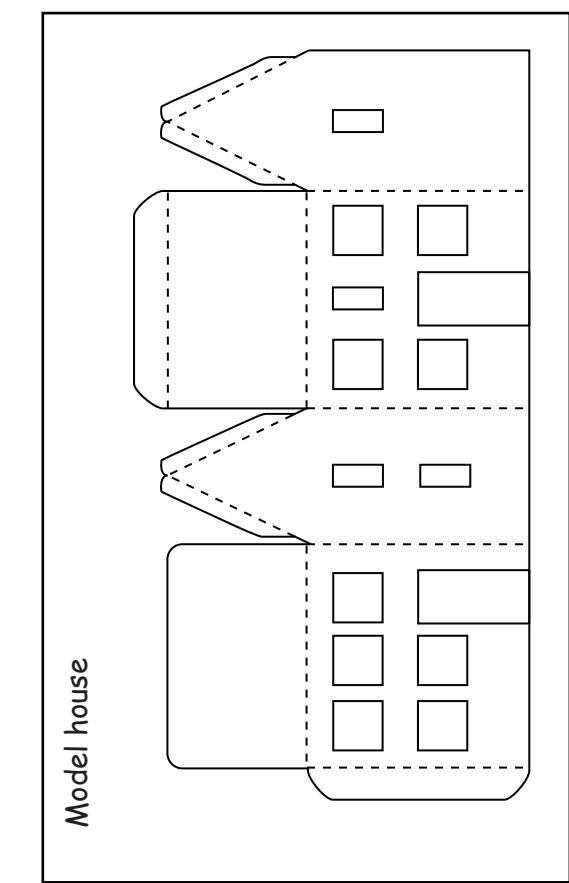
**A2** Complete the full size plan and front view of the model of the hotel below. [8]**A1** Complete the sketches below of the three pieces of styrofoam used to make the model of the hotel by:

- (a) adding thick and thin line technique to part A; [2]
- (b) sketching in the shapes of part B and part C. [4]



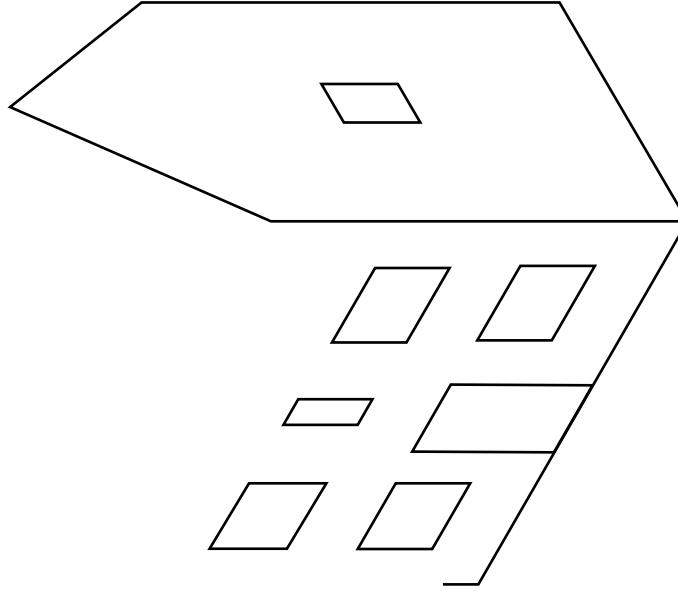
A3 The sketch below shows the development (net) for a model of a house that is printed on thin card.

The development (net) of the model is printed on card and coloured by hand.



- (b) Name **two** ways of adding colour to the development (net) of the model.
1. [1]
2. [1]
- (c) The development (net) of the model is perforated so that it can easily be removed from the card sheet. In the space below use a sketch and notes to show what is meant by the term perforated.

(a) In the space below complete the isometric drawing of the fully assembled model of a house. [4]

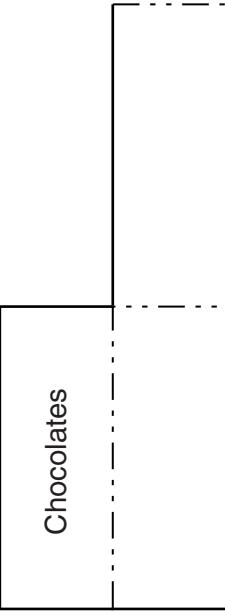
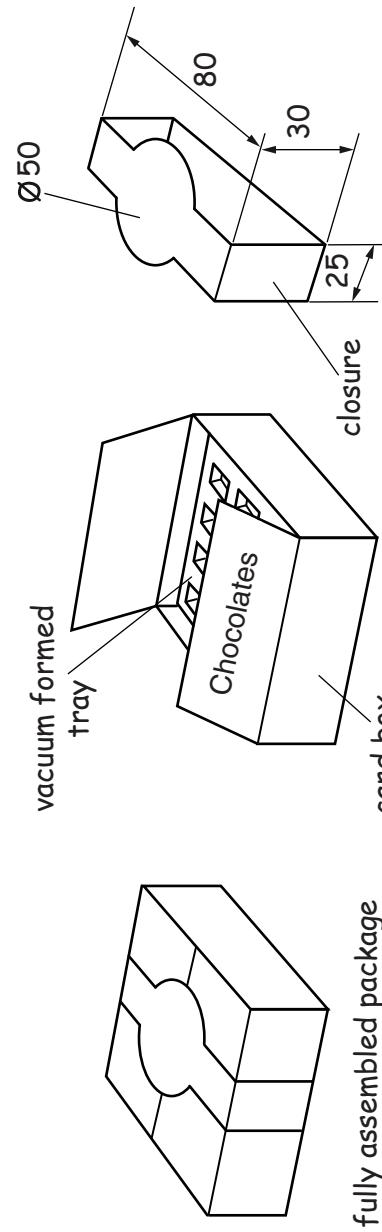


- (d) State **one** reason why the development (net) of the model is considered to be an uneconomical use of materials and explain how this could be overcome.

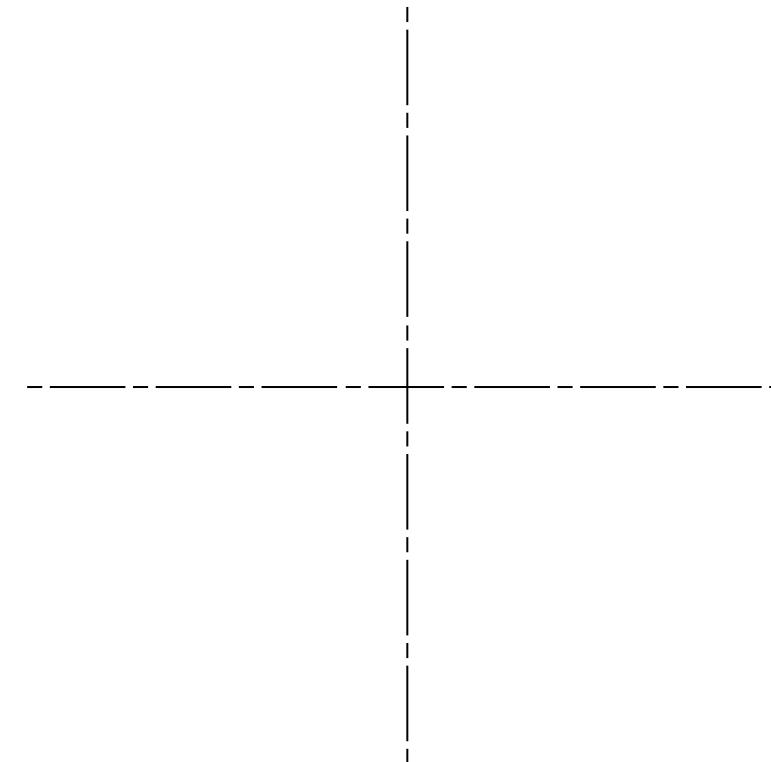
Reason [1]
This problem could be overcome by
....
....
....
[2]

Section B
Answer either question B4 or B5.

- (b) Complete the sketch below of the development (net) for the card box. Include all fold lines, glue tabs and fold in flaps. [9]

**B4** Sketches of a package for chocolates are shown below.

- (a) On the centre lines below draw a full size planometric view of the closure. [10]

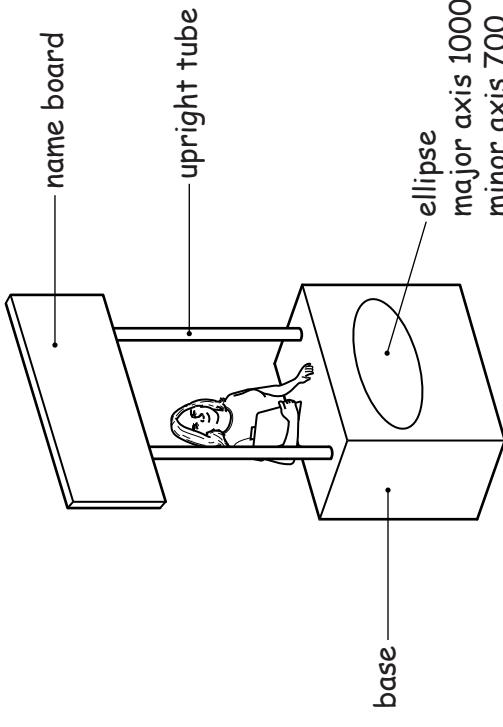


[10]

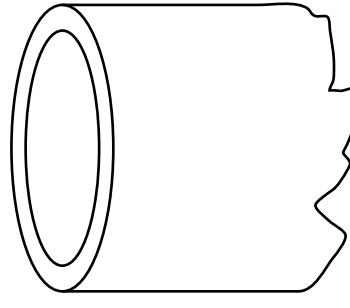
- (c) 10000 packages for the chocolates are to be made.
- Name the printing method that would be used in the production of the card boxes.
.....
[1]
 - Name a specific plastic that would be used to make the vacuum formed trays.
.....
[1]
 - In the space below use sketches and notes to explain the vacuum forming process. [4]

Centre Number	Candidate Number	Candidate Surname	Other Names	[Turn over]	For Examiner's use
0445/21 © UCLES 2015	Oct/Nov 2015 DC (ST/FD) 101709/4	1 hour			

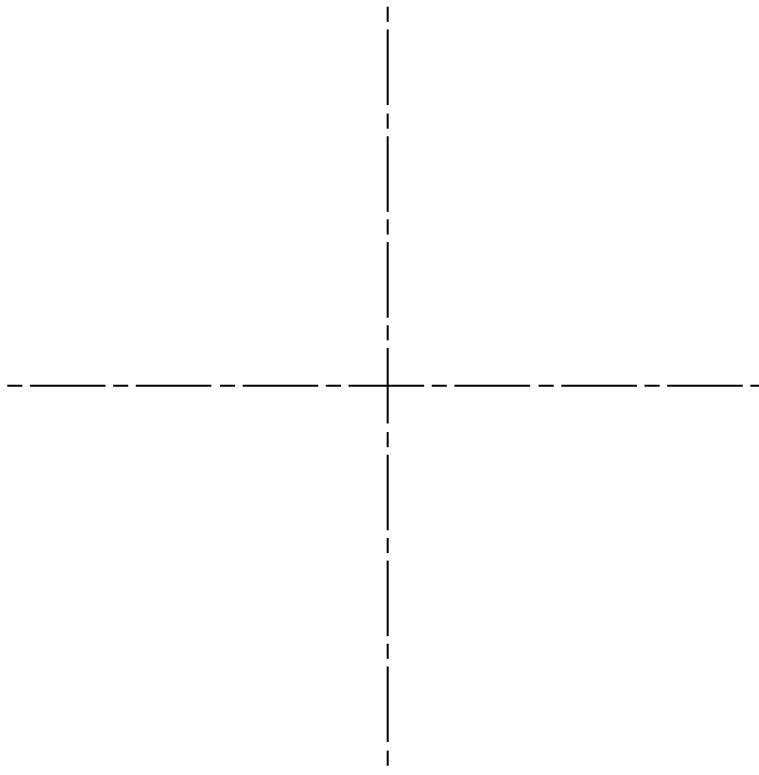
B5 A sketch of a stand used to carry out customer research in shopping centres is shown below.



(a) Render the upright tube shown below to make it look like it is made from shiny plastic. [5]



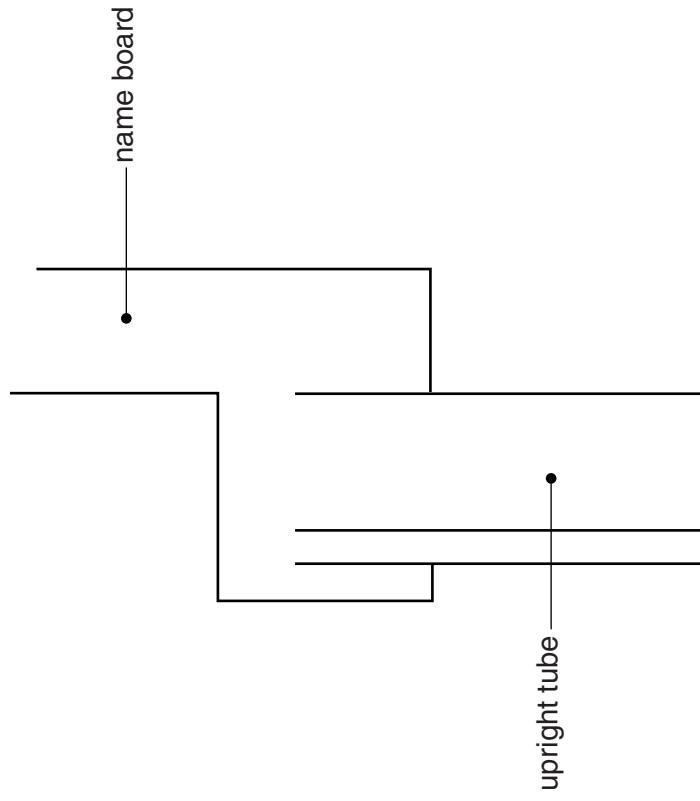
(c) On the centre lines below construct a 1 : 10 scale drawing of the ellipse used on the front of the base. [7]



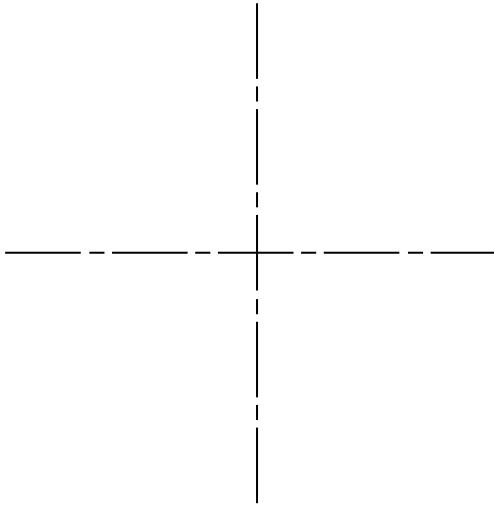
(d) The results of research on customers' favourite washing powder are shown below.

favourite	Zupaclean	Spotgo	Glowrite
	800	400	600

(b) Complete the sectional view below to show the method of joining the upright tube to the name board. [7]



(i) On the centre lines below draw a pie chart to show the results of the customer research on washing powder. Use labels and colour to enhance the appearance of the drawing. [5]



(ii) State one advantage of using ICT for customer research. [1]