Cambridge IGCSE®

DESIGN & TECHNOLOGY

Paper 5 Graphic Products

SPECIMEN PAPER

1 hour

You must answer on the two A3 pre-printed answer sheets.

You will need: Two A3 pre-printed answer sheets (enclosed)
Standard drawing equipment

INSTRUCTIONS

● Section A: answer all questions.
● Section B: answer one question.
● Use an HB pencil for any drawings and a black or dark blue pen for any writing.
● Write your name, centre number and candidate number in the boxes at the top of the page and on both pre-printed answer sheets.
● Answer in the space provided on the answer sheets.
● Do not use an erasable pen, staples, paper clips, glue or correction fluid.
● Do not write on any bar codes.
● You may use a calculator.
● You may use standard drawing equipment, including coloured pencils.
● You must show all construction and projection lines clearly where appropriate.
● At the end of the examination, insert both sheets into this booklet. Do not punch holes in the cover and sheets or tie with string.

INFORMATION

● The total mark for this paper is 50.
● The number of marks for each question or part question is shown in brackets [ ].
● All dimensions are in millimetres.

This document has 4 pages. Blank pages are indicated.

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Section A
Answer all questions in this section.

The logo design for a new coffee shop is shown below.

1. Complete the full size view of the logo in the space provided to the right by drawing:
   (a) the cup and crown outline [3]
   (b) the face on the cup. [5]

2. The logo is to be printed on the front page of a menu. The page measures 210 × 140. The logo is positioned in the centre of the page. Draw the outline of the page around the logo. [3]
A holder for carrying four cups of coffee is shown below.

The holder is made from 10 mm thick softwood.

(a) Complete the orthographic views of the holder to a scale of 1:2. [10]

(b) A table sign from the coffee shop is shown below. Use thick and thin line technique on the table sign. [4]
Section B
Answer one question, either question 4 or 5, from this section.

4 A coffee mug is shown below.
   (a) Complete the drawing of the mug by constructing the elliptical shape of the top edge. [7]

   (b) (i) Identify two pieces of anthropometric information the designer would use when deciding on the size and shape of the mug handle.
   1 ..............................................................................................................................................
   2 .............................................................................................................................................. [2]

   (ii) Explain how the two pieces of anthropometric information would be used in the design of the mug handle.
   1 ..............................................................................................................................................
   2 .............................................................................................................................................. [2]

   (c) An image is to be printed onto the mug using thermochromic ink. Describe how using thermochromic ink will affect the image.
   ..................................................................................................................................................
   ............................................................................................................................................. [2]

   (d) Orthographic views of a menu holder from the coffee shop are shown below.

   Complete the full scale isometric view of the menu holder. [12]
A package for biscuits is shown below.

(a) Complete the scale 1:2 development (net) of the package for biscuits by drawing:

(i) the remaining surfaces and glue tabs for the development (net) [10]

(ii) the clear plastic window on the lid of the package. [4]

(b) The cardboard developments (nets) are to be produced in different quantities. Complete the table below by giving a suitable tool/item of equipment for cutting out the developments (nets) in the quantities given.

<table>
<thead>
<tr>
<th>Quantities</th>
<th>Tool/Item of equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
</tr>
<tr>
<td>8000</td>
<td></td>
</tr>
</tbody>
</table>

(c) The recycling symbol shown below is to be printed onto the package. State two reasons why symbols are used on packaging instead of written text.

1 ...............................................................................................................

2 ...............................................................................................................

(d) The results of a questionnaire on people’s favourite biscuit flavour are shown below.

<table>
<thead>
<tr>
<th>Biscuit</th>
<th>Chocolate</th>
<th>Custard</th>
<th>Jam</th>
<th>Ginger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number</td>
<td>425</td>
<td>150</td>
<td>275</td>
<td>300</td>
</tr>
</tbody>
</table>

In the space below draw a bar chart to show the results of the questionnaire. Use labels and colour to enhance the appearance of the chart. [6]