Section A

Answer all questions in this section.

A1 A sketch of a plastic cup and lid is shown below.

A2 (a) Name a method of manufacturing the lid of the cup.
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(b) A straw is pushed into the hole in the top of the lid. Complete the drawing below to show part of a straw with a 45 degree bend.

(c) Explain why the cup is wider at the top than at the bottom.
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A face shape cut from foam board sheet is to be added to the plastic cup.

Orthographic views of the face shape are shown below.

(a) Construct a 2 : 1 planometric drawing of the face shape in the space below. Sizes should be taken from the orthographic views. [7]

(b) Use a sketch and notes to show a method of attaching the foam board face shape to the cup. [2]

(c) State two reasons why the face would be added to the cup.

1. ......................................................................................................................................... [1]
2. ......................................................................................................................................... [1]
Section B
Answer either question B4 or B5.

B4 A sketch of a package for fresh fruit is shown on the right.

(a) Complete the full size drawing of the development (net) of the card sleeve below by:
   (i) adding the missing surfaces; [9]
   (ii) adding the missing glue tab; [2]
   (iii) completing the name. [3]

(b) Describe the method of cutting out 10 000 copies of the development (net) for the card sleeve.

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(c) The apple shape on the card sleeve is to be embossed.

Use a sketch and notes to show what is meant by the term ’embossed’. [2]

(d) Explain why the symbol shown below is on the plastic pot.

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A package for biscuits is shown on the right. The package is made from paper and has a clear window on the front surface.

(a) On the start lines below complete the two point perspective drawing of the package. [16]

(b) A prototype of the package for biscuits is to be made in a design studio.
   (i) Name a material that could be used to make the clear window.
       ...................................................................................................................................... [1]
   (ii) Use sketches to show a method of making and attaching the clear plastic window to the package. [4]

(c) (i) Complete the list below to show three pieces of information that should be printed on the package.
   1. Eat within one week of opening.

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

   (ii) Use a sketch and notes to explain why the closure has a circular hole in it. [2]