Section A
Answer all questions in this section.

A1 A sketch of a model of a car transporter is shown below.

[Diagram of a car transporter with labels for trailer and cab]

Complete the orthographic views of the cab of the car transporter shown below.

[Orthographic views of a cab: side view, end view, plan]

A2 The trailer is to be redesigned to include a mechanism that allows the top of the trailer to lower. A model of the mechanism is made from four strips of card shown below.

[Diagram of a trailer mechanism with four strips of card]

(a) Sketch and name a method of fastening the strips of card together. [2]

(b) Complete the schematic drawing below to show the path of point A as the line X – Y moves from a vertical to a horizontal position. [4]
Car shapes cut from foam board sheet are added to the trailer of the car transporter.

Orthographic views of one of the car shapes are shown below.

(a) Construct a 2:1 isometric drawing of the car shape from the given start point A. Sizes should be taken from the orthographic views.

(b) State two reasons why foam board is a suitable material for the car shape.

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

(c) Describe how a computer could be used to search for and capture a car shape.

Search for ................................................................................................................................
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Capture ....................................................................................................................................
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Section B

Answer either question B4 or B5.

B4 A sketch of a package for an ice lolly is shown on the right.

(a) Complete the full size drawing of the development (net) of the package for the ice lolly below by:

(i) adding the missing surfaces; [8]
(ii) adding the missing glue tabs; [4]
(iii) completing the name ICE LOLLY. [3]

(b) Describe the printing method used to produce 10,000 colour copies of the package for the ice lolly.

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(c) Name and justify the choice of a colour for the fruit shape on the package for the ice lolly.

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(d) Draw and name another symbol that should be added to the package for the ice lolly. [2]
B5 A package for a toy is shown on the right.

(a) On the start lines below complete the estimated two-point perspective drawing of the package for the toy. [15]

(b) Use sketches and notes to show a method of making the clear plastic cover. [6]

(c) Complete the sketch below to show how the semi-circular tab can be formed in the development (net) of the front part of the package. [4]