This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners’ meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.
Section A

A1  (a)  Cab outline (octagon)
  Rectangle 90 \times 45 (1)
  On centre line (1)
  Half diagonal arcs from corners (1)
  Sides to arcs (1) \[4\]

(b)  Semi circle
  Ø 50 on correct centre (1) \[1\]

(c)  Train boiler
  horizontal chimney to cab (1)
  vertical boiler to cab (1) \[2\]

(d)  Chimney
  15 wide (1)
  Top level with cab (octagon) (1) \[2\]

(e)  Missing wheel
  Ø 30 (1)
  Correct position/alignment (1) \[2\]

  [Total: 11]

A2  Lettering
  Accuracy and proportion of:
  T (1)
  R (1)
  Spacing (1)
  Height (1) \[4\]

  [Total: 4]

A3  Perspective view (award marks for isometric)
  Length to right approx. 140 (1)
  Length to left approx. 100 (1)
  Door  40 wide (1)
  60 high (1)
  Central on LHS (1)
  Window 40 wide (1)
  35 High (1)
  Central on RHS (1)
  Min two lines to VP1 (1)
  Min two lines to VP2 (1) \[10\]

  [Total: 10]
Section B

B4 (a) Vacuum formed tray
Tray shown in isometric (1)
Tray width 80/82 (1)
Tray length 160/164 (1)
Tessellated shape for indent to size (2)
Tessellated shape 60° ends (2 x 1) (2)
Indent depth evident (1)
Indent shape depth 10 (1)

(b) Development
Two large sides evident (2 x 1) (2)
Two large sides 80 x 42 (2 x 1) (2)
Two small sides evident (2 x 1) (2)
Two small sides 80 x 26 (2 x 1) (2)
One end evident (1)
One end 42 x 26 (2 x 1) (2)
One long glue flap (on 80 side) (1)
Three glue flaps for end (3 x 1) (3)
One finger cut-out (1)

[Total: 25]

B5 (a) End Elevation
Height 100 (1)
Width 80 (1)
Three faces evident (1)
Central face 40 (1)
Two side face shown 20 (1)
Height of display surface 30 (1)
Support flaps shown (1)
Support flaps correct shape (1)

(b) Development
Six sides all same width as given (6)
Two high rectangles next to join (1)
3 / 4 from join 80 high side (1)
Two angled sides evident (2 x 1) (2)
Angles line 40 high to 100 (1)
One glue flap on join (correct position) (1)

[Total: 25]

(c) Display surface
Hexagon drawn (1)
Regular hexagon drawn 40 side (1)
Supporting flaps drawn (1)
Six regular flaps shown (1)
Six flaps 30 deep (1)

[Total: 25]