MARK SCHEME for the May/June 2013 series

0445 DESIGN AND TECHNOLOGY

0455/23   Paper 2 (Graphic Products), maximum raw mark 50

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 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

Section A

A1 (a) Semi circle evident (1)
Ø 80 (1)   **[2]**

(b) Triangle evident (1)
80 base and 50 apex (1)   **[2]**

(c) Two rectangles (1 + 1) (2)
80 × 20 rectangles (1 + 1) (2)   **[4]**

(d) Thick line enhancement (1)   **[1]**

[Total: 9]

A2 (a) Accuracy and proportion of:
A (1)
R (1)
Spacing (1)
Height (1)   **[4]**

(b) Border complete (1)
Symmetrical angle (1)   **[2]**

[Total: 6]

A3 (a) Height of rectangular base is 20 (1)
Width of rectangular base is 90 (1)
Height of C & K 80 (1)

Semi circle plots evident (1)
Semi circle drawn to candidate's plots (1)
Repeat curve C (1)
Base evident below curve of C (1)   **[7]**

(b) Printed line for **K** (1)
Printed line for **I** (1)   **[2]**

(c) Coin slot 30 × 5 on correct face (1)   **[1]**

[Total: 10]

Section B

B4 (a) *Development*
4 faces development shown (4 × 1) (4)
Fold in flap pocket 1 evident (1)
Fold over flaps top & bottom to pocket 1 (on back, not on flap) (1)
Flaps 90 × 20 to scale (2 × 1) (2)
Fold up flap to pocket 2 evident (1)
Fold up flap attached to correct face and in correct orientation (1)
Fold up flap has glue flap correct (1)
Fold up flap 140 × 180 to scale (1)
Fold up flap 60° angle (1)   **[13]**

(b) *Arrow-tabs and slots*
Arrow and neck correctly drawn (2)
Slot size to match neck (1) dist (1) (2)
Two arrow-tabs on back (2 × 1) (2)
Two arrow-tabs on fold over laps (2)   **[8]**

(c) *Letters (award only on development)*
C K I added (1)
Appropriate size (1)
On correct face (1)
In correct orientation (1)   **[4]**

                                                                      [Total: 25]

B5 (a) *Two dimensional Pie chart*
Circle drawn (1)
Divided into 6 (1)
Correct divisions 120/60/90/30/45/15; 2 correct (1), 3 correct (2) 4/5 correct (3)
Clear labels to correct sector (1)
Correct quantity to labels (1)   **[7]**

(b) (i) *Two dimensional bar chart*
Suitable scale selected (1)
Information correctly plotted (× 5) (1)
Labels evident (days of week) (1)   **[3]**

(ii) *Three dimensional bar chart*
3D chart (1)
Suitable scale selected (1)
Vertical scale labelled 'customers' (1)
Two rows of columns (1)
Corporate data at the front (1)
Domestic data plotted to scale (5 × 1) (5)
Corporate data plotted to scale (5 × 1) (5)   **[15]**

                                                                      [Total: 25]