
CDT: DESIGN AND COMMUNICATION

7048/01

Paper 1

For Examination from 2017

SPECIMEN MARK SCHEME

2 hours 30 minutes

MAXIMUM MARK: 80

This document consists of **4** printed pages.

Question	Answer	Marks
A1(a)	Appropriate colour used (brown – yellow) [1] Some grain added [1] Grain added correctly to side, top and end (including annual rings) [1]	3
A1(b)	Arc correctly used to show the arm swinging [1] At least three positions for the arm drawn [1] Three positions plotted for L [1] or more than three positions [2] Load is finally positioned on the ground [1] Points joined together to form a smooth curve for L [1]	6
A1(c)	Vertical 30 to the right of A [1] Horizontal 80 up from A [1] Vertical 80 to the left of A [1] Radius 80 circle to top corner [1] Horizontal 30 long to bottom left [1] R10 arc [1] R50 arc [1] Shape correctly lined in to overlay [1]	8
A1(d)(i)	First or Third [1]	1
A1(d)(ii)	Award one mark for each example, to a maximum of 2 marks. Examples include: Dimensions or measurements The shapes of the pieces The positions of holes [1 × 2]	2
A1(e)	Three-dimensional bar chart [1] Five equal width bars [1] Years indicated next to bars [1] Suitable vertical scale [1] Sales plotted correctly [1]	5
A1(f)	At least 3 stages added (text) [1] At least 3 stages in process boxes (rectangular) [1] End box added in correct shaped box [1] Fourth stage added as a decision box [1] Arrows added to the decision box [1]	5

Question	Answer	Marks
B2(a)	Any rectangle drawn [1] Rectangle correct to overlay (plus or minus 2 mm) [1] Three equal divisions of the rectangle [1] Three divisions of rectangle correct to overlay [1] Any three squares drawn in the correct positions (bottom half) [1] Any three circles drawn in the correct positions (top half) [1] Circles and squares correct to overlay [1] Stripe correct to overlay or candidate solution [1] Semi-circle drawn in correct position (middle top – overlay or candidate solution) [1]	9
B2(b)(i)	Lithography or digital printing [1]	1

Question	Answer	Marks
B2(b)(ii)	Concentrate on how [1] and success criteria [1]. For example: <i>Ask people what they think of it [1] and if they say nice things it is a successful design [1]</i> <i>Look at sales [1] and if they have gone up the design is a success [1]</i>	2
B2(c)	Stage 1 Strip of acrylic shown [1] All folds shown with a dashed line [1] Cuts for base shown with a solid line [1] Stage 2 Strip of acrylic shown [1] 90 degree fold shown to form three bases [1] Cuts for the base clearly visible [1]	6
B2(d)	3D sketch of base [1] Square base [1] Two holes shown in base [1] 3D sketch of triangle [1] Triangle in appropriate position above base [1] 3D sketch of the two pegs [1] All parts line up correctly (in line along one axis) [1]	7

Question	Answer	Marks
B3(a)	Six connected surfaces shown [1] Six surfaces make a box with a sloping top [1] Five additional surfaces correct to overlay [5] (mark each surface individually with a ✓ to avoid early errors resulting in double penalty) Three further glue tabs shown [1 × 2] Glue tabs in the correct positions [1] Three fold in flaps [1] drawn in appropriate positions [1] Best fold in flap an appropriate shape and size [1] Some fold lines drawn to a recognised convention/labelled [1] or all fold lines drawn to a recognised convention/labelled [2]	15
B3(b)	Rule or straight edge [1] Cutting mat [1] Safety rule [1] One method of adding colour from: [1] Crayons Paint Coloured paper Ink, etc.	4
B3(c)	Design will stand on a flat surface [1] Design will hold the package of sweets [1] Surface graphics show a range of sweets is available [1] Notes or labels evident [1] Quality of sketch satisfactory [1] or good [2]	6

Question	Answer	Marks
B4(a)	Inner border added to the Eagle sheet [1] Border of the correct size [1] The word Eagles added [1] The word Eagles added in an appropriate style of lettering [1] Outside edge of paper added to the Shark sheet [1] Outside edge the correct size [1] Shark added [1] Shark of an appropriate style (matches given designs) [1]	8
B4(b)	Original produced (computer printout, drawn, cut and paste, etc.) [1] Method (photocopying, silk screen printing, print from computer, etc.) [1] Clear understanding that it is a single colour print [1]	3
B4(c)	Sketches and notes show an understanding that: The shapes/name could be peeled off a backing sheet [1] The shapes/name could be stuck to a shirt [1] Advantages: No pins (safety) or damage to the shirt [1] No additional materials required (Velcro) [1]	4
B4(d)(i)	Circle divided into three sectors [1] Two sectors the correct size (120, 160 or 80 degrees) [1 × 2] Different colours used to identify each of the sectors [1] Sectors correctly labelled [1]	5
B4(d)(ii)	Clear understanding of the term sector [1] Isometric drawing [1] Sector drawn [1] Construction method clearly shown [1] Sector matches one part of candidate solution to B4 (d) (i) [1]	5