

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
General Certificate of Education Ordinary Level

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**CDT:DESIGN AND COMMUNICATION**

**7048/01**

Paper 1

**October/November 2007**

MARK SCHEME

Maximum Mark : 100

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**IMPORTANT NOTICE**

Mark Schemes have been issued on the basis of **one** copy per Assistant examiner and **two** copies per Team Leader.

CDT: Design and Communication 7048/01  
2007 Paper 1 Mark all questions to a tolerance of +/- 2mm

## **CDT: Design and Communication 7048/01**

### **Mark scheme - 2007**

**Question 1**

1 (a)	<b>Front elevation</b> Width - correct to overlay Height of wall - correct to overlay Height of roof - correct to overlay Windows - correct to overlay (1 mark each) Door - correct to overlay Porch width and pitch – of a suitable size (1 mark each)	1 1 1 2 1 2	8
	<b>End elevation</b> Width - correct to overlay Height of walls - correct to overlay Pitch - correct to overlay Chimney shown of a suitable size	1 1 1 1	4
	<b>Plan</b> Width - correct to overlay Ridge - correct to overlay Porch - correctly shown projected from front elevation Porch - correctly shown projected from end elevation	1 1 1 1	4
	Scale 1:2 used throughout First/third angle projection used (symbol not required)	1 1	2
			18
1 (b)	Front - height correct to overlay End (left) - height of walls and pitch correct to overlay (1 mark for each) End (right)- height of walls and pitch correct to overlay (1 mark for each) Roof - correct width and ridge shown (1 mark for each) Back - height correct to overlay Glue tabs - sufficient to hold net together Slots - 6 shown in an appropriate position	1 2 2 2 1 1 1	10
			10
1 (c)	All surfaces shown and the correct shape Net holds together and fastens to roof Quality of sketch - high quality for mark	1 1 1	3
			3
1 (d)	All surfaces shown and the correct shape Net holds together and fastens to roof Quality of sketch - high quality for mark	1 1 1	3
			3
			<b>34</b>

**Question 2**

Question			
2 (a) (i)	<b>No overlay - perspective sketch. No marks for 2D</b> Drawing in perspective VP1 used VP2 used Overall proportions of drawing (L140, H80+ & W80) Good 2, satisfactory 1 or poor 0 Marks above <b>only</b> available for <b>perspective drawings</b> . Isometric and planometric can be awarded marks below. Base of lorry and protruding at front and back Basic shape of cab Sloping front of cab Basic shape of back of lorry  Wheel with thickness Quality of curve of profile of wheel 2 - good, 1 - reasonable or 0 - poor	1	
		1	
		1	3
		1	
		1	
		1	4
		1	
2 (a) (ii)	Wheels and body different colours Quality of colouring of body 2 - excellent, 1 - good & 0 - poor Quality of colouring of wheels including curved surface 3 - excellent, 2 - good, 1 reasonable or 0 - poor	1	
		2	
		3	6
			16
2 (b) (i)	Wheel position - touching side of lorry (ignore size) Front profile of wheel correct to overlay Depth of wheel correct to overlay Construction method visible in (i) or (ii)	1	
		1	
		1	
		1	4
2 (b) (ii)	Axle - 8mm protruding from body and correct diameter Wheel position - 30mm away from lorry (ignore size) Front profile of wheel correct to overlay Depth of wheel correct to overlay	1	
		1	
		1	
		1	4
			8
2 (c) (i)	Side window the correct shape Side window the correct orientation (mark to overlay) Side window the correct size	1	
		1	
		1	3
2 (c) (ii)	Windscreen height (mark to overlay) Windscreen width (mark to overlay)	1	2
		1	
2 (c) (iii)	Two parallel sides of correct width Overall length correct 16mm radius curve at end – mark best one Name added but not same style or size as example given Name added accurately – height and depth matches example	1	
		1	
		1	
		1	5
		1	10
<b>Total</b>			<b>34</b>

**Question 3**

3 (a)	Correct size acrylic strip added at top	1	
	Correct size acrylic strip added at bottom	1	
	Correct size acrylic strip added at right	1	
	Correct size acrylic strip added at left	1	4
	Inside 'track' completed and works	1	
	Inside 'track' completed and works well - coin rolls right, left and then right	1	
	Width of inner track correct (coin will fit - 17mm minimum)	1	
	Width of inner acrylic strip correct (6mm)	1	4
			8
3 (b)	Back and front acrylic sheet shown	1	
	Disc shown	1	
	Suitable design for disc shown (up to)	2	
	Appropriate position of pivot shown	1	
	Coin 'contained' - will not roll out (up to)	2	
	Path/route of coin shown	1	
	Notes describe the design (up to)	2	10
			10
3 (c)	Ideas relate to the theme 'Sea world'	1	
	Strong association (fishes or other images present)	1	2
	Quality of sketching of ideas for sticker 3 - excellent, 2 - good, 1 - reasonable or 0 - poor	3	
	Notes describe the design for the sticker 2 - good, 1 - reasonable or 0 - poor	2	5
	Development of ideas 2 - good, 1 - reasonable or 0 - poor	2	2
			9
3 (d)	Quality of letter and images on sticker 2 - excellent, 1 - good or 0 - poor	2	
	Use of colour on sticker 2 - excellent, 1 - good or 0 - poor	2	
	Overall effectiveness of design on sticker 2 - excellent, 1 - good or 0 - poor	2	6
			6
<b>Total</b>			<b>33</b>

<b>Quest. 4</b>			
4 (a)	Sketch of part (a) Approx. 45 degree lines (parallel) Front surface Back surface Edge	1 1 1 1	4
	Sketch of part (b) Approx. 45 degree lines (parallel) Bottom surface Top surface Back Inner block	1 1 1 1 1	5
			9
4 (b)	Drawing of block (a) (must be accurate to overlay) Height (60mm) Depths (10mm, 60mm & 10mm) Front surface complete Top 'U' completed Two inner surfaces completed Two front edges completed	1 3 1 1 1 1	8
	Drawing of block (b) (must be accurate to overlay) Height (80mm) Depths (10mm & 80mm) Front 'U' surface complete Top completed End completed Inner block completed	1 2 1 1 1 1	7
	Overall quality of line work 3 - excellent, 2 - good, 1 - reasonable or 0 - poor	3	3
			18
4 (c)	Appropriate colour selected (brown, yellow...) End grain shown Grain shown Overall effectiveness of rendering 3 - excellent, 2 - good, 1 - reasonable or 0 - poor	1 1 1 3	6
			6
			<b>33</b>

**Question 5**

5 (a)	41 mm radius circle - centre 41 mm radius circle - size to overlay Left top curve correct to overlay - 1 mark Left top centre correct to overlay - 1 mark Right top curve to overlay - 1 mark Right top centre correct to overlay - 1 mark	1 1 1 1 1 1	6
	Top - position Top - length	1 1	2
	Base - position Base - length	1 1	2
	Handle width - 41mm Handle top right curve to overlay - 1 mark Handle top right curve centre to overlay - 1 mark Handle bottom right curve to overlay - 1 mark Handle bottom right centre to overlay - 1 mark	1 1 1 1 1	5
			15
5 (b)	Circle correct to overlay (1) Hexagon - any size (1) or correct to overlay (2)	1 2	3
	Handle shown in the middle of a face Handle correct to overlay - length - width	1 1 1	3
			6
5 (c)	3D sketch of an hexagonal box 3D lid of correct shape (hexagon) Fold flaps Overall quality of sketch (must be 3D) Excellent 3, good - 2 marks, satisfactory - 1 mark or poor - 0 marks	1 1 1 3	6
			6
5 (d)	Vertical axis of ellipse 80mm Horizontal axis of ellipse 44mm Construction method Clear and accurate - 2 marks Some construction - 1 mark No evidence - 0 marks Quality of profile Accurate to overlay - 2 marks Reasonably accurate - 1 mark Poor - 0 marks	1 1 2 2	6
			6
			<b>33</b>

**Question 6**

6 a)	Circle drawn (2D or 3D) Circle divided into 5 Circle divided correctly (D30, L90, R45, P120 & M75) Appropriate use of colour Labels clearly identify the different parts	1 1 1 1 1	5
			5
6 b)	Appropriate graphical method selected (bar chart or graph) Suitable scale/s selected Information correctly plotted Appropriate use of colour Labels clearly identify the different parts	1 1 1 1 1	5
			5
6 c) (i)	Correct data used from the table Ideas relate to the toys 2 - excellent, 1 - good or 0 - poor Ideas 3 dimensional Overall quality of ideas 2 - excellent, 1 - good or 0 - poor Notes clearly explain the ideas 2 - excellent, 1 - good or 0 - poor	1 2 1 2 2 2	8
			8
6 c) (ii)	All the toys represented Overall level of sales accurately represented Overall idea 3 dimensional Appropriate use of colour Labels clearly identify the different parts  Representation (quality) 2 - excellent, 1 - good & 0 - poor Duck Lorry Rocket Puzzle Money box	1 1 1 1 1  2 2 2 2 2	5 5  10
			15
<b>Total</b>			<b><u>33</u></b>



**Final Check of Mark Scheme**

When you have checked the mark scheme, please fill in the following form and return it together with the mark scheme.

Date of Examination	Name of Paper	Syllabus / Component	Maximum Mark
October/November 2007	CDT: Design & Communication	7048/01	100

No changes are required to the mark scheme and disk sent to me

Changes are required: I have marked the changes on the mark scheme and revised the disk sent to me

Changes are required: I enclose new pages to add to the mark scheme and revised the disk sent to me

Changes are required: I enclose a new version of the mark scheme and disk

Other Changes highlighted on paper copy - you have an electronic copy

For Principal Examiners who work with Team Leaders and/or Assistant Examiners:

Do you want the mark scheme to be distributed to all Examiners? Yes  No

If no, please give instructions for distribution:

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Do you want any other document to be distributed with the mark scheme? Yes  No

If yes, please give instructions:

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Name (Please print) K A CRAMPTON

Signed 

Date 10/10/2006