

Design and Technology

General Certificate of Secondary Education **1955/04**

Graphic Products Paper 4

Mark Scheme for June 2010

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Tolerance is +/- 2mm on all questions

1 (a) Photograph

Photograph taken (1), method of importing into the computer system (1) and resized and/or positioned on the electronic template (1) 3

Laminating

Printout positioned in a pouch (1) and passed through the machine/sealed (1) 2 [5]

Tick to indicate the award of marks

(b) The identity card is usually no larger than 85mm x 54mm because this is a size that people can easily carry, place in pocket or wallet/purse. 1 [1]

(c) (i) Advantage to the card holder - exemplar answer

Personal details such as name, DoB and address not visible if the card is left lying around, less risk of identity theft. 1

(ii) Advantage to the company - exemplar answer

Magnetic strip can be 'read' to track attendance, whereabouts of employees, personal details can be changed/stored electronically, control access, security etc 1 [2]

(d) Logo based upon the letters AK (using the grid) – accept single lines 1

Sketch of a high quality logo - design based upon a good drawing of the outline shape of the letters utilising the grid, with consistency of style or size or thickness. Must be some evidence of thickness to letters. 1 [2]

Total [10]

2	(a)	(i)	The self adhesive sign can easily be stuck to most surfaces without the need for additional materials/ easier or quicker to attach to surfaces	1	
		(ii)	Sketch shows a rounded corner/edge or shape e.g. ellipse	1	
		(iii)	Green and white colours have been chosen because they give a good contrast, green is associated with 'go' or 'safe', or standard colours.for safe conditions.	1	[3]
	(b)	(i)	Corriflute has been chosen because it is a lightweight material or waterproof (for use outside) or can easily have a message printed on it. Can easily be folded along the flutes. Not just strong or rigid or stable.	1	[1]
		(ii)	Named method e.g. plastic fasteners Velcro, bifurcated rivets or nuts and bolts. Not screws or split pins.	1	
			Sketch clearly indicates that the joining method is temporary	1	[2]
	(c)	(i)	Clear understanding that biodegradable means the material will rot away, will not cause a pollution problem or is more environmentally friendly/green.	1	
		(ii)	Clear understanding of slot for the tape	1	
			Notes and/or sketches show how tape rolls	1	
			Method of cutting clearly shown on the packaging	1	[4]
				Total [10]	

3	(a)	(i)	20mm diameter circle	1	
			40mm diameter circle	1	
			60mm square	1	
			60mm height from top or bottom of square base (with bottom and top widths correct to overlay or candidate plan)	1	[4]
	(ii)		One dimension added	1	
			One dimension correctly added to the front view (to British Standards)	1	[2]
	(b)		Some variation in tone on the vertical curved surface.	1	
			Graduation gives the impression of a cylindrical object	1	[2]
	(c)		Three horizontal stripes added (must be evenly spaced and follow top/bottom profile)	1	
			Vertical stripe added in a correct position – does not touch the top or bottom of the counter and top/bottom of stripe are curved.	1	[2]

If candidate has interpreted the design as a label award 2 marks if correct.

Total [10]

4	(a)	Products identified (words, images or the table used as a key)	1	
		Suitable (labelled) scale added to the drawing	1	
		Pictorial bar chart drawn with four bars of consistent width	1	
		The number of returns correctly plotted (to candidate scale)	1	[4]
		Must be pictorial to score the last two marks		
	(b)	Pictorial view of the backing sheet for the self adhesive label	1	
		Pictorial view of customer receipt drawn detached from the backing sheet (to the right)	1	
		Pictorial view of self adhesive label drawn away from the backing sheet	1	
		Pictorial view of the job sheet shown to the left of the backing sheet including holes.	1	[4]
		No marks for 2D drawings.		
		<i>Accept answers from different orientations.</i>		
	(c)	Exemplar answer		
		The bar code could be 'scanned' (1) to bring up an electronic template of a form on which details/progress would be recorded/tracked (1)		
		or		
		The sales desk and the service engineer can both access (1) and update information on the screen (1) about the product and its progress through the workshop	2	[2]

Total [10]

5 (a) Exemplar answers

The sides of the holder are sloping because the vacuum formed holder has to be removed from a mould. If the sides were straight the holder would be difficult to remove from the mould 1

The holder has an indentation in each corner so that the points for fastening it to a wall are identified and do not have to be marked out on each holder 1

Part of the sides of the bottle holder are lower so that the user can easily grip the bottle and pull it out 1 **[3]**

(b) The self adhesive vinyl is flexible, easy to clean or hygienic or waterproof, or can be applied to a curved surface 1 **[1]**

Do not accept cheap, easy to apply or available in a wide range of colours

(c) Freehand sketch of former in good proportion with the following features

Isometric sketch 1

The back 1

The bottle holder 1

Two bottle grips in the holder 1

Three/four indentations 1

Sloping sides evident 1 **[6]**

No marks for 2D drawings

Total [10]

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