

UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

**MARK SCHEME for the October/November 2009 question paper
for the guidance of teachers**

0445 DESIGN AND TECHNOLOGY

0445/02

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.

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Page 2	Mark Scheme: Teachers' version	Syllabus	er
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1	Hexagon – 6 sides	(1)	
	Regular	(1)	
	Orientation	(1)	
	Triangle – correct size	(1)	
	Equilateral on centre line	(1)	[2]
	Path side × 2	(2)	
	Rectangle length of side × 2	(2)	[4]
			[Total: 9]

2	Accuracy and proportion of:		
	R	(2)	
	T	(1)	
	Y	(1)	
	Spacing	(1)	
	Height	(1)	[6]
			[Total: 6]

3	(a) Width	(1)	
	Height to top of shoulder	(1)	
	Slot: depth	(1)	
	height	(1)	
	Top: shoulder depth	(1)	
	radius	(1)	
	radius plots evident	(1)	[7]
	(b) Thin line front edge	(1)	
	Thick line outer edge	(1)	
	Thick/thin on slot	(1)	[3]
			[Total: 10]

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4 (a) (i) F.E.			
62 × 20 body	+/- 2 mm	(1)	
20 × 30 hips	+/- 2 mm	(1)	
2 arms 58 long	2 × 1	(2)	
2 legs 50 long	2 × 1	(2)	
2 feet 18 sq		(2)	
Washers evident		(1)	
Rivets evident		(1)	[10]
(ii) PLAN			
Ø30		(1)	
Thin wall		(1)	
Body 20 × 50	+/- 2 mm	(1)	
Feet protruding 10		(1)	
2 arms visible		(1)	[5]
(iii) ELLIPTICAL BASE			
Centre lines used as axis		(1)	
Elliptical outline		(1)	
Construction evident 0–2 pr		(2)	
Projected to F.E.		(1)	[5]
(b) Sketch: – quality of communication			
Good		(3)	
Satisfactory		(2)	
Poor		(1)	[3]
Notes:			
Good		(1)	
Evident		(1)	[2]

[Total: 25]

Page 4	Mark Scheme: Teachers' version	Syllabus	er
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- 5 (a) **Front View**
- First angle (1)
- In projection with PLAN (1)
- Overall height (1)
- Cut out:
- horizontal base line to side 4 (1)
- horizontal base line to side 5 (1)
- 60–90 slope to top of side 4 (1)
- horizontal top of side 5 (1)
- vertical edge to side 6 (1)
- Plan view**
- Regular octagon (1)
- Orientation to match E.V. (1) [10]
- (b) **Development**
- 8 equal width sides (1)
- window has full panels on both sides (1)
- window width over panels 4, 5 & 6 (1)
- window flat top in middle (1)
- window height in middle 45 (1)
- 2 sloping sides (1)
- Development starts at given joint (1)
- Lid regular octagon (1)
- 3 flaps to lid 3 × 1 (3) [11]
- (c) **Octagonal shape** (1)
- Satisfies brief (1)
- Has fold down flaps 60 long (1)
- Notes (1) [4]

[Total: 25]