UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2007 question paper

0445 DESIGN AND TECHNOLOGY

0445/01

Paper 1 (Design), 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.

All Examiners are instructed that alternative correct answers and unexpected approaches in candidates' scripts must be given marks that fairly reflect the relevant knowledge and skills demonstrated.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

• CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2007 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



Page		ge 2	Mark Scheme	Syllabus	Paper			
			IGCSE – May/June 2007	0445	,	1		
	(a)	Accept any four suitable points – stable in use, lightweight, easy to move, quick to position, hygienic, etc. (no repeats of question).			(1x4)	[4]		
	(b)	Accept drawings of any two suitable constructions – halving joints, M&T joints, welding, bolts, rivets, etc.				(2x2)	[4]	
	(c)	Pro rata if fewer. Communication Simple drawings displaying a low standard or limited range of techniques						
						0-2		
		Clear drawings displaying a good standard and a range of techniques – shading/colour/annotation etc. High quality drawings using a wide range of techniques with clear			3-4			
			tion and de			5-6		
		Rather	more deta	s showing outlines only il, sensible solutions that could work s, good fitness for purpose, detailed cons	truction	0-2 3-4 5-6	[12]	
	(d)	each		ch of the ideas. At least 3 evaluations utification. (1+1)	ip to 2 marks	0-6 2	[8]	
	(e)	Poor lin Good li	ne work, u andard thr il	proportions, little detail se of colour, proportions, some detail roughout with a range of techniques that 2 or 3 overall dimensions only – 1 Additional detail dimensions – 2	show clearly	1 2-3 4 2		
		A simplused		tails pach showing little or no detail of const		0-2		
		some a	nnotation	nal detail may be obvious from overall or detail will be clear with good annotation a		3-4		
				s necessary		5-6	[12]	
	(f)		-	materials stated. ons for choice.		2 2	[4]	
	(g)	Suitable method stated. Good detailed description of process, including processes (3) and tools		1				
		(2)				5	[6]	

Pa	ige 3	Mark Scheme	Syllabus	Paper	
		IGCSE – May/June 2007	0445		1
(a)	•	any four suitable points – stable when opened, ligo, easy to carry, etc. (no repeats of question)	ghtweight,	(1x4)	[4]
(b)	•	drawings of any two suitable handles – string/cord card, reinforced card, etc.	d, cutout,	(2x2)	[4]
(c)	Pro rata	arks.			
		unication drawings displaying a low standard or limited ues	range of	0-2	
	shading	Clear drawings displaying a good standard and a range of techniques – shading/colour/annotation etc.			
		uality drawings using a wide range of techniques v tion and detail.	with clear	5-6	
	Simplis	tic designs showing outlines only more detail, sensible solutions that could work		0-2 3-4	
		te solutions, good fitness for purpose, detailed construc	tion		[12]
(d)		Evaluation of each of the ideas. At least 3 evaluations up to 2 marks			
	each Selectio	on and justification. (1+1)		0-6 2	[8]
(e)		of drawing			
	Good li	ne quality, proportions, little detail ne work, use of colour, proportions, some detail andard throughout with a range of techniques that sho	ow cloarly	1 2-3	
	all deta	il	ow clearly	4	
		Additional detail dimensions – 2 uction details		2	
	used	listic approach showing little or no detail of construct		0-2	
	some a	onstructional detail may be obvious from overall view nnotation structional detail will be clear with good annotation and		3-4	
		rawings as necessary	additional	5-6	[12]
(f)		e specific materials stated. riate reasons for choice.		2 2	[4]
	Αρρίορ	nate reasons for endice.		2	ניין
(g)	Good c	riate logo representing fast food ommunication skills – colour/shading		3 2	.
	Approp	riate attachment method		1	[6]

Mark Scheme

Syllabus

Paper

Page 3

Pa	age 4	Mark Scheme	Syllabus	Pa	per	
		IGCSE – May/June 2007		,	1	
(a)	Accept any four suitable points – colourful, lightweight, safe, easy to clean, no small parts, etc. (no repeats of question)				[4]	
(b)	Accept any four suitable methods – cams, cranks, gears, electronic, make/break switch, clicking on gear, etc.				[4]	
(c)	Pro rata if fewer. Communication					
	techni	Simple drawings displaying a low standard or limited range of techniques Clear drawings displaying a good standard and a range of techniques – shading/colour/annotation etc. High quality drawings using a wide range of techniques with clear				
	shadir High					
	Suital			5-6		
	Rathe	stic designs showing outlines only more detail, sensible solutions that could work ate solutions, good fitness for purpose, detailed co	onstruction	0-2 3-4 5-6	[12]	
(d)	each	ation of each of the ideas. At least 3 evaluations ion and justification. (1+1)	s up to 2 marks	0-6 2	[8]	
(e)	Poor li Good High s all det Dimer	y of drawing ne quality, proportions, little detail line work, use of colour, proportions, some detail tandard throughout with a range of techniques the ail asions 2 or 3 overall dimensions only – 1 Additional detail dimensions – 2 ruction details	hat show clearly	1 2-3 4 2		
	A sim used	olistic approach showing little or no detail of co		0-2		
	some	constructional detail may be obvious from overa annotation		3-4		
		structional detail will be clear with good annotatio drawings as necessary	ภา สถน สนนเมปิโสโ	5-6	[12]	
(f)		le specific materials stated. oriate reasons for choice.		2 2	[4]	
(g)	,	Suitable method stated. Good detailed description of process, including processes (3) and tools		1		
	(2)	actailed description of process, including process	oos (o) and tools	5	[6]	١