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UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2011 question paper for the guidance of teachers

0445 DESIGN AND TECHNOLOGY

0445/11

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, which would have considered the acceptability of alternative answers.

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

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

Cambridge is publishing the mark schemes for the May/June 2011 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Page 2		Mark Scheme: Teachers' version Syllabus			0	
r age z		IGCSE – May/J		0445	900	
(a)		any four additional suitable roof, appropriate height, bab	e points – easy to cle	ean, stable in use, ge for items, etc.	OdbaCall (1x4)	Abridge
(b)	Accept drawings of any two suitable storage systems – shelves, boxes, divisions, hooks, clips, etc.					[4]
(c)	Any suitable ideas. At least three different ideas for maximum marks. Prorata if fewer. Communication					
	Simple drawings displaying a low standard or limited range of techniques Clear drawings displaying a good standard and a range of techniques –			(0-2)		
	shadin	shading /colour/annotation etc			(3-4)	
	High quality drawings using a wide range of techniques with clear annotation and detail			(5-6)		
	Rather	lity tic designs showing outlines more detail, sensible solution te solutions, good fitness for	ns that could work	struction	(0-2) (3-4) (5-6)	[12]
(d)	Evaluation of each of the ideas. At least 3 evaluations up to 2 marks each				(0-6)	
	Selection and justification. (1+1)					[8]
(e)	Quality of drawing Poor line quality, proportions, little detail Good line work, use of colour, proportions, some detail High standard throughout with a range of techniques that show clearly all detail					
	Dimensions 2 or 3 overall dimensions only - 1 Additional detail dimensions - 2 Construction details A simplistic approach showing little or no detail of construction to be used Most constructional detail may be obvious from overall views or with some annotation All constructional detail will be clear with good annotation and additional				(2)	
					(0-2)	
					(3-4)	
	detail drawings as necessary			(5-6)	[12]	
(f)	Suitable specific materials stated.				(2)	
\-/		riate reasons for choice.			(2)	[4]
	11. 71				` '	. ,
(g)		e method stated. etailed description of: proce tools.			(1) (3) (2)	[6]

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[Total: 50]

Dema 2		Maris Calcarras Tanahara's saraina	6		
Page 3		Mark Scheme: Teachers' version IGCSE – May/June 2011	Syllabus 0445	80	
(a)		t any four additional suitable points – appeal to ful, include NEW TERM, lightweight, items located v	pupils, compact, well, etc.	Papa (1x4)	Mbride
(b)	Accept gauze,	(2x2)	[4]		
(c)	rata if the Common Simple Clear is shadin High is annota Suitab Simplis	nunication c drawings displaying a low standard or limited rang drawings displaying a good standard and a rang g /colour/annotation etc quality drawings using a wide range of technation and detail	e of techniques e of techniques –	(0-2) (3-4) (5-6) (0-2) (3-4)	
(d)	Accura	ate solutions, good fitness for purpose, detailed con-		(5-6)	[12]
	Selecti	ion and justification. (1+1)		(2)	[8]
(e)	Poor li Good I High s detail Dimen Const A simp Most of annota All cor	y of drawing ne quality, proportions, little detail ine work, use of colour, proportions, some detail standard throughout with a range of techniques the asions 2 or 3 overall dimensions only - 1 Additional detail dimensions - 2 ruction details blistic approach showing little or no detail of constructional detail may be obvious from overall vertion astructional detail will be clear with good annotated drawings as necessary	ction to be used iews or with some	(1) (2-3) (4) (2) (0-2) (3-4) (5-6)	[12]
(f)		le specific materials stated. priate reasons for choice.		(2) (2)	[4]
(g)		le method stated. detailed description of: processes tools.		(1) (3) (2)	[6]

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[Total: 50]

Page 4		Mar	k Scheme: 1	Teachers' version	Syllabus	(1x4)	a r
ı ay	j	iviai		ay/June 2011	0445	800	
		I		· y. x ······· — • · ·	3	S.C.	2
(a)	Accept	t any four ac	dditional suita	able points – will not tip ove	er, east to clean,		'm
. ,	hygien	hygienic, no harm to pets, easy to fill, adjustable timing, food easily					170
	accessible, etc.					(1x4)	3
41.5							·
(b)	Accept any two power sources – clockwork, battery power, rubber motor,						
	low voltage supply/motor, solar power, etc.(similar batteries but different sizes 2 + 1)				s but dillerent	(2x2)	[4]
	01200 2	- · ' <i>)</i>				(414)	ניין
(c)	Any suitable ideas. At least three different ideas for maximum marks. P						
` '	rata if fewer.						
		unication					
	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					(0-2)	
						(2.4)	
		•		vide range of techniques wi	ith clear	(3-4)	
	• .	High quality drawings using a wide range of techniques with clear annotation and detail				(5-6)	
	Suitab					()	
		•	showing outl	ines only		(0-2)	
	•	•	•	lutions that could work		(3-4)	
	Accura	ate solutions	, good fitness	s for purpose, detailed cons	struction	(5-6)	[12]
, n			.	At 1 . () . ()		(0.0)	
(d)				. At least 3 evaluations up	to 2 marks each	(0-6)	
	Selecti	on and justi	fication. (1+1	1)		(2)	[8]
(6)	O !!!	المستحددات عمرين					
(e)	Quality of drawing Poor line quality, proportions, little detail					(1)	
	Good line work, use of colour, proportions, some detail High standard throughout with a range of techniques that show clearly all					(2-3)	
					()		
	detail			•	*	(4)	
	Dimen			mensions only - 1		(6)	
	0			l dimensions - 2		(2)	
		ruction deta		little or no detail of construc	ction to be used	(0-2)	
				be obvious from overall vie		(0-2)	
	annota		· · · · · · · · · · · · · · · · ·			(3-4)	
				clear with good annotation	and additional	.= -:	.
	detail d	drawings as	necessary			(5-6)	[12]
(f)	Suitab	le specific r	naterials stat	ed.		(2)	
(.,		•	ns for choice.			(2)	[4]
						` ,	
(61)	Q;4~1-1	la mathad -1	atad			(4)	
(g)		le method st detailed des		processes		(1) (3)	
	5000	actanea acs		tools.		(2)	[6]
						` /	

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[Total: 50]