## **UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**International General Certificate of Secondary Education** 

## MARK SCHEME for the May/June 2010 question paper for the guidance of teachers

## 0445 DESIGN AND TECHNOLOGY

0445/11

Paper 11 (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.

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

CIE is publishing the mark schemes for the May/June 2010 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.

Domo 2		Mark Scheme: Teachers' version Sylla			Cullabus	. O				
	Page 2							Syllabus	O.	
				IGC	SE – May/Ju	ine 2010		0445	200	
1	(a)	Accept any <b>four</b> additional suitable points – stable in use, easy to remove, remotes can be seen easily, matches surroundings, etc.				PapaCa (1 ×	Morida			
	(b)	•	_	gs of any rubber, foa	•	tion methods -	- small	contact surfaces	, (2 × 2)	[4]
	(c)	rata if fe			east <b>three</b> d	lifferent ideas	for ma	ximum marks. Pro	)	
						ndard or limited			(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 annotation								
							(3–4) 1			
		and det	tail	J	J		•		(5–6)	
		Suitabi Simplist	•	ine ehowir	ng outlines o	nly			(0–2)	
						s that could wo	rk		(3-4)	
		Accurat	te solutio	ons, good	fitness for p	urpose, detaile	d const	truction	(5–6)	[12]
	(d)			ach of the ustificatior		east 3 evaluatio	ns up t	o 2 marks each	(0–6) (2)	[8]
	(e)	Poor lin Good lin High st detail Dimens Constru A simpli Most co annotat All cons	ne work, candard sions cuction clistic apponstruction struction struction	y, proporti , use of co throughou 2 or 3 ov Additiona details proach sho ional deta	verall dimensial detail dimensions by the clear that with a rail dimension of the clear that will be clear t	tions, some de nge of techniq sions only – 1 ensions – 2 r no detail of co bvious from ov	ues that onstruct verall vi	at show clearly al tion to be used iews or with some ion and additiona	(4) (2) (0–2) (3–4)	[12]
	(f)		-	i <b>c</b> materia					(2) (2)	[4]

(g)

Suitable method stated.

Good detailed description of: processes

tools.

[Total: 50]

[6]

(1) (3) (2)

	Page 3		Mark Scheme: Teachers' version	Syllabus	3	
			IGCSE – May/June 2010	0445	200	
2	(a)	Accept any <b>four</b> additional suitable points – attract attention, minimal use of materials, easy to pack, minimal storage space, high-tech appearance, easy to see MP3, cannot see other items, etc.			ADACA (1 × 4)	hbridge
	(b)	•	any <b>two</b> access methods – tuck-in flaps, lift s, sliding sections, etc.		(2 × 2)	[4]
	(c)	rata if for Communication Simple Clear of shading High quand det Suitabi Simplisi Rather	unication drawings displaying a low standard or limited range lrawings displaying a good standard and a range l/colour/annotation etc. lality drawings using a wide range of techniques wit ail	of techniques e of techniques – th clear annotation	(0-2) (3-4) (5-6) (0-2) (3-4) (5-6)	[12]
	(d)		ion of each of the ideas. At least 3 evaluations up to on and justification. (1 + 1)	o 2 marks each	(0–6) (2)	[8]
	(e)	Poor lin Good lin High st detail Dimens Constr A simpl Most co annotat All cons	e quality, proportions, little detail ne work, use of colour, proportions, some detail andard throughout with a range of techniques that sions 2 or 3 overall dimensions only – 1 Additional detail dimensions – 2 uction details istic approach showing little or no detail of construct onstructional detail may be obvious from overall vision structional detail will be clear with good annotation	ion to be used ews or with some	(1) (2–3) (4) (2) (0–2) (3–4) (5–6)	[12]

processes tools.

(f)

(g)

Suitable **specific** materials stated. Appropriate reasons for choice.

Suitable method stated.

Good detailed description of:

[Total: 50]

[4]

[6]

(2) (2)

(1) (3) (2)

	Page 4		Mark Scheme: Teachers' version	Syllabus	0	•	
		, -	IGCSE – May/June 2010	0445	OD,		
3	(a)	Accept any <b>four</b> additional suitable points – easy to operate, minimal space, stable in use, safe for child to use, appealing to child, etc.				Morida	
	(b)	Accept any <b>two</b> types of battery – AAA, AA, C, D, PP3, disc type, etc.		(2 × 2)	[4]		
	(c)	rata if fewer.					
		Communication Simple drawings displaying a low standard or limited range of techniques					
		Clear d	(3–4)				
		High qu	` ,				
		and det Suitabi			(5–6)		
			tic designs showing outlines only more detail, sensible solutions that could work		(0–2) (3–4)		
			te solutions, good fitness for purpose, detailed const	ruction	(5–6)	[12]	
	(d)		ion of each of the ideas. At least 3 evaluations up to on and justification. (1 + 1)	o 2 marks each	(0–6) (2)	[8]	
	(0)	Quality	of drawing				
	(e)	Poor lin	e quality, proportions, little detail		(1) (2–3)		
		Good line work, use of colour, proportions, some detail  High standard throughout with a range of techniques that show clearly all					
		detail	etail				
		Dimens	Sions 2 or 3 overall dimensions only – 1 Additional detail dimensions – 2		(2)		
			<b>uction details</b> istic approach showing little or no detail of construct	ion to be used	(0–2)		
		Most constructional detail may be obvious from overall views or with some			` ,		
		annotat All cons	ıon structional detail will be clear with good annotati	on and additional	(3–4)		
			rawings as necessary.		(5–6)	[12]	
	(f)	Suitable <b>specific</b> materials stated.		(2)			
	.,		riate reasons for choice.		(2)	[4]	
	(g)	Suitable	e method stated.		(1)		
		C004 4	otailed description of: processes		(2)		

Good detailed description of: processes

tools.

[Total: 50]

[6]