UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

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for the guidance of teachers

0445 DESIGN AND TECHNOLOGY

0445/13

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.

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A A	Marila O alta area Tarria da	0.11.1		
Page 2	Mark Scheme: Teachers' version IGCSE – October/November 2011	Syllabus 0445	ap.	<u> </u>
	y four additional suitable points – cutting surfaction surfaction of the surfactio	ce, no damage to ble to carry, etc.	Axtrap DanaCar (1x4)	nbrie
	awings of any two suitable folding/adjusting/dism iding, slotting together, dowels, screws, KD fittings	antling methods – s, etc.	(2x2)	[4]
rata if fewe Communi	cation			
•	awings displaying a low standard or limited range o wings displaying a good standard and a range	•	(0–2)	
•	g/colour/annotation etc. ality drawings using a wide range of techniques with clear annotation		(3–4)	
and detail			(5–6)	
Rather mo	/ designs showing outlines only ore detail, sensible solutions that could work solutions, good fitness for purpose, detailed constr	ruction	(0–2) (3–4) (5–6)	[12
Evaluatior	n of each of the ideas. At least 3 evaluations up to	o 2 marks each	(0–6)	
Selection	and justification (1+1)		(2)	[8
	quality, proportions, little detail		(1)	
	work, use of colour, proportions, some detail dard throughout with a range of techniques tha	t show clearly all	(2–3)	
detail Dimensio	ns 2 or 3 overall dimensions only – 1		(4)	
	Additional detail dimensions – 2		(2)	
A simplisti	st constructional detail may be obvious from overall views or with some		(0–2)	
Most cons annotatior			(3–4)	
	uctional detail will be clear with good annotation vings as necessary	on and additional	(5–6)	[12
Suitable s	pecific materials stated		(2)	
	te reasons for choice		(2)	[4
	nethod stated		(1)	
O	ailed description of: processes		(3)	
Good deta	tools		(2)	[6

IGCSE - October/November 2011 0445 (a) Accept any four additional suitable points – lightweight, easy to carry, strong handles, easily assembled, easy to clean, ventilation for pet, etc. (1) (b) Accept any two strengthening methods – corrugation, folding, ridges, additional tape, etc. (2×2) (2 (c) Any suitable ideas. At least three different ideas for maximum marks. Pro rata if fewer (0-2) (3-4) Communication (3-4) (3-4) (3-4) Buildpicolour/annotation etc. (3-4) (3-4) High quality drawings displaying a good standard and a range of techniques – shading/colour/annotation etc. (3-4) Suitability (0-2) (3-4) Simplistic designs showing outlines only (0-2) Rather more detail (3-4) Accurate solutions, good fitness for purpose, detailed construction (5-6) Suitability (3-4) Reduction of each of the ideas. At least 3 evaluations up to 2 marks each (0-6) Selection and justification (1+1) (2) (2) (d) Evaluation of each of the ideas. At least 3 evaluations up to 2 marks each (0-6) Selection and justification (1+1) (2) (2) <t< th=""><th></th><th></th><th></th><th>32</th><th></th><th></th></t<>				32		
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Good detailed description of: processes (3)		Approp	riate reasons for choice		(2)	[4
	(g)					
			• •			[6

Pa	ge 4	Mark Scheme: Teachers' version	Syllabus	2	r
		IGCSE – October/November 2011	0445	Dan	
(a)	damage	any four additional suitable points – lightweight, to fruit, accepts various fruit shapes and ble to hold, etc.	simple to use, no sizes, adjustable,	Papaca (1x4)	mbrie
(b)		ny two adjustment systems – sliding in or on, tul bosen, wing nuts, etc.	be in tube, twist to	(2x2)	[4
(c)	Any suita rata if fev Commu r		ximum marks. Pro		
	Simple di	Simple drawings displaying a low standard or limited range of techniques			
		awings displaying a good standard and a range colour/annotation etc.	e of techniques -	(3–4)	
	High qua	High quality drawings using a wide range of techniques with clear annotation			
	and detai			(5–6)	
	Rather m	ty c designs showing outlines only nore detail, sensible solutions that could work solutions, good fitness for purpose, detailed const	truction	(0–2) (3–4) (5–6)	[12
(d)	Evaluatio	on of each of the ideas. At least 3 evaluations up to	o 2 marks each	(0–6)	
	Selection	and justification (1+1)		(2)	[8]
(e)	Poor line Good line High star	of drawing quality, proportions, little detail e work, use of colour, proportions, some detail ndard throughout with a range of techniques tha	at show clearly all		
	detail Dimensi e	ons 2 or 3 overall dimensions only – 1		(4)	
	Construe	Additional detail dimensions – 2 ction details		(2)	
	A simplis	tic approach showing little or no detail of construct		(0–2)	
	annotatio			(3–4)	
		tructional detail will be clear with good annotati awings as necessary	ion and additional	(5–6)	[12
(f)	Suitable	specific materials stated		(2)	
		ate reasons for choice		(2)	[4
(g)		method stated		(1)	
		tailed description of: processes tools		(3) (2)	[6

[Total: 50]