UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

GCE Advanced Subsidiary Level and GCE Advanced Level

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

9705 DESIGN AND TECHNOLOGY

9705/12

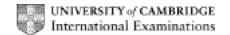
Paper 12 (Written 1), maximum raw mark 120

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.

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	ı aş	ge z	GCE A/AS LEVEL – October/November 2009 9705		12
1	(a)	Drawir	ng shows layers of wood	(1)	<u></u>
	(-,		identify thin layers of wood or veneers	(1)	[2]
	(b)		aking of template described se of template described	(0–2) (0–2)	
			etails of tools and equipment	(0-2)	[6]
			opropriate method of cutting out sides described oppropriate methods of cutting out slots and smoothing edges described	(0–2) (0–2)	
			etails of tools / equipment / safety	(0-2)	[6]
	(oplication of first coat of varnish described anding and application of second coat or cleaning of equipment	(0–2)	
		de	escribed etails of tools / equipment / safety	(0-2) (0-2)	[6]
		De	etails of tools / equipment / safety	,	
				Į i c	otal: 20]
2	(a)		le metal named e.g. aluminium le reason given e.g. weather resistant	(1) (1)	[2]
		Oditab	io reason given e.g. weather resistant	(1)	[4]
	(b)		attern making described etails of tools / equipment / safety	(0 -4) (0 -2)	[6]
			asting process described	(0-4)	[0]
			etails of tools / equipment / safety	(0–2)	[6]
	(uitable method of hinging described etails of tools / equipment / safety	(0 -4) (0 -2)	[6]
				, ,	otal: 20]
				_	-
3			ng showing outer layers and corrugations explaining outer layers glue to corrugations or similar	(1) (1)	[2]
	. ,	OR	d joins corners but not securely	(0–2)	
			propriate secure joining method described used to clearly describe appropriate joining method	(0–4) (0–2)	[6]
		•		(4)	
		Base	oriate scale	(1) (1)	
		⊨ach s	ide correctly drawn and positioned 4 × 1	(4)	[6]
	(d)		understanding of embossing	(0–2)	
			understanding of embossing	(0-4)	[6]
		Details	of tools / equipment / safety	(0–2)	[6]
				Lic	otal: 20]

Mark Scheme: Teachers' version

Syllabus

Paper

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Page 3	Mark Scheme: Teachers' version	Syllabus	Paper
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Section B

4	(a)	Appropriate use shown – fitting is screwed to two pieces to join them at right angles	(0–2)	[2]
	(b)	Problem 1 described Problem 2 described e.g. Problems related to parts missing Poor instructions, not have correct equipment etc.	(0–2) (0–2)	[4]
	(c)	Explanation of how problem 1 could be overcome Explanation of how problem 2 could be overcome e.g. Provide quality control checks at the packaging stage Better instructions particularly visual ones Provide basic tools required for assemble with instructions for use	(0-3) (0-3)	[6]
	(d)	Situation has been analysed and relevant issues / points have been identified	(0–3)	
	(4)	Explanation of why these issues / points are considered relevant Specific examples or evidence has been used to support the answer	(0-3) (0-2)	[8]
5	(a)	Appropriate explanation – relating to adjusting height and / or angle of chair	(0–2)	[2]
	(b)	Problem 1 described Problem 2 described e.g. Related to monitor being too high Poor access to keyboard	(0–2) (0–2)	
		Chair and / or person's legs will not fit under desk		[4]
	(c)	Explanation of how problem 1 could be overcome Explanation of how problem 2 could be overcome e.g how the position of some of the shelves could be altered and possibly some shelves removed.	(0-3) (0-3)	[6]
	(d)	Situation has been analysed and relevant issues / points have been identified Explanation of why these points / points are considered relevant Specific examples or evidence have been used to support answer	(0-3) (0-3) (0-2)	[8]
			[Total:	20]
6	(a)	Appropriate explanation related to protecting surface and / or giving it a shiny finish	(0–2)	[2]
	(b)	Problem 1 described Problem 2 described e.g. Unstable weight at front would tip this design over The part of the design holding the phone would fold flat	(0–2) (0–2)	
		Difficult to see or take out phone		[4]

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(c)	Explantion of how problem 1 could be overcome Explantion of how problem 2 could be overcome e.g. Making the bottom of the supporting strut angled rather than horizontal Adding a diagonal strut to the front part of the design Removing part of front, replacing with see through material	(0-3) (0-3)	[6]
(d)	Situation has been analysed and relevant issues / points have been identified Explanation of why these issues / points are considered relevant Specific examples or evidence has been used to support answer	(0-3) (0-3) (0-2)	[8]
		[7]	otal: 20]
	Section C		
7 (a)	One pre-conceived idea presented	(0-3)	
	OR The development and selection of a range of ideas into a single design proposal which would appear to work but lacks some technical detail OR	(4–7)	
	The development and selection of a range of ideas into a single design proposal that includes sufficient technical details to show that the proposed	(8–10) (0–3) (0–3)	[16]
(b)	As for part (a)		[16]
(c)	As for part (a)		[16]
(d)	As for part (a)		[16]
(e)	The drawing will exhibit a reasonable standard of outcome and show some of the required design features OR	(0–3)	
	The drawing will exhibit a good standard of outcome and show most of the design features required to make a product function as intended OR	(4–7)	
	The drawing will be completed to a high standard of outcome and fully show	(8–10)	
	Some use of colour and tone to enhance the visual impact of the drawing OR	(0–2)	
	Good use has been made of colour and tone to enhance the visual impact of the drawing OR	(3–4)	
	Very good use has been made of colour, tone and material representation to enhance the visual impact of the drawing	(5–6)	[16]
		Γ	Гotal: 80]

Mark Scheme: Teachers' version

Syllabus

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Question 8 and 9 as for Question 7

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