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General Certificate of Education (A-level) Applied June 2011

Applied Information and IT10 Communication Technology

(Specification 8751/8753/8756/8757/8759)

**Unit 10: Advanced Spreadsheet Design** 

## Final



Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all examiners participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for standardisation each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, examiners encounter unusual answers which have not been raised they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

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	1		Externally assessed work
AQA			Mark Scheme
		sion 1.0	June 2011
Examiner Mark			GCE Applied ICT (8756/7/9)
Examiner Initial		Unit 10:	Advanced Spreadsheet Design (IT10)

Centre name: Centre no:

For each item a mark of zero will be recorded for all non-creditworthy responses.

	1 mark	2 marks	3 marks	4 marks	Marks	
ltem (a)	Candidate has produced a time plan that identifies the tasks required.	The time plan includes an indication of time allocated to tasks.				
2 marks						
				Total item	ı (a) mark	
	Candidate has attempted to describe the background information about the client and why a spreadsheet system is required.	Candidate has clearly described the background information about the client and why a spreadsheet system is required.				
ltem (b) 4 marks	Candidate has identified the intended user(s) of the system, and their skill level.	Candidate has identified the intended user(s) of the system, and produced design notes indicating how the skill level of the user has affected their designs.				
				Total item	(b) marks	

	1 mark	2 marks	3 marks	4 marks	Marks
ltem (c) 9 marks	Candidate has listed some client needs.	Candidate has agreed the needs with the client.	Candidate has explained how their proposed system will meet the needs of the client.		
	Candidate has stated some of the processing to be undertaken in the proposed spreadsheet system.	Candidate has produced a description of the processing to be undertaken in the proposed spreadsheet system.	Candidate has produced a detailed description of the processing to be undertaken in the proposed spreadsheet system.		
	Candidate has stated the inputs and outputs required.	Candidate has specified the inputs and outputs required.	Candidate has specified in detail the inputs and outputs required.		
	Total item (c) marks				
ltem (d) 4 marks	Candidate has produced some evaluation criteria for their solution.	Candidate has produced both qualitative and quantitative evaluation criteria for the solution.	Candidate has produced both qualitative and quantitative evaluation criteria that are appropriate to assess if the client needs have been met.	Candidate has identified both qualitative and quantitative evaluation criteria, and has stated why they are appropriate to assess if the client needs have been met.	
·				Total item	(d) marks

	1 mark	2 marks	3 marks	4 marks	Marks
	Candidate has produced simple design work of the user interface to be implemented.	Candidate has produced design work of the user interface to be implemented, annotating the key features of the interface.	Candidate has produced annotated design work of the user interface to be implemented, justifying the use of the key features of the interface in relation to user needs.		
ltem (e) 9 marks	Candidate has produced simple design work for a spreadsheet system demonstrating some of the functionality of the software to be used.	Candidate has produced design work for a spreadsheet system demonstrating all of the functionality of the software to be used.	Candidate has produced design work for a spreadsheet system and has justified how the functionality of the software meets the client needs.		
	Candidate has annotated design work for a spreadsheet system showing client feedback.	Candidate has produced evidence of updated design work for a spreadsheet system following comments from the client.	Candidate has explained changes to design work for a spreadsheet system in line with comments from the client.		
				Tatal itam	
	Candidate has produced an outline for a testing strategy or sets of data to test the whole system.	Candidate has produced a testing strategy and includes sets of test data to test the whole system.		Total item	
ltem (f) 4 marks	Candidate has produced a test plan that tests individual parts of the spreadsheet system.	Candidate has produced a test plan that tests individual parts and the complete system in a logical order to aid implementation of the system.			

	1 mark	2 marks	3 marks	4 marks	Marks
Item (g) 8 marks	Candidate has provided evidence of carrying out testing of the individual elements of the system.	Candidate has provided evidence of carrying out testing of the individual elements of the system in line with the test plan.	Candidate has provided evidence of carrying out testing of the individual elements of the system in line with the whole of the test plan using test data that tests the formulae and functions.	Candidate has provided evidence of carrying out testing of the individual elements of the system in line with the whole of the test plan using normal, extreme and erroneous test data that tests the formulae and functions.	
	Candidate has provided evidence of carrying out some integration testing.	Candidate has provided evidence of carrying out testing of the system as a whole.	Candidate has provided evidence of carrying out testing of the system as a whole that shows how the actual results compare with the expected results.	Candidate has provided evidence of carrying out testing of the system as a whole and has explained how the results of the testing prove that the needs of the client have been met.	
				Total item	(g) marks

	1 mark	2 marks	3 marks	Marks
	Candidate has shown some awareness of managing work effectively such as using appropriate sheet names, filenames, or named areas.	Candidate demonstrates that they have consistently managed work effectively such as using appropriate sheet names, filenames, named areas and macro names.		
	Candidate has produced part of a working spreadsheet system.	Candidate has produced a working spreadsheet system which partially meets the client's needs.	Candidate has produced a working spreadsheet system and explained how it meets the client's needs.	
	Candidate has produced printouts or screenshots from the spreadsheet system.	Candidate has produced printouts or screenshots from the spreadsheet system with evidence of use of formulae.	Candidate has annotated printouts or screenshots from the spreadsheet system to explain the use of a variety of formulae that meet the needs of the client.	
ltem (h) 18marks	Candidate has used complex spreadsheet features.	Candidate has used complex spreadsheet features appropriately to meet client needs.	Candidate has explained how the complex spreadsheet features used are appropriate for the system and for the needs of the client.	
	Candidate has made use of macros in their spreadsheet system.	Candidate has made use of macros to automate a task other than navigation to meet the needs of the client.		
	Candidate has used software features to produce a system that can be used more than once.	Candidate has explained the use of software features to produce a system that can be used more than once.		
	Candidate has produced a spreadsheet system that provides some output.	Candidate has produced a spreadsheet system that provides some output that meets the needs of the client.	Candidate has produced a spreadsheet system that provides some output and explains how it meets the needs of the client.	
	provides some output.		explains how it meets the	
		1	1	<u>l</u>
			Total item	(h) marks

Initial time plan updated to show progress has been monitored in both investigation time and controlled conditions Actual use of time is explained.   2 marks Total item (i)   2 marks Total item (i) marks   Low mark range 0-3 Candidate has attempted to evaluate their spreadsheet system and/or their own performance. Text is readable. There may be some errors of spelling, punctuation and grammar. The reader can understand what is written but the meaning is not always clear. Candidate has used a form and style of writing and presentation which is sometimes appropriate to its purpose, but with deficiencies. Candidate has expressed straightforward ideas clearly, if not always fluently. Sentences and paragraphs may not always be well-connected. Information presented may lack structure.   Mid-mark range 4-6 marks Candidate has reviewed their spreadsheet system using the evaluation criteria and/or the needs of the client. Candidate has reviewed their progress. Text is readable. There may be occasional errors of spelling, punctuation and grammar. Most of the meaning is clear for a reader. Candidate has, in the main, used a form and style of writing and presentation which is appropriate for its purpose. Candidate has expressed moderately complex ideas clearly and reasonably fluently. Candidate has used well-linked sentences and paragraphs so that information is generally well structured. There is some evidence of appropriate use of technical terminology.		1 mark	2 marks	3 marks	Marks
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High mark range 7-10 marks Candidate has critically evaluated their system based on the evaluation criteria and client needs. Candidate has critically evaluated their own performance. Text is readable. There are few, if any, errors of spelling, punctuation and grammar. Meaning is clear for a reader. Candidate has selected and used a form and style of writing and presentation appropriate to purpose and has expressed complex ideas clearly and fluently. Information is well structured with sentences and paragraphs following on from one another clearly and coherently. Specialist vocabulary has been used appropriately, including appropriate technical terms that relate to ICT.	10	Candidate has attempted to readable. There may be some what is written but the me presentation which is some expressed straightforward is be well-connected. Inform Mid-mark range 4-6 mark Candidate has evaluated the client. Candidate has review spelling, punctuation and ge main, used a form and style has expressed moderately of sentences and paragraphs appropriate use of technicat High mark range 7-10 ma Candidate has critically eva of spelling, punctuation an form and style of writing a clearly and fluently. Inform another clearly and cohere	ne errors of spelling, punctuation and aning is not always clear. Candidate h times appropriate to its purpose, but y deas clearly, if not always fluently. Se ation presented may lack structure. ss heir spreadsheet system using the evalu- wed their progress. Text is readable. Th rammar. Most of the meaning is clear e of writing and presentation which is complex ideas clearly and reasonably f so that information is generally well st il terminology. <b>rks</b> fluated their system based on the eval fluated their own performance. Text is d grammar. Meaning is clear for a rea and presentation appropriate to purpos nation is well structured with sentence antly. Specialist vocabulary has been us	grammar. The reader can under as used a form and style of writ with deficiencies. Candidate ha entences and paragraphs may no uation criteria and/or the needs here may be occasional errors of r for a reader. Candidate has, ir appropriate for its purpose. Ca luently. Candidate has used we cructured. There is some evidence uation criteria and client needs. s readable. There are few, if any der. Candidate has selected an e and has expressed complex id es and paragraphs following on sed appropriately, including app	stand ing and s ot always of the n the ndidate II-linked e of r, errors d used a eas from one
				Total item	

The following standard abbreviations may be used: NONE There is no evidence presented for this section NA Not Appropriate – the information presented is not appropriate to the requirements of the task NE Not Enough – although there is some evidence present it is insufficient to gain any marks BOD Benefit Of the Doubt