



**General Certificate of Education (A-level) Applied
January 2012**

**Applied Information and
Communication Technology**

IT10

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

Unit 10: Advanced Spreadsheet Design

Final

Mark Scheme

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 students' 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 students' 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 students' 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.

Further copies of this Mark Scheme are available from: aqa.org.uk

Copyright © 2011 AQA and its licensors. All rights reserved.

Copyright

AQA retains the copyright on all its publications. However, registered schools/colleges for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to schools/colleges to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.



Version 1.0

**Externally assessed work
Mark Scheme
January 2012**

GCE Applied ICT (8756/7/9)

Unit 10: Advanced Spreadsheet Design (IT10)

Examiner Mark		
Examiner Initial		

Centre name: **Centre no:**

--	--	--	--	--

Candidate name: **Candidate 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
Item (a) 2 marks	Candidate has produced a time plan that identifies the tasks required.	The time plan includes an indication of time allocated to tasks.			
	Total item (a) mark				
Item (b) 4 marks	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.			
	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 will affect their designs.			
Total item (b) marks					

	1 mark	2 marks	3 marks	4 marks	Marks
Item (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 specified the processing to be undertaken in the proposed spreadsheet system.	Candidate has specified in detail 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				
Item (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 correctly identified both qualitative and quantitative evaluation criteria that are appropriate to assess if the client needs have been met.	In addition, candidate has stated why the criteria are appropriate to assess if the client needs have been met.	
	Total item (d) marks				

	1 mark	2 marks	3 marks	4 marks	Marks
Item (e) 9 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.	In addition, the designs for the user interface are sufficient for third party implementation.	
	Candidate has produced simple design work for a spreadsheet system indicating some of the functionality of the software to be used.	Candidate has produced design work for a spreadsheet system indicating most 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.	In addition, the designs for the system are sufficient for third party implementation.	
	Candidate has annotated design work for a spreadsheet system with comments from the client.				
	Total item (e) mark				
Item (f) 4 marks	Candidate has produced 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.			
	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 completed system.			
Total item (f) marks					

	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 test plan using a range of appropriate test data.	In addition the majority of formulae and functions have been tested.	
	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
Item (h) 18marks	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 spreadsheet system.	Candidate has produced a spreadsheet system which partially meets the client's needs.	Candidate has produced an effective spreadsheet system and explained how it meets the client's needs.	
	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 describe the formulae used.	In addition, the annotation justifies how the formulae meet the needs of the client.	
	Candidate has used complex spreadsheet features.	Candidate has used complex spreadsheet features appropriately to meet client needs.	Candidate justifies 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 justified the use of macros 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 justified 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 justifies how it meets the needs of the client.	
Total item (h) marks				

	1 mark	2 marks	3 marks	Marks
Item (i) 2 marks	Initial time plan updated to show progress has been monitored in both investigation time and controlled conditions.	Actual use of time is explained.		
Total item (i) marks				
Item (j) 10 marks	<p>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.</p> <p>Mid-mark range 4-6 marks Candidate has evaluated their spreadsheet system using the evaluation criteria and/or the needs of the client. Candidate has reviewed their progress making some comments regarding strengths and weaknesses. 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.</p> <p>High mark range 7-10 marks Candidate has evaluated their spreadsheet system relating the results of testing to their evaluation criteria. Candidate has critically evaluated their system in relation to the needs of the client identifying improvements that could be made in the future. Candidate has critically evaluated their own performance, identifying strengths, weaknesses and areas for improvement. 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.</p>			
	Total item (j) marks			

Page	Maximum mark	Mark awarded
1	6	
2	13	
3	13	
4	8	
5	18	
6	12	
Total	70	

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