



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

**Applied Information and  
Communication Technology**

**IT10**

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

**Unit 10: Advanced Spreadsheet Design**

***Report on the Examination***

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## **IT10 – Advanced Spreadsheet Design**

### **General Comments**

Most candidates revealed a good knowledge of the chosen software and provided evidence of setting up a spreadsheet system for a client. Some candidates produced a very high standard of work which was very pleasing.

Some candidates submitted very long projects, some of which contained very repetitive documentation. It must be realised that quality is more important than quantity and greater quantity does not necessarily ensure higher marks. It is not necessary to duplicate designs, test plans and tests where these are for similar or identical items. It is also unnecessary to describe the creation of each worksheet in item (h).

In fact this repetition was often counterproductive, as those candidates left themselves insufficient time for their evaluation which carries a substantial number of marks. By contrast many candidates achieved very high marks with concise documentation.

Sadly it was evident that a large number of the clients appeared to be fictional. Some were neither real nor realistic. Candidates should try to find a real client, as a proper understanding of the client's needs is very important. Without a real client it is difficult to establish any client needs and this is likely to have a substantial adverse effect on the marks gained. The use of a real client will add to the candidate's overall learning experience.

### **Organisation of the script**

Some candidates failed to number the pages of their scripts, although this is a requirement in the instructions in the Candidate Booklet.

Nearly all scripts were submitted in the appropriate order (a) - (j), as requested in the Candidate Booklet, but some centres submitted work that was not bound in any way. Some candidates submitted work with pages upside down or in the wrong order.

### **Choice of project**

In some centres, the candidates all undertook the same or similar Items with the same or similar clients. In these cases it is often not clear what is the work of the candidate and what is material provided by the teacher. Teachers should refer to paragraph 3 of section 2 of the Teachers' Notes.

Several candidates submitted work where the problem was more suitable to a solution using database software.

Centres are advised to ensure that candidates select organisational problems that are suitable for implementation using a spreadsheet system.

Many candidates submitted invoice systems. This is a very good type of project for this unit, but only in a few cases did the output actually look like an invoice. Candidates should pay attention to detail by, for example, examining the documents currently used. This is invaluable in designing the outputs required for the solution.

## Investigation Time

### Item (a) - Time plan

Most candidates scored the maximum of two marks on this section with tasks in a logical order and estimates of the time required.

### Item (b) - Background information

Candidates are expected to answer the question, 'What is the client's problem and how could a spreadsheet solution be used to address it?'

Most candidates could state the benefits of using ICT (no need to store volumes of paper, good quality print-outs, reliable, backup, etc) without stating why a **spreadsheet** was needed, e.g. ability to do calculations, graphical output, macro capabilities.

Those who explained the benefits to the client of a spreadsheet solution gained the second mark available.

Some candidates did not identify their intended users sufficiently well, often just referring to *the staff* or *the team* and so not describing the user's skill level.

### Item (c) - Client needs

Nearly all candidates identified some client needs but few provided evidence of the client agreeing this statement of needs as required in the Candidate Booklet and so only gained one mark. Better candidates also explained how these needs would affect the design of their proposed system.

Specification of the inputs, outputs and processing was generally weak with few candidates getting more than one or two marks out of a possible six. Many candidates did not appear to understand what is meant by inputs, outputs and processing.

Input refers to the data that has to be entered into the spreadsheet, such as quantity and item number.

Processing means manipulating the input data e.g. by looking up a price or performing a calculation.

Output refers to information displayed, such as total price or a delivery charge.

Too often, 'inputs' were simply stated as clicking on a button. For those who listed input **data** it was generally brief with little detail. It was rare to see any mention of input or output formats, or to see sample input and output data.

### Item (d) - Evaluation criteria

Most candidates identified some quantitative and qualitative criteria. Several candidates gained higher marks by relating their evaluation criteria to the client's needs stated in item (c).

### **Item (e) – Designs**

Nearly all candidates produced some designs. The quality was variable, with some untidy designs and some showing very little detail; the better ones were fully annotated, could easily have been implemented by a third party, included client comments about the designs and identified features that linked to the client's needs.

### **Item (f) - Test plan**

The test strategy was not done well with few candidates explaining the rationale behind their test plan.

Most candidates produced a test plan but few candidates included tests that would test the whole system.

Data sets were weak. Many candidates simply submitted, for example, a list of products and a list of customers without linking the two and working out the expected total cost.

It should not be necessary to include hundreds of tests. Candidates should test each part of their system and then choose several data sets that test the system from start to finish.

### **Controlled conditions**

Centres are reminded that controlled conditions means examination conditions and that clear guidance is provided in the Teachers Notes about what is and what is not allowed. Any queries should be addressed to the ICT Qualifications Developer.

Students should be reminded that no electronic files, including image files, may be taken into the controlled conditions sessions.

### **Item (g) - Testing**

The best testing was where candidates tested all elements of the system and then the system as a whole, comparing the results with those that were expected.

### **Item (h) – Implementation**

This section was the best answered with over half the candidates getting at least 15 marks out of 18.

There is **no need** for candidates to provide screenshots of every stage of creating the spreadsheet system. It is sufficient to provide screenshots of

- The final worksheets (in normal and formula view)
- Macro coding
- Evidence of the system being reusable
- Explanation of how features used meet the client's needs

Where candidates have used particular software features, this should be obvious from screenshots of the final spreadsheet. Many candidates spent time on producing unnecessary repetitive instructions on how to use Excel such as colour the background, change the font,

insert WordArt, record a macro etc. This gained no additional marks and the time could more usefully have been spent on other items.

### **Item (i) - Time planning**

Most candidates did monitor their progress against their original time plan and those candidates who explained, rather than stated, any necessary alterations achieved two marks.

Too many candidates put simplistic explanations such as 'completed on time' or 'this took longer than I expected.' It is likely that if they had monitored their progress as they went along, then the comments would have been more meaningful.

### **Item (j) – Evaluation**

The best candidates looked back at the original client needs in item (c) and provided evidence that the needs had been met.

Some candidates clearly did not leave enough time in the controlled conditions to produce a suitable evaluation. Centres are reminded that item (j) has up to 10 marks available for evaluation of the spreadsheet solution, self-evaluation and written communication and candidates should spend a proportionate time on it.

The best candidates wrote clearly and fluently. Their work was well described, using good technical language, as well as being checked for spelling and grammar.

### **Mark Ranges and Award of Grades**

Grade boundaries and cumulative percentage grades are available on the [Results Statistics](#) page of the AQA Website.