



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

**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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Unit 10: Advanced Spreadsheet Design (IT10)

General comments

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

Some scripts contained 200 pages or more. These projects tended to be repetitive and often included instructions on how the candidate set up the spreadsheet system, information which is not required and does not gain any marks.

Quality is more important than quantity. Candidates should be concise, avoid repetition and only include information that is necessary to gain the available marks. Scripts that are no more than 50 sides of A4 can contain sufficient detail to gain the maximum marks available.

Choice of client

Sadly, a large number of candidates use made-up clients. Some of these were not realistic. Candidates should try, if at all possible, to find a real client. The establishment of the client's needs is very important in this unit and without a real client, it is difficult to do this. This has an effect on the accessibility of many marks in the examination.

Organisation of scripts

Some candidates failed to number the pages of their scripts as instructed in the Candidate Booklet.

Nearly all scripts were submitted in the appropriate order (a) - (j) as requested in the Candidate Booklet.

Choice of project

Several candidates created data storage systems for things such as booking the facilities at a leisure centre, or renting DVDs. Spreadsheet software is clearly not the most suitable software for database applications like these.

Candidates who choose to use spreadsheet software in this way should justify why they are using spreadsheet software, such as to perform calculations and create graphs. These are acceptable uses of spreadsheet software.

Many candidates submitted invoice systems. Generally, this is a very good type of system to create using spreadsheet software but only in a few cases did the output actually look like an invoice with the client name, address, telephone number, date, invoice number, etc. Again this suggests that there was no real client, as a real client would insist on these items appearing on the invoice.

Investigation Time

Item (a) - Time plan

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

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) but could not state why a spreadsheet system 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.

Candidates are also expected to identify the user(s), consider their skill level and state how this will affect the designs for their proposed solution. Most candidates were awarded one mark for identifying the user and their skill levels. Those who went on to describe how this would affect the design of their system gained the second mark.

Item (c) - Client needs

Nearly all candidates identified some client needs but few provided evidence of client agreement as required in the question, so only gained one mark. Better candidates also explained how these needs would affect the design of their proposed system.

A significant number of candidates presented the inputs, outputs and processing in a table. Work submitted tended to be brief, with little detail. It was rare to see any mention of formats for input or output data, 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 in item (c). It should be remembered that qualitative criteria such as the clarity of input screens need to be assessed by the end user and therefore should be assessed by showing design work to the client.

Item (e) – Designs

Nearly all candidates produced some designs for their spreadsheet system. The quality was variable with some untidy designs and some minimalist ones being presented; 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 strategy and plan

Many candidates failed to produce a test strategy. The use of data sets for testing should be encouraged, to help reduce the number of individual tests required and to improve integration testing. Data sets should include the expected outputs as well as inputs.

Most candidates produced some sort of test plan. Sadly, few candidates included a test plan that tested the whole system from beginning to end.

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 on what is and is not allowed should be addressed to the ICT Subject Manager.

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

Item (g) – Testing

The choice of project led to problems for some candidates. When candidates set up a data storage system that does not manipulate data it is difficult to test the system as a whole as testing that can be carried out is extremely limited. To test the whole system, candidates should test with input data deliberately chosen to try to provoke failure as well as to ensure correct operation and check that the outputs are as expected.

Item (h) – Implementation

To gain maximum marks it is sufficient to include screenshots that show:

- 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 software features, this should be obvious from screenshots of the final spreadsheet, yet many candidates included unnecessary repetitive instructions on how to colour the background, change the font, insert WordArt, record a macro etc.

The following are not needed and gain no credit:

- guides to using the software
- user documentation
- hardware and software requirements for running the system

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 were awarded two marks. Many candidates used simplistic explanations of missed deadlines such as 'completed on time' or 'this took longer than I expected' and these statements were not awarded the second mark.

Item (j) – Evaluation

Centres are reminded that item (j) now has up to 10 marks available for evaluation of the spreadsheet solution, self evaluation and written communication.

The majority of candidates provided evaluation comments that were related to the client's needs and/or evaluation criteria. Most candidates also tried to identify their own strengths, weaknesses and areas for improvement. The best candidates provided evidence in their evaluation such as screenshots and/or cross referencing to test results.

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.

Many candidates did not appear to realise that 10 marks out of the 38 available in the controlled conditions are awarded for this item. That is more than a quarter of the marks. Candidates' time plans often allocated less than an hour to this item. Consequently, their evaluations were often brief, not in a logical order and not checked for mistakes.

Candidates should allocate sufficient time to the evaluation to allow themselves to complete it and gain the marks available.

Mark Ranges and Award of Grades

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

Converting Marks into UMS marks

Convert raw or scaled marks into marks on the Uniform Mark Scale (UMS) by using the link below.

UMS conversion calculator www.aqa.org.uk/umsconversion.