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Applied Information and Communication Technology — IT03

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

Unit 3: Data Handling

Report on the Examination

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Unit 3: Data Handling (IT03)

It was again noted that a number of new Centres had started the Specification for the first time this series. For these Centres it is recommended that the Reports on the Examination for previous series' are studied as they contain much detail that may be of use.

The Marking Grids for these units were unchanged from the previous series, though centres are requested to ensure that they check on the AQA website for the current version. Most assessors included clear page references that indicated where marks had been awarded, which is most helpful. Where the only annotation of the Marking Grid is a tick it is often difficult to understand why or where marks have been awarded.

It should be noted that in both units the evaluation required in Assessment Objective 4 is of the solution produced, rather than of the candidate's performance.

Much of the work submitted was accurately assessed, with marking grids that referenced the pages where evidence had been found.

AO1 assesses the practical aspects of the solution, in particular whether the software has been utilised to produce an appropriate solution for the client. The wording of some rows on the Marking Grid is very similar to some of those in AO3. However, AO1 is concerned with the practical aspects of creating the solution, whilst AO3 is concerned more with the design of the solution and consideration of the inputs, processing and the output required to ensure that the solution meets client requirements.

A substantial number of candidates had been awarded high marks for their data structures, data types and formats and had provided evidence that these things had been specified and implemented correctly, with the appropriate explanations. Some, though, had not accurately specified these prior to implementation and in some cases they were incorrectly implemented.

As design work for their data structures, candidates should provide a data dictionary, some form of entity relationship diagram (or a description of the relationships that will be formed between key fields). They should then provide screenshots of the tables at the implementation stage and the relationships that have been created between the tables.

As well as specifying their data structures candidates should produce designs for the processing that will take place and the outputs that result. Many candidates only showed the results of processing, query-by-example (qbe) grids (the design view for queries in Microsoft Access), or reports in design view. To gain full marks the outputs that will be produced should be designed to show what processing will take place. This can be achieved by a detailed description of what data is required to generate a report and the criteria for selecting it, or by drawing detailed designs for printed reports, or by filling in query 'templates' based on qbe grids.

Some candidates showed the outputs that resulted from queries but did not include the qbe grids to allow the assessor/moderator to see how the queries were structured. Both are needed to award marks on AO1, Row 3.

Some candidates clearly did not understand the difference between ensuring that data inputs are reasonable (using validation techniques) and ensuring that data inputs are correct (using verification techniques). This produced the largest number of disagreements between assessor decisions and moderator decisions. Centres should ensure that candidates have a good working knowledge of the difference between the two before attempting the assessment task.

Validation of data inputs, using measures such as validation rules, input masks, drop down boxes/lists, presence checks and so on were clearly explained and usually implemented. It was disappointing that many candidates thought that the use of these measures would ensure that users only input correct data. This is clearly not the case as being presented, for example, with a list of appellations (Mr, Ms, Mrs, Lord, Dr and so on) does not ensure that the one chosen matches the value that is on the data capture document. It only ensures that what is input is an acceptable value for the data field into which it is being entered.

Verification of data inputs can only be carried out by comparing the data that has been input with the original source data. Common suggestions for verifying data inputs were to have a message on the data entry form that asked the user to check the data against the data capture form before saving the new record, or to repeat back the order taken over the phone before saving the order record.

Candidates who understood the difference between validation and verification often gave clear descriptions of both and suggested ways to ensure that data was both valid and correct. These candidates could be awarded full marks, whereas candidates who did not understand the difference could be awarded only one mark.

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.