



General Certificate of Education

Applied Information and Communication Technology 8751, 8753, 8756 & 8759

IT05 Fundamentals of Programming

Report on the Examination

2009 examination - June series

Further copies of this Report are available to download from the AQA Website: www.aqa.org.uk

Copyright © 2009 AQA and its licensors. All rights reserved.

COPYRIGHT

AQA retains the copyright on all its publications. However, registered centres 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 centres 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.

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales (company number 3644723) and a registered charity (registered charity number 1073334). Registered address: AQA, Devas Street, Manchester M15 6EX
Dr Michael Cresswell Director General.

Unit 5: Fundamentals of Programming (IT05)

This unit assesses the candidate's grasp of the fundamental practices and principles that are the foundation of good programming. As such, and bearing in mind the likely absence of real clients, most Centres set scenarios for their candidates to undertake. On the whole these scenarios did provide candidates with a reasonable amount of information with which to work out a software specification and produce a programmed solution. Some were very effective in providing candidates with a challenging task that allowed them to access the full range of marks available. Centres are advised to consult their Portfolio Adviser if they need guidance on the suitability of a particular scenario.

A few very good examples of programs were produced that demonstrated a good understanding of the principles and practice of programming, such as those who created a booking system and used Access as the back-end database with Visual Basic to create a user interface. This allowed the candidates to clearly show the data types and modular programming, in both the design and implementation, as well as the use of iteration, selection and data structures and so allowed the candidates to gain higher marks than those candidates who had used only Access. These latter candidates found it difficult to show the use of iteration and selection, modular structure and the data structures used.

Few candidates gained full marks on AO1, Row 4 where for 1 mark candidates must use both selection and iteration structures and for 2 or more marks, candidates must use "complex selection and repetition structures". Examples of these are structures such as nested IF, CASE, or any other selection structure nested inside a repetition structure, or vice versa. For 3 marks "complex conditions" might use Boolean operators AND, OR, NOT, or combinations of relational operators.

For the award of 2 or more marks on AO3: Row 5, test results must be clearly cross-referenced to the test plan, for example by means of test numbers or figure numbers against screenshots of the results.

When providing a listing of program code, candidates should be encouraged to copy the code into a word-processing application, as most programming environments only allow the printing of plain text files which often means that indentation is not clear and the lack of margins on pages of code leads to the binding obscuring the code. For 2 or more marks on AO3, Row 6, candidates must properly indent and comment their code.

Mark Ranges and Award of Grades

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