AQA

Centre-assessed work Marking Grid 2012

GCE Applied ICT (8751/3/9)

Unit 5: Fundamentals of Programming (IT05)

Centre name: ....

Centre no:

Candidate name: ....

Candidate no:

This form should be completed and attached to the candidate's work and retained at the Centre or sent to the moderator as required.

Assessment Objective 1 (A01): Practical capability in applying ICT (up to 21 marks)

Row	1 mark	2 marks	3 marks	4 marks	Marks
1	Simple data types have been used.	A range of appropriate data types have been used.	A range of appropriate data types have been used with an explanation of why they are appropriate for the task.		
2	Simple arithmetic operators have been used.	Arithmetic operators have been used to manipulate data appropriately.			
3	Simple data structures, such as one-dimensional arrays, have been used.	Complex data structures, such as multi-dimensional arrays or records, have been used.	Candidate has explained why data structures used were appropriate for the task.		
4	Simple selection and repetition structures have been used, with appropriate operators, to control program operation.	Complex selection or repetition structures have been used, with appropriate operators, to control program operation.	Complex selection and repetition structures have been used, in combination with complex conditions, to control program operation.	The control structures and operators used have been explained in relation to the requirements of the task. The candidate has also shown that they have considered alternative structures and operators that might have met the requirements of the task.	
5	Simple event handling was implemented through event procedures.	A range of appropriate event procedures was implemented.	A range of appropriate event procedures was implemented, for which error handling was dealt with effectively.		

Row	1 mark	2 marks	3 marks	4 marks	Marks
6	Controls, such as text boxes and labels, have been used for input and output.	A range of appropriate controls has been used for input and output.	A range of appropriate controls has been used in combination. For example, a text box was used for input, a button for manipulating the input data, and a label was then used for displaying the result.		
7	The work shows only basic evidence of being managed and of being kept secure.	The work shows evidence of being managed effectively by using version numbers.	Candidate has provided clear evidence of understanding the need to manage their work effectively, including using version numbers.		

Assessment Objective 2 (A02): Knowledge and understanding of ICT systems and their roles in organisations and society (up to 14 marks)

Row	1 mark	2 marks	3 marks	Marks
1	Candidate has listed the client needs that the program must meet.	Candidate has described the client needs that the program must meet.	Candidate has described, in detail, the client needs that the program must meet.	
2	Candidate has shown an understanding of how the program would meet the needs of the user.	Candidate has shown an understanding of how the program would meet the needs of the user and of the wider organisation.		
3	Candidate has listed the input and output requirements of the program.			
4	Candidate has provided a statement about maintenance and upgrade issues relating to the program.	The statement about program maintenance and upgrade issues shows an understanding of how those issues may affect the client.	The statement about program maintenance and upgrade issues shows an understanding of how those issues may affect the client and have an impact on the wider organisation.	
5	The program's user interface shows that the candidate has a basic understanding of good design features.	The user interface shows a clear understanding of good design features that are appropriate in terms of ergonomics and health and safety.	Candidate has provided an explanation of the user interface design features that demonstrate a good understanding of the requirements of ergonomics and health and safety.	
6	A statement about copyright issues was provided.	A statement about the implications of copyright and data protection issues, in relation to the program, was provided.		

Assessment Objective 3 (A03): Apply knowledge, skills and understanding to produce solutions to ICT problems (up to 21 marks)

Row	1 mark	2 marks	3 marks	4 marks	Marks
1	A list of hardware and software that will be used to produce the solution was provided by the candidate.	A description of hardware and software that will be used to produce the solution was provided by the candidate.	Candidate has justified the hardware and software that will be used to produce the solution, and showed that alternatives had been considered.		
2	Candidate has provided a brief program specification.	Candidate has provided a program specification that includes designs for input, output **or** processing.	Candidate has provided a program specification that includes designs for input, output **and** processing.	Candidate has provided an accurate and detailed program specification and a module structure.	
3	Candidate has provided a list of variables and constants used in the program.	Candidate has described the purpose and use of the variables and constants in the program.			
4	Candidate has created a test plan for the program to test input with standard data **or** to test controls for normal events.	The test plan for the program also tests inputs with unacceptable data **or** tests controls for abnormal events.	The test plan also includes details of the expected outcomes and error messages.	The test plan also includes 'dry runs' to check the processing carried out by program modules.	
5	Candidate has provided evidence that some testing has been carried out.	Candidate has provided evidence that some testing has been carried out and has cross referenced the test results to the test plan.	**In addition**, the candidate has also made changes as a result of testing.	Candidate has provided evidence that thorough testing was carried out and has explained the changes made as a result of testing.	
6	Candidate has provided a listing of the program.	A listing of the program has been provided, showing the program code properly indented and commented to aid readability.	The candidate has annotated the program listing, explaining the structures, objects and events that have been implemented.	Candidate has also provided brief notes, in the listing, on any unusual or particularly elegant features of the program.	

Assessment Objective 4 (AO4): Evaluate ICT solutions and own performance (up to 14 marks)

Row	1 mark	2 marks	3 marks	Marks
1	Candidate has provided a brief description of actions taken to solve the problem.	Candidate has described actions taken to solve the problem.	Candidate has clearly described actions taken to solve the problem and has shown a clear understanding of what they had done and why.	
2	Candidate has provided limited evidence of time management or planning.	Candidate has provided some evidence of time management and planning. They have met some deadlines and have shown that they understand the need to monitor their progress.	Candidate has provided strong evidence of time management and planning, fully monitored their progress and met deadlines. Reasons for any missed deadlines have been explained.	
3	Candidate has provided some evaluation criteria for the solution and has carried out some testing.	Candidate has provided both qualitative and quantitative evaluation criteria, some of which were appropriate to assess if the client needs have been met. They have tested the solution against the criteria.	Candidate has identified qualitative and quantitative evaluation criteria that were appropriate for assessing whether client needs have been met and testing took full account of the evaluation criteria.	
4	Candidate has attempted to evaluate their solution.	Candidate has evaluated their solution and identified some strengths, weaknesses and areas for improvement.	Candidate has evaluated their solution and successfully identified strengths, weaknesses and areas for improvement. Candidate has drawn meaningful conclusions and made appropriate changes to the solution as a result.	
5	Candidate has used written expression which is adequate to convey intended meaning.	Candidate has used written expression that was suitable in form and style of writing to convey intended meaning within complex subject matter.		

Assessment objective	Maximum mark	Mark awarded
AO1	21	
AO2	14	
AO3	21	
AO4	14	
Total	70	