AQA
ASSESSMENT and QUALIFICATIONS ALLIANCE

Specimen for 2010

Externally assessed work
Specimen Mark Scheme
2010

GCE Applied ICT (8759)
Unit 9: Software Development (IT09)

Centre name: ....

Centre no:

Candidate name: ....

Candidate no:

For each item a mark of zero will be recorded for all non-creditworthy responses.

	1 mark	2 marks	3 marks	Marks
Item (a) 2 marks	Candidate has produced a time plan that identifies the tasks required in an appropriate order.	Candidate has produced a comprehensive list of tasks in an appropriate order that includes an indication of time allocated to each task.		
Item (b) 4 marks	Candidate has attempted to describe the background of the client and why the software system in the task is required.	Candidate has clearly described the background of the client and why the software system in the task is required.		
	Candidate has identified the intended user(s) of the system, and their skill level.	Candidate has identified the intended user(s) of the system, and produced notes indicating how the skill level of the user will affect their designs.		
Item (c) 9 marks	Candidate has listed some client needs for the task set.	Candidate has produced a comprehensive list of client needs for the task set.	Candidate has produced a comprehensive list of client needs for the task set and explained how their proposed system will meet these needs.	
	Candidate has stated the inputs and outputs required by the client to achieve the task set.	Candidate has specified the inputs and outputs required by the client to achieve the task set.	Candidate has specified in detail the inputs and outputs required by the client to achieve the task set.	
	Candidate has produced a description of some of the processing to be undertaken in the proposed software system.	Candidate has produced a clear description of most of the processing to be undertaken in the proposed software system suitable for discussion with the client.	Candidate has produced clear descriptions of the processing to be undertaken in the proposed software system, and agreed these with the client.	

	1 mark	2 marks	3 marks	4 marks	Marks
Item (d) 4 marks	Candidate has produced some evaluation criteria for their solution.	Candidate has produced both qualitative and quantitative evaluation criteria for the solution.	Candidate has produced both qualitative and quantitative evaluation criteria that are appropriate to assess if the client needs have been met.	Candidate has identified both qualitative and quantitative evaluation criteria, and has stated why they are appropriate to assess if the client needs have been met.	

	1 mark	2 marks	3 marks	Marks
Item (e) 9 marks	Candidate has shown some awareness of the need to manage files during the development of their software system, by specifying and using appropriate file and folder names.	Candidate demonstrates that they have consistently managed work effectively such as specifying and using appropriate file and folder names, and backups or version numbering.		
	Candidate has produced annotated designs of the user interface to be implemented, explaining the key features.	Candidate has produced annotated designs of the user interface to be implemented, explaining the key features, and has related any design choices to the requirements of the user.		
	Candidate has produced designs showing the use of modular programming techniques.	Candidate produced designs for a modular software system, and has justified how the structure of their design meets client needs.		
	Candidate has produced outline designs of some of the data structures required to create the proposed software system.	Candidate has produced detailed designs of most of the data structures required to create the proposed software system.	Candidate has produced detailed designs of the data structures required to produce the proposed software system, sufficient for a third party to implement the system.	
Item (f) 4 marks	Candidate has produced a testing strategy that tests individual modules of the software system.	Candidate has produced a testing strategy that tests individual modules and the completed system in a logical order.		
	Candidate has produced an outline for a testing plan(s).	Candidate has produced a testing plan(s) that includes testing with normal, extreme and erroneous test data.		

	1 mark	2 marks	3 marks	Marks
Item (g) 8 marks	Candidate has provided some evidence of carrying out testing of processes.	Candidate has provided evidence of carrying out testing of processes in line with their planned testing and has compared results with the expected outcomes.	Candidate has provided evidence of carrying out testing of processes in line with their planned testing and has compared results with the expected outcomes, noting changes that may need to be made to the system as a result of the testing.	
	Candidate has provided some evidence of carrying out integration testing to test the whole system.	Candidate has provided evidence of carrying out integration testing to test the whole system in line with their test strategy and has compared results with the expected outcomes.		
	Candidate has produced a software system that partially performs the functions specified in the task.	Candidate has produced a software system that performs the functions specified in the task.	Candidate has produced a software system that performs the functions specified in the task, and clearly attempts to meet the client's needs as described in (c).	
Item (h) 13 marks	Candidate has implemented their designed system using at least two different candidate-defined program control structures.	Candidate has implemented their designed system using at least two different appropriate candidate-defined program control structures.	Candidate has implemented their designed system using at least two or more different appropriate candidate-defined program control structures, and explained their choice.	
	Candidate has used some appropriate candidate-defined variable, object, and procedure names in some of their system.	Candidate has used appropriate candidate-defined variable, object, and procedure names throughout their system.		
	Candidate has identified some of the modular programming techniques used in the software system produced.	Candidate has identified the modular programming techniques used in the software system produced.		
	Candidate has identified where they have used some appropriate data types in their system.	Candidate has identified where they have used appropriate data types throughout their system.	Candidate has identified where they have used appropriate data types throughout their system, and has justified their choices.	
	Candidate has produced some annotated evidence of the key features in their software system.	Candidate has produced good annotated evidence of the key features in their software system.	Candidate has produced good annotated evidence of the key features in their software system, sufficient for a competent third party to adapt or maintain it.	

	1 mark	2 marks	3 marks	Marks
Item (i) 2 marks	Candidate has produced user instructions that describe how to install and access their software system.	Candidate has produced user documentation that describes how to install and access their software system, and use its main features. This is suitable for the user identified in their specification.		

Item (j) 11 marks	**High mark range 8–11 marks** Candidate has evaluated their software system relating the results of testing to their evaluation criteria. Candidate has critically evaluated their system in relation to the tasks and the needs of the client identifying improvements that could be made in the future. Text is readable. There are few, if any, errors of spelling, punctuation and grammar. Meaning is clear for a reader. Candidate has selected and used a form and style of writing and presentation appropriate to purpose and has expressed complex ideas clearly and fluently. Information is well structured with sentences and paragraphs following on from one another clearly and coherently. Specialist vocabulary has been used appropriately, including appropriate technical terms that relate to ICT. **Mid–mark range 4–7 marks** Candidate has evaluated their software system using the evaluation criteria and/or the needs of the client, making reference to the requirements of the task. Text is readable. There may be occasional errors of spelling, punctuation and grammar. Most of the meaning is clear for a reader. Candidate has, in the main, used a form and style of writing and presentation which is appropriate for its purpose. Candidate has expressed moderately complex ideas clearly and reasonably fluently. Candidate has used well-linked sentences and paragraphs so that information is generally well structured. There is some evidence of appropriate use of technical terminology. **Low mark range 0–3** Candidate has attempted to evaluate their software system. Text is readable. There may be some errors of spelling, punctuation and grammar. The reader can understand what is written but the meaning is not always clear. Candidate has used a form and style of writing and presentation is sometimes appropriate to its purpose, but with deficiencies. Candidate has expressed straightforward ideas clearly, if not always fluently. Sentences and paragraphs may not always be well-connected. Information presented may lack structure.	

	1 mark	2 marks	3 marks	Marks
Item (k) 2 marks	Candidate has shown that they adhered to their implementation schedule.	Candidate has shown that they monitored progress explaining any alterations to their implementation schedule.		
Item (l) 2 marks	Candidate has evaluated their own performance in producing their system.	Candidate has evaluated their own performance in producing their system identifying strengths and weaknesses and areas for improvement.		

Page	Maximum mark	Mark awarded
1	15	
2	17	
3	21	
4	13	
5	4	
Total	70	