| Centre Number | | | Candidate Number | | |
|---------------------|--|--|------------------|--|--|
| Surname | | | | | |
| Other Names | | | | | |
| Candidate Signature | | | | | |



General Certificate of Education Advanced Subsidiary Examination January 2011

Information and Communication Technology INFO1

Unit 1 Practical Problem Solving in the Digital World

Thursday 13 January 2011 1.30 pm to 3.00 pm

For this paper you must have your Sample Work and attach it with a completed and signed Candidate Record Form to this question paper/answer booklet at the end of the examination.

Time allowed

1 hour 30 minutes

Instructions

- Use black ink or black ball-point pen. Use pencil only for drawing.
- Fill in the boxes at the top of this page.
- Answer all questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You will **not** gain credit for the use of brand names in your answers.
- Question 7 should be answered in continuous prose.
 In this question you will be marked on your ability to:
 - use good English
 - organise information clearly
 - use specialist vocabulary where appropriate.

Warning If you do not hand in both this question paper/answer booklet and your Sample Work it may not be possible to issue a result for this unit.

| For Examiner's Use | | |
|---------------------|------|--|
| Examiner's Initials | | |
| Question | Mark | |
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| TOTAL | | |



Section A

| | Section A | | |
|---|---|---|--|
| Answer all questions in the spaces provided. | | | |
| | | | |
| 1 | There are health risks associated with using a workstation regularly. | | |
| | For each of the following health risks, identify one piece of equipment that is part of a workstation and describe how a specialised feature of it could help to protect you from the given health risk. | | |
| | The equipment given must be different in each case. | | |
| 1 (a) | Eye strain | | |
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| | | | |
| | | | |
| | (3 marks) | | |
| 1 (b) | RSI | | |
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| | (3 marks) | Γ | |
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| 2 | Describe storage media currently available, giving examples of what they can be used for. |
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| | (5 marks) |

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Turn over for the next question



| 3 | Evaluation of any ICT solution involves assessing its effectiveness against the client's requirements for that solution. |
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| | What questions would you need to ask yourself when evaluating an ICT solution, other than 'Is the solution an effective one?' |
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| | (4 marks) |
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| 4 | An operating system provides a number of functions. One function would be the allocation of processor time, which enables several programs to run at the same time. |
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| | Explain other functions of an operating system. |
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| | (6 marks) |
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Turn over for the next question



Section B

| | Answer all questions in the spaces provided. |
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| 5 | Answer this question using the Sample Work that you have brought into the examination with you. |
| | For this question: |
| | you must give the page number of where the evidence for your answer may be found in your Sample Work |
| | you must write the question number in the margin of that page in your Sample Work. |
| 5 (a) | Give the page number in your Sample Work where you identify your user(s). |
| | Page |
| | With reference to your Sample Work, identify one of the people who will use your solution and describe what they will use it for. |
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| | (2 marks) |
| 5 (b) | Explain, using examples, what is meant by a <i>client</i> and an <i>audience</i> for an ICT solution. |
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| | (4 marks) |
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| 5 (c) | Give the page number in your Sample Work where you identify the data needed to produce the outputs required from your solution. |
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| | Page In your Sample Work, write '5(c)' in the margin of that page next to your evidence. |
| | Describe the outputs required from your solution and explain how and why the data identified was needed to create them. |
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| | (8 marks) |





| 5 | (d) | Give the page number(s) in your Sample Work where you show the results of two of your tests. |
|---|-----|--|
| | | Page(s) In your Sample Work, write '5(d)' in the margin of those page(s) next to your results . |
| | | For each test result, describe the test used, the result obtained and explain what that result shows about the solution that you tested. |
| | | Test 1 result(s) |
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| | | Test 2 result(s) |
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| | | (10 marks) |

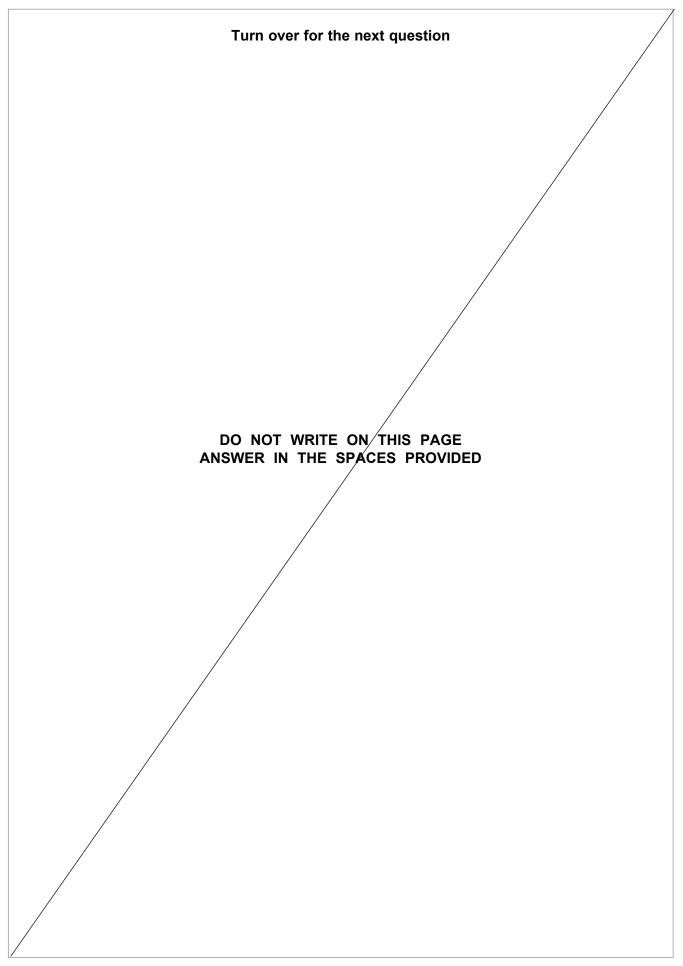


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| 5 | (e) | Explain what you would need to do if any of your testing results were not as you expected. |
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| | | (3 marks) |
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| 6 | | A social networking site requires you to open a new account before you can use it. The following data is required: first name, last name, date of birth, email address and password. |
| | | Discuss the validation and verification techniques that the web designer should have put in place to ensure robust data entry when opening a new account on the social networking site. (12 marks) |
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| 7 | You have been asked to write a report on what you consider to have been the most useful items of hardware and software that you have used for your school work since you started school. The report will be placed with other items in a time capsule that will be buried under a new library building. |
|---|---|
| | In your report you should explain what features/functions of the hardware and software made them most useful to you. |
| | In this question you will be marked on your ability to use good English, to organise information clearly and to use specialist vocabulary where appropriate. (20 marks) |
| | This space is available for planning your answer, if you wish to use it. |
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| END OF QUESTIONS | |
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