Surname

Other Names

Candidate Signature

**AQA**

General Certificate of Education
Advanced Subsidiary Examination
January 2010

# Information and Communication Technology INFO1

Unit 1    Practical Problem Solving in the Digital World

**Thursday 14 January 2010    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.  Answers written in margins or on blank pages will not be marked.
● 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.

## SECTION A

Answer **all** questions in the spaces provided.

**1** State, with a reason, what type of printer you would use for each of the following tasks.

**1** (a) Printing a letter

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*(2 marks)*

**1** (b) Printing a colour photograph

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*(2 marks)*

**4**

**2** Explain the role and functions of systems software.

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*(4 marks)*

**4**

**3** Spreadsheet software can be used to perform many different tasks.

Identify a task that you have completed using spreadsheet software and explain how the functionality of the software helped you to complete the task effectively.

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*(6 marks)*

6

**Turn over ▶**

**4** A friend has Media Studies coursework that she needs to store electronically so that she can work on it both at home on her laptop and in school on a networked PC. She has asked you to advise her on which storage media she should use.

Explain what you would need to ask her about before offering her advice.

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*(6 marks)*

6

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## SECTION B

Answer **all** questions in the spaces provided.

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.

## PROBLEM IDENTIFICATION

5  (a)  Give the page number in your Sample Work where you identify your Client's requirements.

Page.............................
*In your Sample Work, write '5(a)' in the margin of that page next to your evidence.*

Give **one** of your Client's requirements from your Sample Work and explain how you would evaluate that the requirement had been met.

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*(5 marks)*

**Question 5 continues on the next page**

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**5** (b) Give the page number in your Sample Work where you identify the input, processing and output for your solution.

Page............................
*In your Sample Work, write '5(b)' in the margin of that page next to your evidence.*

Describe **one** of the processes required in your solution and explain the input(s) needed for the process and the output(s) required from that process.

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*(6 marks)*

**TESTING**

**5** **(c)** Explain why you need a test plan and what you would include in it.

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*(7 marks)*

**Question 5 continues on the next page**

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**5** (d) Give the page number in your Sample Work where you have included evidence of testing.

Page............................
*In your Sample Work, write '5(d)' in the margin of that page next to your evidence.*

Explain what you should do if the actual result for a test was different from the expected result.

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*(4 marks)*

22

**Turn over for the next question**

**DO NOT WRITE ON THIS PAGE**
**ANSWER IN THE SPACES PROVIDED**

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**6** YZX is a toy company. It has a secure on-line shopping site where customers enter the items they wish to buy.

**Figure 1** below shows an example of a completed on-screen order form for YZX.

**Figure 1**

| YZX TOYS ORDER FORM |
|---|

| | DATE | 01/01/10 |
|---|---|---|

**CUSTOMER NO**     1024

**FIRST NAME**     FRED

**SURNAME**     BOND

**ADDRESS**     22 FERNOD STREET

**TOWN**     MYTOWN

**POSTCODE**     PY23 4ZX

| ITEM CODE | PRODUCT DESCRIPTION | QUANTITY | PRICE PER ITEM | TOTAL |
|---|---|---|---|---|
| ACC124 | CUDDLY TOY | 2 | 14.50 | 29.00 |
| ADZ691 | SPARKLY PEN | 10 | 1.20 | 12.00 |
| | | | | |
| | | | | |
| | | | | |
| | | | | |
| | | | TOTAL BEFORE VAT | £41.00 |
| | | | VAT @ 17.5% | £ 7.18 |
| | | | TOTAL | £48.18 |

Consider the data that would need to be entered on to the order form shown in **Figure 1**.

The design of an input form can help a customer to complete the form. With reference to **Figure 1** answer the questions which follow.

**6** **(a)** Explain which fields an existing customer would need to enter data into and what validation checks could be made on these fields.

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*(10 marks)*

**Question 6 continues on the next page**

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**6** (b) Explain which fields would be populated automatically by the system and describe the processes required to complete this form.

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*(10 marks)*

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**7** A company that uses ICT systems has particular responsibility for its employees' health and safety. Likewise, each employee has responsibility for their own health and safety when they are working with ICT systems.

Discuss these responsibilities with reference to the use of ICT systems.

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.

*(18 marks)*

*This space is available for planning your answer, if you wish to use it.*

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**18**

**END OF QUESTIONS**