Centre Number			Candidate Number		
Surname					
Other Names					
Candidate Signature					



General Certificate of Education Advanced Subsidiary Examination June 2013

Information and Communication Technology INFO1

Unit 1 Practical Problem Solving in the Digital World

Monday 3 June 2013 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
- Insert for use with Question 6 (enclosed).

Time allowed

• 1 hour 30 minutes

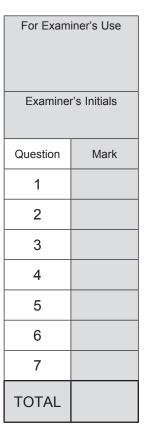
Instructions

- 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.
- 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.

Write the name of each device on the dotted line and then match the device to its use by drawing a line from one to the other.

Device

Use



To store records of family accounts



To view/store reading material



To capture examination marks



To produce an essay to hand in to a teacher

(6 marks)



from seed packets to garden furniture. Name and justify a suitable device(s) for the garden centre to use.
ivaline and justify a suitable device(s) for the garden centre to use.
/2 marka)
(3 marks)
One type of systems software is an operating system.
Describe other types of systems software.
(4 marks)



Give an example of a pexplaining how the fundamental solution.	ctionality of the soft	ware helped you to p	oroduce an effective
			(7



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. Give the page number in your Sample Work where you have identified who needed the 5 (a) (i) solution. Page..... In your Sample Work, write '5(a)(i)' in the margin of that page next to your evidence. With reference to your Sample Work, identify who needed the solution. (2 marks) 5 (a) (ii) Give the page number in your Sample Work where you have identified one of the people who will use your solution. Page...... In your Sample Work, write '5(a)(ii)' in the margin of that page next to your evidence. With reference to your Sample Work, identify one of the people who will use your solution and describe what they will use it for.

(3 marks)



5 (b)	Give the page number in your Sample Work where you have evidence of testing your solution.
	Page In your Sample Work, write '5(b)' in the margin of that page next to your evidence.
	Test plans may include tests carried out for a number of reasons using normal, extreme and erroneous data.
	With reference to your test plan, test data and testing evidence, describe and justify tests you have carried out for two different reasons.



/
(10
Question 5 continues on the next page



of a solution.				
With reference to your Sample Work, explain how you ensured the outputs produce were suitable and therefore effective.				



6 (a)	Explain, using an example, what is meant by <i>verification</i> .
	(3 marks)

Question 6 continues on the next page



6 (b)	A group of friends are using a local travel company, 'Sporty Tours', to organise a tour to Australia in 2013. 'Sporty Tours' has recently produced a website for online booking. They are trying to encourage people to sign up to the website and enter their personal data, as they are in the process of moving away from the paper-based data entry form, as shown in Figure 1 on the insert.
6 (b) (i)	You have been asked to design an online booking form. Explain the validation and verification you could include in your design which would support robust data entry by minimising errors and ensuring valid and accurate data entry.

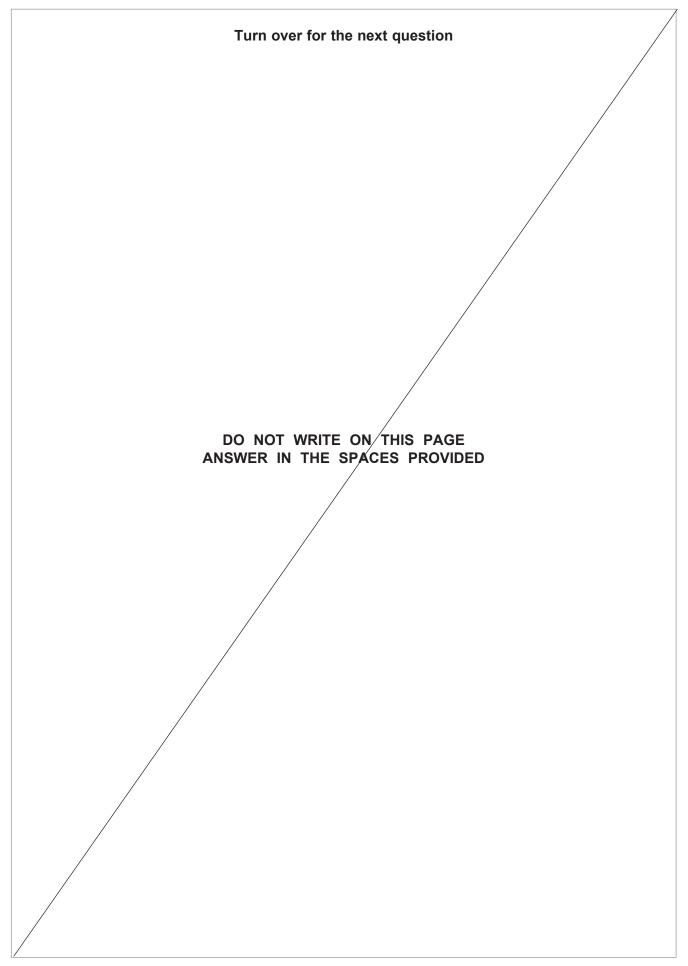


	(8 marks)
	(o marke)
Question 6 continues on the next page	



(D) (II)	In the space provided below, sketch a design for an online input screen to be entering the personal data for collection by Sporty Tours.	(7 mark







7 The articles below relate to the health problems that may arise when using computers and other electronic input and output devices.

'Many children are now using computers at home or school – or both. Few schools or homes provide proper workstations for children; furthermore, people become injured at "ergonomically correct" workstations every day because of improper posture and technique and sheer overuse of the hands.'

http://www.rsihelp.com/children.shtm

'Children learning to use computers are being put at risk of permanent injury, some health experts are warning. They say thousands of children have already been damaged by medical problems associated with the operation of computers.'

http://news.bbc.co.uk/1/hi/health/1041677.stm

Discuss the advice you could give parents concerning their children's use of ICT devices, the health problems that may arise and how those problems could be prevented.

In your answer use your knowledge of and experience with ICT devices and the fact that current health and safety legislation does not apply to children. (20 marks)

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.

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









END OF QUESTIONS		
	(20 marks)	



