Centre Number			Candidate Number		
Surname					
Other Names					
Candidate Signature					



General Certificate of Education Advanced Level Examination January 2011

Information and Communication Technology INFO3

Unit 3 The Use of ICT in the Digital World

Wednesday 26 January 2011 1.30 pm to 3.30 pm

For this paper you must have:

 a clean copy of the Candidate Booklet (enclosed for you to use when answering questions in Section A).

Time allowed

2 hours

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.
- Section A questions should be answered with reference to the pre-release material.
- 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 100.
- Question 9 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.
- You will not gain credit for the use of brand names in your answers.

For Examiner's Use		
Examine	r's Initials	
Question	Mark	
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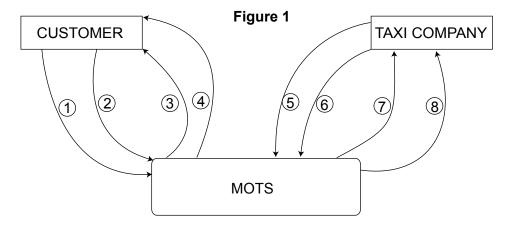


Section A

	Answer all questions in the spaces provided.
1	MOTS will provide an Internet facility for customers and an extranet facility for participating taxi companies.
1 (a)	Describe a difference between the Internet and extranet services that would be provided by MOTS.
	(2 marks)
1 (b)	Explain how Mulcastor could provide secure access to the extranet service.
	(2 marks)



2 (a) Figure 1 below shows a partial context diagram. Label the data and information flows into and out of MOTS.



KEY = external entity = system = data and information flows

2.....

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(8 marks)



2 (b)		an incomplete Entity-Relationship Do show and describe the relationsh	
	·	Figure 2	
		VEHICLE BOOKING	
			(6 marks)



The Memorandum following the survey suggested that a security consultant be employed to advise Mulcastor.
Identify the security issues that could affect Mulcastor, its customers and the taxi companies, and describe the security measures that could be taken to prevent them. (9 marks)





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4	Identify the different groups of users of MOTS and suggest and justify an appropriate method of training for each group. (9 marks)





5	The author of the memorandum to the Mulcastor Company Executive suggested that iterative, rather than linear, development methods be used to reduce the development time.
	Compare iterative and linear development methods. Recommend and justify the method most suitable for the development of MOTS. (7 marks)







Section B

Answer all questions in the spaces provided.

6	For many companies a Chief Information Officer (CIO) is also a member of the Company Executive.
	Describe the role of a CIO.
	/A manula)
	(4 marks)

Turn over for the next question

4



7 (a)	Part of a large organisation's ICT strategy should cover the technology required for ICT systems.
	Using examples, describe what technology issues should be covered in the ICT strategy. (9 marks)



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established (6 marks)	7 (b) Discuss the benefits and/or drawbacks to an organisation of purchasing an software product that is already being widely used by other organisations.



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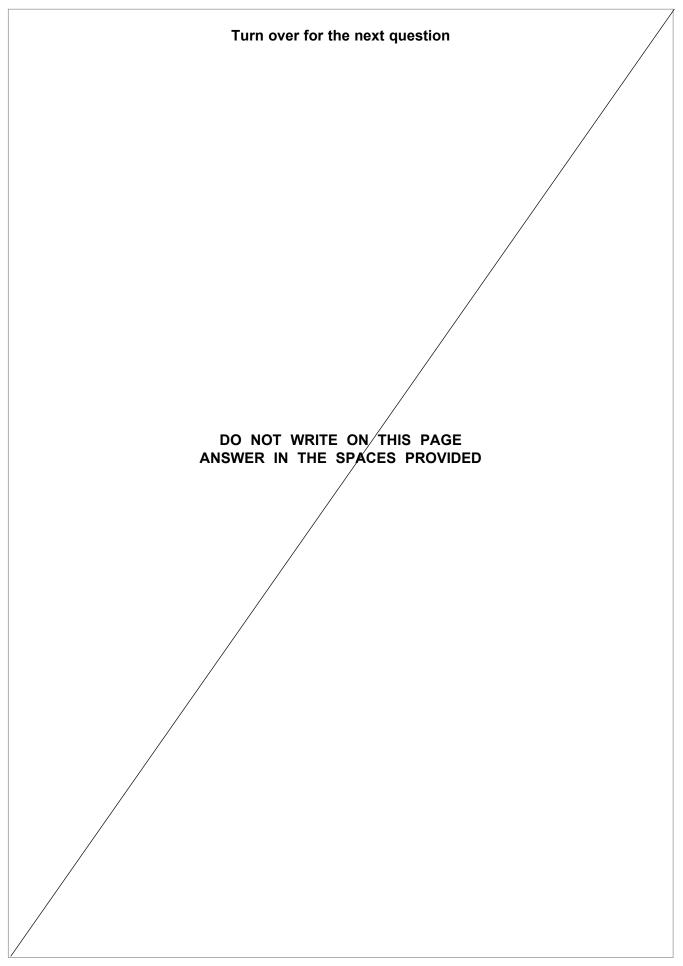
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9 Gordon Brown, former British Prime Minister, in January 2009, said:

"Our digital networks will be the backbone of our economy in the decades ahead, just as roads and rails were the backbone of our physical infrastructure, and still are. And we know that every aspect of our lives in local communities, every school, every hospital, every workplace and even every home will be dependent on the services that the digital network provides."

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Discuss the extent to which you agree or disagree with this statement. Use relevant examples to support your argument.

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. (20 marks)









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END OF QUESTIONS

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