

Centre Number						Candidate Number				
Surname										
Other Names										
Candidate Signature										

For Examiner's Use	
Examiner's Initials	
Question	Mark
1	
2	
3	
4	
5	
6	
7	
8	
9	
TOTAL	



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.



J A N 1 1 I N F O 3 0 1

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.

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(2 marks)

1 (b) Explain how Mulcastor could provide secure access to the extranet service.

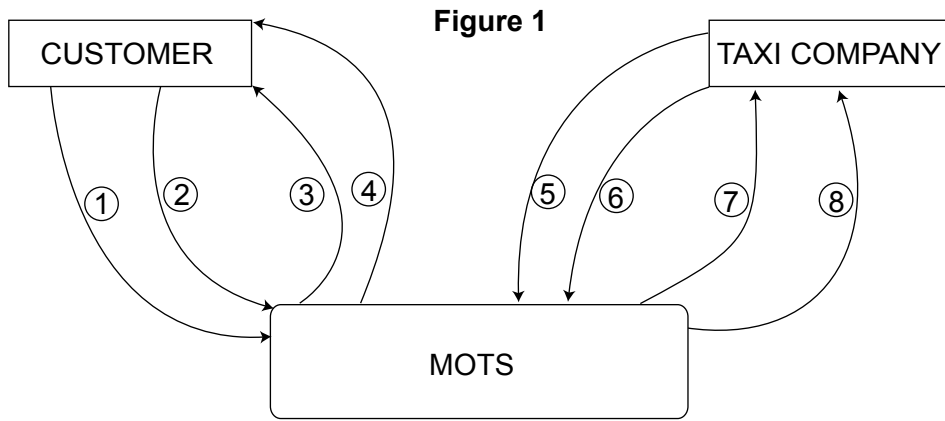
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(2 marks)

4



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 1 → = data and information flows

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⑧

(8 marks)

Turn over ▶



2 (b) **Figure 2** below shows an incomplete Entity-Relationship Diagram.

Complete the diagram to show and describe the relationships between customers, bookings and vehicles.

Figure 2



(6 marks)

14



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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.

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(4 marks)

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Turn over for the next question

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Question 7 continues on the next page

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15

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Turn over for the next question

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

Turn over ▶



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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