

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  
June 2015

# Information and Communication Technology      INF03

## Unit 3    The Use of ICT in the Digital World

Tuesday 23 June 2015    9.00 am to 11.00 am

**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.
- 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 maximum mark for this paper is 100.
- The marks for questions are shown in brackets.
- 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.



J U N 1 5 I N F 0 3 0 1

**Section A**

Answer **all** questions in the section.

**1** UCDM will provide an extranet service for volunteers.

Explain the difference between an internet service and an extranet service.

**[4 marks]**

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**2 (a)** Complete the simple Gantt chart below to show UCDM's development schedule.

	<b>MONTHS</b>					
<b>Activity</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Investigation and analysis						
Design						
Prepare invitation to tender						
Develop data warehouse						

**[4 marks]**







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**3 (b)** The Trustees state that the head office at Ipswich will have standby power supplies.

Describe how the use of UPS and standby generators could assist with the provision of a reliable ICT operation.

**[3 marks]**

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**Turn over for the next question**

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**5**

Describe the steps that UCDM will need to take to ensure its data warehouse gives the appearance of one system.

**[6 marks]**

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**Section B**

Answer **all** questions in this section.

**6 (a)** For each testing technique described in **Table 1**, choose the letter from A, B, C or D which best matches the description.

A - Multi-platform testing

B - Volume testing

C - Unit testing

D - Integration testing

Each letter must only be used once.

**Table 1**

	Description	Letter
(i)	Testing the interaction between different software modules.	<input type="checkbox"/>
(ii)	Testing the individual software modules.	<input type="checkbox"/>
(iii)	Testing to access system or network performance using large amounts of data.	<input type="checkbox"/>
(iv)	Testing using a different type of hardware from that used for development.	<input type="checkbox"/>

**[4 marks]**

**Question 6 continues on the next page**

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**6 (b)** Describe what a test harness is and how it is used.

**[4 marks]**

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**8** Describe typical areas of responsibility for a Chief Information Officer (CIO) working in a large organisation with an internal ICT department.

**[10 marks]**

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**9** Discuss, using examples of ICT systems, how the efficiency and effectiveness of business processes can be improved by ICT.

**[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.

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<b>20</b>

**END OF QUESTIONS**



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