



Wednesday 21 May 2014 – Afternoon

GCSE INFORMATION AND COMMUNICATION TECHNOLOGY

B063/02 ICT in Context

Candidates answer on the Question Paper.

OCR supplied materials:

- Pre-release material (inserted)

Other materials required:

None

Duration: 1 hour



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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INSTRUCTIONS TO CANDIDATES

- The Insert will be found inside this document.
- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. HB pencil may be used for graphs and diagrams only.
- Answer **all** the questions.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Do **not** write in the bar codes.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- Your Quality of Written Communication is assessed in questions marked with an asterisk (*).
- This document consists of **12** pages. Any blank pages are indicated.

2

- 1 Staff at TechMed2014 use hardware and software.

Write the letter of the item that best matches the description in the table below.

The first one has been completed for you.

- A. Backup
- B. Document scanner
- C. Expert system
- D. Fingerprint scanner
- E. Laser printer
- F. Patient information system
- G. Tablet computer

Description	Item
Software used by a doctor to make a diagnosis	C
A copy of a file that can be used if the original is lost or damaged	
A device that reads biometric information	
A device used to convert printed material into electronic format	
A device used to produce paper versions of patient records	
A hand-held device that has a touch screen	
The database used to store patient records	

[6]

3

- 2 Patient records are stored in a database which can be accessed using a range of devices.

Explain **three** ways TechMed2014 can try to prevent unauthorised access to patient records.

1

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2

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3

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[6]

- 3 Inpatients at TechMed2014 have access to a bedside patient entertainment system.

(a) Identify **three** features that would be found in a bedside patient entertainment system.

1

2

3

[3]

(b) Explain **one** benefit to patients of using a bedside patient entertainment system.

.....

.....

.....

.....

[2]

4

- 4 TechMed2014 wants to ensure that its website is accessible to people with visual impairments.

Explain **two** ways of making a website more accessible to people with visual impairments.

- 1
-
-
-
- 2
-
-
-
- [4]

- 5 TechMed2014's hospitals are connected using a network.

- (a) TechMed2014 uses a firewall on its network.

Describe the purpose of a firewall.

-
-
-
-
- [2]

- (b) Identify **two** components needed to create a network.

- 1
- 2
- [2]

5

6 TechMed2014 wants to use telepresence technologies in its hospitals.

(a) What is telepresence technology?

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..... [2]

(b) Describe **two** uses of telepresence technologies in hospitals.

1

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2

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..... [6]

7* TechMed2014 uses wireless networks and hand-held devices throughout all of its hospitals.

Explain, using examples, the benefits and drawbacks to the hospital and its staff of using wireless networks and hand-held devices.

Marks will be awarded for the quality of written communication in your answer.

[8]

- 8** A patient monitoring system is installed on each hospital bed. This system has a number of sensors that take medical readings.

(a) Identify **three** items of data that could be obtained from the sensors.

1

2

3

[3]

(b) The data is processed and output in different ways.

Give **two** different ways the data could be output.

1

2

[2]

(c) Explain **two** advantages and **one** disadvantage to TechMed2014 of using the patient monitoring system.

Advantage 1

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Advantage 2

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Disadvantage

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[6]

Turn over for last question

9* TechMed2014 uses expert systems to help with the diagnosis and treatment of patients.

Explain the benefits and limitations of using expert systems in the diagnosis and treatment of patients.

Marks will be awarded for the quality of written communication in your answer.

[8]

END OF QUESTION PAPER

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