

**OCR**

Oxford Cambridge and RSA

**Wednesday 17 May 2017 – Morning****GCSE INFORMATION AND COMMUNICATION TECHNOLOGY****B061/02** ICT in Today's World

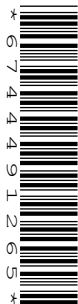
Candidates answer on the Question Paper.

**OCR supplied materials:**

None

**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**

- 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 barcodes.

**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**.
- Quality of Written Communication will be assessed in questions marked with an asterisk (\*).
- This document consists of **12** pages. Any blank pages are indicated.

2

- 1 A multi-national company has a Voice-over-IP (VoIP) telephone system for use by its employees. **Fig. 1** shows a VoIP telephone unit.



**Fig. 1**

- (a) Explain why each of the following hardware devices is included as part of the VoIP telephone unit:

(i) Microphone .....  
 .....  
 ..... [2]

(ii) Speaker .....  
 .....  
 ..... [2]

(iii) Touch screen .....  
 .....  
 ..... [2]

3

(b) What is the purpose of an icon?

.....

.....

.....

..... [2]

(c) Describe how a VoIP system sends a voice message from one telephone to another.

.....

.....

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.....

.....

..... [3]

(d) (i) Describe **two** advantages to the **company** of its employees using a VoIP telephone system.

1 .....

.....

.....

.....

2 .....

.....

.....

..... [4]

(ii) Explain **one** disadvantage to the **employees** of using a VoIP telephone system.

.....

.....

.....

..... [2]

4

- 2 A manufacturing company employs 100 engineers to make parts for machines. Each engineer is required to write down details of each job on a paper job sheet. A database has been created to store the information gathered from the job sheets.

(a) Data can be stored in the database in any of the following data types:

- integer;
- real number;
- date;
- Boolean;
- text.

Complete the table below to identify the **most** appropriate data type for each field in the database.

Field name	Example data	Data type
Job_number	10998012	
Engineer_family_name	Broonell	
Engineer_first_name	Robert	
Part_ID	PNX299R	
Hours_worked	5.5	
Date_job_completed	22/10/2016	

[6]

- (b)** Freya, an administration assistant in the company, enters the data from the engineers' job sheets into the database. The data must be entered accurately.

Freya uses batch totals and hash totals as she enters the data for each job. Describe how batch and hash totals can be used to try to ensure that she enters accurate data.

[6]

- \*3** Many homes have high-speed access to the internet. A home-based local area network (LAN) enables users to make good use of the high-speed internet access.

Discuss the benefits and drawbacks of having a LAN in a home.

[8]

- ..... [6]

- [4]

- (b) Describe **one** way a user could reduce the risks from key logging software on their computer.

.....

.....

.....

..... [2]

- 6 Prolonged use of computers can cause health problems such as repetitive strain injury (RSI) and eye strain. Taking regular breaks away from the computer is one way that computer users can try to prevent these problems.

- (a) State **one** other way, apart from taking regular breaks, that a computer user can try to avoid getting **RSI**.

.....

..... [1]

- (b) State **two** other ways, apart from taking regular breaks, that a computer user can try to avoid getting **eye strain**.

1.....

.....

2.....

.....

[2]



- \*7** There are billions of digital devices in use around the world. These devices affect the environment in a range of ways.

Discuss the environmental impact of digital devices.

[8]

**END OF QUESTION PAPER**

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