

OCR

Oxford Cambridge and RSA

Tuesday 9 January 2018 – Morning**LEVEL 1/2 CAMBRIDGE NATIONAL IN ICT****R001/01 Understanding Computer Systems**

Candidates answer on the Question Paper.

OCR supplied materials:

- Clean Copy of the Pre-release Case Study (R001/01 – 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 Case Study Insert can 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 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**.
- This document consists of **12** pages. Any blank pages are indicated.

Answer **all** the questions.

SECTION A

The questions in this section are based on scenario 1 in the case study and your background research.

1 SecuritechTV closed-circuit television (CCTV) systems can be set up so that the live video feed can be watched by a security guard.

(a) Identify the type of output device that is most suitable for this purpose.

..... [1]

(b) Some CCTV cameras are set up so that they can be rotated and tilted to change their view.

Describe how output devices are used to change a camera's view.

.....
.....
.....
..... [2]

(c) The live feed can be saved onto a secondary storage device.

(i) Explain **one** feature of a secondary storage device that would make it suitable for use in storing a day's video data.

.....
.....
.....
..... [2]

(ii) Identify **one** type of storage device that would be suitable for this task.

..... [1]

(d) Identify **one** suitable file type to use for storing video files.

..... [1]

2 When a CCTV system is installed, the main account is given the name 'Administrator' and the default password is set to 'Let me in'.

(a) Identify **one** reason why the Administrator account is always given the same default password.

.....
..... [1]

(b) Describe **one** way in which SecuritechTV could be affected if the main administrator password is not changed from this default setting.

.....
.....
.....
..... [2]

SecuritechTV has been asked for advice on what makes a secure password.

(c) State **two** items of advice that SecuritechTV could pass on to customers wishing to create a secure password.

1.
.....
2.
..... [2]

3 Each CCTV system, installed by SecuritechTV, includes a desktop computer that runs the CCTV system. Each desktop computer has an operating system that includes utility software.

(a) Describe what is meant by the term 'utility software'.

.....

 [2]

(b) The table below lists three types of utility software. Complete the table to describe why each type of utility software would be used on the desktop computer system. [6]

Type of utility software	Description of why the software would be used
Data compression utility
Disk checker utility
Disk defragmenter utility

(c) Identify **two other** types of utility software.

1.
 2. [2]

4 The cameras that SecuritechTV use can be connected wirelessly or by cable to a CCTV network.

(a) Explain why a wireless network may be less secure than a wired network.

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.....
.....
.....
.....
.....
.....
..... [4]

(b) Describe how the data transmitted by a wireless signal can be made more secure.

.....
.....
.....
..... [2]

(c) Explain **one** advantage of using a wireless connection between a CCTV camera and the CCTV network.

.....
.....
.....
..... [2]

(d) Explain **one** advantage, other than security, of using a wired connection between a CCTV camera and the CCTV network.

.....
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.....
..... [2]

SECTION B

The questions in this section are based on scenario 2 in the case study and your background research.

- 5 HGR Electricals would like to create an online form that each new member of staff completes to show that they are aware that the factory is under 24 hour surveillance.
- (a) Use the space below to design a suitable form to use online. Use the inner box to draw your form and the space in the outer box to add an explanation of the features you have included.

Marks will be awarded for:

- items to be included;
- good use of space;
- fitness for purpose;
- annotations to explain why each feature has been included.

[9]

The image shows a large rectangular box intended for drawing a form. Inside this box, there is a smaller, centrally placed rectangular box. The outer box is intended for providing an explanation of the features of the form, while the inner box is for drawing the form itself.

- (b) HGR Electricals would like the data that is entered into the online form to be saved directly onto the staff database once it is submitted by an employee.

Describe **one** way that the data can be coded so that it can be entered directly onto the staff database.

.....

.....

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..... [2]

- (c) Explain **one positive** impact on HGR Electricals of data entered onto the online form being saved directly onto the staff database.

.....

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..... [2]

- (d) Explain **one negative** impact on HGR Electricals of data entered onto the online form being saved directly onto the staff database.

.....

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..... [2]

- (e) When the online form is sent back to HGR Electricals by an employee, a presence check is run on each field included on the form.

Explain **one** reason why this presence check is important.

.....

.....

.....

..... [2]

7 Will used his ex-manager's User ID and password to remotely access the company's network without permission and delete some files.

(a) Identify the UK law that Will has broken by accessing the network in this way.

..... [1]

(b) Describe **one** possible penalty that a court can impose upon Will if he is found guilty of accessing the network without permission and deleting files.

.....
.....
.....
..... [2]

END OF QUESTION PAPER

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