

Thursday 6 June 2013 – Morning

LEVEL 1/2 CAMBRIDGE NATIONAL IN ICT

R001/01 Understanding Computer Systems

Candidates answer on the Question Paper.

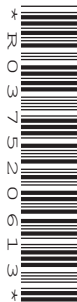
OCR supplied materials:

- Clean Copy Case Study

Other materials required:

None

Duration: 1 hour



Candidate forename		Candidate surname	
Centre number		Candidate number	

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 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**.
- This document consists of **12** pages. Any blank pages are indicated.

SECTION A

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

Answer **all** questions.

- 1 Portland Games has a website that it uses to sell hardware and software.

(a) Identify **one** input device that could be used to enter text onto the website.

..... [1]

John, a new customer, must set up an account by completing a form on the website before he can place an order. To do this, he will need to choose a username and enter the country where he lives.

(b) Explain why each username used on the Portland Games website must be unique.

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..... [2]

(c) Explain how the form could make sure that John can enter only a valid country name.

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..... [2]

3

2 The information that John gives when he creates his new account is stored on a database.

- (a) State **one** output device which can be used to produce a hard copy of the information stored in the database.

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..... [1]

- (b) Describe **three** features of database software that make it suitable for storing and analysing customer information.

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[6]

3 Portland Games is considering creating a community section on its website.

Discuss the implications **for Portland Games** of including a community section on its website.

[9]

- 4 Rakesh Ram, based in England, and Clare Jones, based in South Africa, work together to write the product showcase section of the website.

Rakesh and Clare both have computers which are connected to the internet.

Rakesh would like Clare to check an article he has written.

- (a) Describe **one** method which could be used to transfer the article from Rakesh's computer to Clare's via the internet.

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..... [2]

- (b) Identify **one** security measure that Rakesh could use to prevent unauthorised people reading the article he sends to Clare via the internet.

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..... [1]

- (c) Clare needs to provide feedback about the article to Rakesh.

Describe **two** features of word processing software that Clare could use to provide Rakesh with feedback.

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2

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..... [4]

6

(d) Clare would like to use an internet-based video conferencing service to speak with Rakesh.

State **one** device that would be needed to take part in this video conference, for each of the following requirements.

Requirement	Device
Voice input	
Moving image input	
Voice output	
Moving image output	
Connectivity	

[5]

SECTION B

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

Answer **all** questions.

- 5 Jane Marsh is a delivery driver for Express Packages Logistics (EPL). Before leaving the delivery depot, Jane connects her hand-held computer to EPL's network.

- (a) Identify **one** type of **wired** method which she could use to connect her computer to the network.

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

- (b) Each hand-held computer can also connect to EPL's network using a wireless connection. As part of its security, the wireless network requires the use of a security key.

Describe how a security key is used to allow a device to connect to a **wireless** network.

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..... [2]

- (c) Data is stored on the hand-held computer using a solid state drive (SSD).

Explain **one** reason why a solid state drive is more suitable than a hard disk drive for use in a hand-held computer.

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..... [2]

- 6 (a) EPL uses barcodes to track the location of packages.

Describe how a barcode reader captures the data stored in the barcode.

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..... [3]

- (b) Customers must sign to show that they have received a package.

Describe how the customer's signature could be entered onto the hand-held computer.

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..... [2]

- (c) EPL receives information from the hand-held computers to track the location of each delivery driver.

Describe how the Global Positioning System (GPS) locates the position of an individual delivery driver.

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..... [3]

- 7 EPL has considered attaching a Radio Frequency Identification Device (RFID) tag to each package it is delivering to help improve its traceability.

(a) Describe how RFID technology would track the movement of packages EPL are delivering.

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..... [3]

(b) Explain how cost would influence the decision about whether to adopt RFID technology.

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..... [2]

- 8 The EPL delivery depot manager sometimes needs to give Jane new information and delivery instructions while she is away from the delivery depot.

(a) Identify **two** benefits to the depot manager of using a phone call to communicate this information.

1.....

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2.....

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..... [2]

(b) Identify **one drawback** to Jane of receiving this information in a phone call.

.....

..... [1]

(c) Identify **one drawback** of using email to send this information.

.....

..... [1]

10

- 9 A customer has forwarded an email to EPL. The customer suspects that the email is not from EPL and would like advice on what action to take.

Subject: EPL Customer Services. Prize winner!

Hello!

The courier company has awarded 2u a special prize for being an outstanding customer!

Your prize is 650 million United States Dollars (USD).

Please attention!

To collect your prize you must give us your bank details. Please download and open the attached form to add your bank details. Then send it to elpprize@czgt.com.

- (a) Identify **four** reasons why this email is suspicious.

- 1.....
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2.....
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3.....
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4.....
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[4]

- (b) Identify **one** action, other than contacting EPL, that the customer should take in response to this email.

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[1]

END OF QUESTION PAPER

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