OCR

Thursday 8 January 2015 – 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.

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Turn over

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SECTION A

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

Answer **all** the questions.

1   **(a)**   Staff at Image Reflections use a range of input devices in their work.

In the table below, write the letter of the input device that best matches the purpose.

The first one has been completed for you.

A.   Chip and pin reader
B.   Keyboard
C.   Microphone
D.   Mouse
E.   Scanner
F.   Sensor
G.   Touch pad

Purpose	Input Device
To move the pointer around the screen and select items on a list or menu	D
To capture data held on a debit or credit card	
To capture sound	
To enter characters onto a computer system	
To make electronic copies of paper documents	
To measure physical variables such as light in a room	
To move the pointer by following movements of the user's fingers	

[6]

(b)   Each of the photographers employed by Image Reflections is given a laptop computer.

Identify **two** features of laptop computers that make them more suitable than desktop computers for the photographers working for Image Reflections.

1 ....

2 ....

[2]

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3

2   The reference for each photograph is made up of the first four letters of the surname of the person who booked the session and four digits based on the order in which the photograph was taken during the session.

(a) A customer, Fred Smith, wants to buy the tenth photograph taken during a session he booked.

State the reference of this photograph.

.... **[2]**

(b) (i) Explain, using an example, why the system that Image Reflections uses may not create a unique reference for each photograph.

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.... **[3]**

(ii) Describe **one** possible problem that could be caused if Image Reflections does not have a unique reference for each photograph.

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.... **[2]**

4

3   The Image Reflections website includes a range of advertisements. Cookies are used to select the advertisements that are shown to different customers when they return to the site.

   (a) Describe how cookies may be used to select the advertisements that are shown to returning customers.

   ....

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   .... **[3]**

   (b) The Image Reflections website includes a pop-up that appears when a person first accesses the website. This pop-up warns users that the website uses cookies.

   Explain why Image Reflections has chosen to include this pop-up.

   ....

   ....

   ....

   .... **[2]**

4   Image Reflections wants to gather customers' opinions on the quality of service provided. There is a feedback form on the Image Reflections website for this purpose.

This feedback form is shown below.

Explain **three** design problems on the feedback form that may make it hard to use.

Customer Feedback

What is your gender?

Male   ☐
Female   ☐

How old are you?

16 – 22   ◯
22 – 26   ◯
26 – 32   ◯
32 and over   ◯

Date of photographic session
☐ ☐ ☐ ☐ ☐

Please leave your feedback

[   ]

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1 ....

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2 ....

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3 ....

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[6]

5 The owners of Image Reflections are considering replacing some, if not all, of the Head Office desktop computers with tablet computers.

Explain the factors that should be considered when deciding whether or not to replace the desktop computers with tablet computers.

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.... **[8]**

7

SECTION B

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

Answer **all** the questions.

6   Each week, Sean has a range of different types of appointment. Some of these are personal and others are to do with his work for Image Reflections. Sean uses Diary Management Software to note the date and planned duration of each appointment.

   (a) Identify **one** further item of information about appointments that Sean could store.

   .... **[1]**

   (b) Explain how the use of Diary Management Software could stop Sean accepting a booking that clashes with one he already has.

   ....

   ....

   ....

   .... **[2]**

   (c) Sean needs to be able to quickly identify which appointments are personal and which are work-related.

   Describe **one** feature of Diary Management Software that Sean could use for this purpose.

   ....

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   .... **[2]**

Turn over

8

(d) Diary Management Software includes many features other than those used to record appointments.

Identify **one further** feature of Diary Management Software that Sean could use to help him with his work and explain how using this feature would benefit him.

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.... **[3]**

7 Sean needs to transfer photographs from his camera to his laptop.

(a) Identify **two** methods he could use to do this.

1 ....

2 ....

[2]

(b) Sean edits some of the photographs he takes to make them more suitable for the customer. He uses image manipulation software to do this.

The table below shows three tools available in image manipulation software. For each tool, describe how it could be used to make the photograph more suitable for the customer.

Tool	How this makes the photograph more suitable
Crop	
Rotate	
Zoom	

[6]

(c) The files Sean has edited are stored in a proprietary format.

What is meant by the term 'proprietary format'?

....

.... **[1]**

(d) Sean exports the files in an open format.

Explain why this is necessary.

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.... **[2]**

8 At the end of each working day, Sean uploads his photographs directly to the main server at Head Office.

(a) Describe **one** possible threat to data security that could be caused by transferring data between computers.

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.... **[2]**

(b) Image Reflections use a firewall to protect its main server.

Describe how a firewall protects a server.

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.... **[3]**

9 Customers are sent a CD containing a proof copy of each photograph so that they can decide which they want to purchase.

Describe **one** method of formatting the proof photographs so that customers have to purchase any photographs they want to keep.

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.... **[2]**

END OF QUESTION PAPER

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