# OCR
Oxford Cambridge and RSA

## Wednesday 17 May 2017 – Morning

### LEVEL 1/2  CAMBRIDGE NATIONAL IN ICT

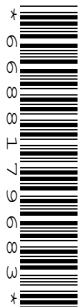R001/01   Understanding Computer Systems

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 | |
|---|---|---|---|

| Centre number | | Candidate number | |
|---|---|---|---|

**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.

OCR is an exempt Charity

**Turn over**

**2**

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   Indiana Motors stores a record of each car it has in stock.

**(a)** Identify **one** type of applications software that would be suitable to store and quickly locate records of cars in stock.

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**(b)** Identify **two** features of this software that make it suitable for this purpose.

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2 ..........................................................................................................................................

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**[2]**

**(c)** Identify **one** suitable output device that can be used to display each record.

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**2** When a customer buys a car, they are asked to put their contact details on a form.

**(a)** Use the space below to design a paper-based data capture form that could be used to collect the contact details. The data has to be in a suitable format for entry into the computer system.

You should use the whole of the space provided. **[7]**

**Turn over**

**4**

All of the customer records are stored on a computer system in the main office. Regular backups must be made of this system.

**(b)** Explain **one** reason why this computer system needs to be backed up.

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**(c)** Identify **one** type of storage media that can store the backup of the whole computer system.

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**5**

3    Customers who want to buy a car can book a test drive. Each test drive is accompanied by a member of the sales staff and so each booking is recorded on an online calendar that is shared between the sales staff.

Explain how the features of shared online calendars could help sales staff at Indiana Motors keep track of bookings and improve customer service.

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4   Indiana Motors has a multimedia presentation that runs in the showroom to promote special offers.

(a) The multimedia presentation includes photographs of cars.

Identify **two** possible issues that may arise if Indiana Motors uses photographs that it finds on the internet as part of this presentation.

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**[2]**

(b) The table below shows features of a multimedia product.

For each feature, describe how it could be used in the presentation that Indiana Motors uses in the showroom. **[6]**

| Feature | How used in the presentation |
|---|---|
| Text | ................................................................................................................<br>................................................................................................................<br>................................................................................................................<br>................................................................................................................ |
| Images | ................................................................................................................<br>................................................................................................................<br>................................................................................................................<br>................................................................................................................ |
| Animation | ................................................................................................................<br>................................................................................................................<br>................................................................................................................<br>................................................................................................................ |

**(c)** The multimedia presentation has no user interaction.

Explain **one** benefit to the customer if the multimedia presentation did include user interaction.

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## SECTION B

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

**5** Four examples of how Safe Breakdown uses technology are listed in the table below.

Complete the table by putting one tick (✓) in each row to show the use of the technology by Safe Breakdown. **The first answer has been completed for you.** **[3]**

| | | Technology Type | | | |
|---|---|---|---|---|---|
| | | **RFID** | **GPS** | **Barcode Reader** | **Near Field Communication** |
| **Use of Technology** | To track and record staff purchases from the canteen | ✓ | | | |
| | To track the location of its breakdown vehicles | | | | |
| | To accept payment | | | | |
| | To track stock in the warehouse | | | | |

9

**6** The Finance Department at Safe Breakdown uses personal data about customers as part of its work. This data needs to be stored by Safe Breakdown.

The Data Protection Act states that Safe Breakdown has to take action to protect the personal data it holds.

**(a)** Describe **one** way that Safe Breakdown can make use of access rights to provide security for its stored data.

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**(b)** Other than protecting personal data, describe **two** actions that Safe Breakdown must take to comply with the Data Protection Act.

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**(c)** Describe **one** moral consideration that should be applied when collecting data.

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**7** Dulcie works for Safe Breakdown as a vehicle recovery driver. She has been provided with a smartphone and a hands-free headphone set to use in her work. Dulcie must keep the smartphone on at all times.

**(a)** Describe **one** benefit to Safe Breakdown that may result from giving Dulcie a smartphone to use in her work.

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**(b)** When a customer requests breakdown recovery, Dulcie is telephoned and told where she needs to go and the customer's name.

Identify **two** reasons why Dulcie's smartphone may be unable to receive the telephone call.

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**[2]**

**(c)** Identify **two** other ways in which the smartphone could be used to inform Dulcie of the details of the breakdown.

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**[2]**

**(d)** Identify **two** input devices that are found on a smartphone.

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**[2]**

**(e)** Identify the **most** suitable method of connection between the hands-free headphone set and the smartphone.

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**(f)** Explain why Safe Breakdown has chosen to provide each driver with a hands-free headphone set.

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**END OF QUESTION PAPER**

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