



Oxford Cambridge and RSA

Wednesday 9 January 2019 – Afternoon

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 Sami designs and creates a four-page colour booklet to advertise the special offers available.

(a) Draw a line linking the input device with the purpose for which Sami could use it. [3]

Keyboard To capture images of locations in a shop.

Digital camera To create digital copies of stock images provided in hard copy by suppliers.

Scanner To add text to the colour booklet.

(b) Identify the **most suitable** type of software that Sami could use to produce the booklet.

..... [1]

Sami has a shared area in the Cloud that she uses to share the four-page colour booklet and other documents with the managers of her shops.

(c) Explain **one** advantage to Sami of using the Cloud to distribute documents to the managers of her shops.

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

(d) Explain **one** disadvantage to Sami of using the Cloud to distribute documents to the managers of her shops.

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

Advertisements for the special offers are shown digitally in the entrances to each shop to attract the attention of customers.

(e) Identify **one** output device that could be used to display these digital advertisements.

..... [1]

2 Each item being purchased is scanned at the till point.

(a) Describe **one** technology that could be used to identify the scanned item.

. [4]

Sami's Supermarkets uses a scanning system to find the price of each item to calculate the bill for each customer. In other shops, staff have to key the price of each item into the system.

(b) Compare the use of the automatic system as used by Sami's Supermarkets with a system where prices are entered manually.

Your answer should consider cost of the system, accuracy and ease of use.

[8]

3 Sami collects daily sales data. She uses the daily sales figures to create a line graph of the sales for each week, with days along the x axis and level of sales along the y axis.

(a) Identify the **most suitable** type of software for Sami to use to create a line graph of the data.

..... [1]

(b) Explain, with the use of examples, how line graphs could be used to compare the daily sales of different shops in the Sami's Supermarket chain.

.....

 [4]

(c) Line graphs include a number of features. Complete the table below to show the purpose of each of the listed items. [3]

Item	Purpose of this item
Title
Legend
Units on the x axis and the y axis

4 The Sami's Supermarkets website has had a Denial of Service (DoS) attack that has affected the web server.

Describe how a DoS attack prevents a web server from being able to carry out its usual tasks.

31

• [3]

SECTION B

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

5 Northern Frozen Foods Ltd operates a Virtual Private Network (VPN).

(a) Describe what is meant by the term 'Virtual Private Network'.

[2]

[2]

(b) Identify **two** benefits to Jensen of being able to use the VPN. For **each** benefit, explain why it is a benefit to Jensen. [6]

Benefit	Why this is a benefit to Jensen
1
2

Users who want to access the VPN must supply a user name and password.

(c) Explain why users have to supply this information to access the VPN.

[2]

[2]

6 Jensen has to choose between using his smartphone or a laptop to contact his manager when he is visiting customers.

(a) Explain **one** situation where it would be better for Jensen to use a smartphone rather than a laptop to contact his manager.

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[2]

(b) Explain **one** situation where it would be better for Jensen to use a laptop rather than a smartphone to contact his manager.

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[2]

Jensen has received a complaint email from a person claiming to be one of his clients. The email is asking Jensen to click an attachment to find out more about the complaint.

Jensen does not recognise the name of the person who has sent the email.

(c) Explain what Jensen should do in response to this email.

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[2]

7 Jensen uses a web-based email service to arrange and confirm appointments with clients.

(a) Explain **one** advantage of using an email rather than a person-to-person conversation on a telephone to arrange and confirm appointments.

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[2]

The email service includes an online calendar that Jensen has shared with a secretary who works in the main office. The secretary has been asked to set up a meeting for Jensen on the afternoon of next Tuesday.

(b) Identify **two** checks that the secretary must make before confirming that Jensen is available for the meeting.

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2

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[2]

Jensen has set up a calendar app on his phone so that he is reminded of all appointments.

(c) Identify **one** way in which a calendar app on his phone can remind Jensen that he has an appointment.

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[2]

Jensen has deliberately changed the timing of his reminders from 15 minutes before each appointment to 24 hours before they occur.

(d) Explain **one** possible reason why Jensen has changed the timing of his reminders.

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[2]

10

8 Jensen makes digital copies of a popular band's music tracks that he has purchased.

(a) (i) Identify the **most suitable** type of storage media for this purpose.

..... [1]

(ii) Explain **one** reason why this is the **most suitable** type of storage media.

.....
.....
.....

..... [2]

Jensen has been passing on the digital copies of music tracks to another sales person.

(b) Identify the UK Law that Jensen has broken by passing on these digital copies of music to other people.

..... [1]

END OF QUESTION PAPER

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