

Modified Enlarged 18 pt

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

Monday 17 January 2022 – Morning

Level 3 Cambridge Technical in IT

05839/05840/05841/05842/05877

Unit 3: Cyber security

Time allowed: 1 hour plus your additional time allowance

**You must have:
a clean copy of the Pre-release
(inside this document)**

Please write clearly in black ink.

**Centre
number**

--	--	--	--	--

**Candidate
number**

--	--	--	--

First name(s) _____

Last name _____

**Date of
birth**

D	D	M	M	Y	Y	Y	Y
---	---	---	---	---	---	---	---

READ INSTRUCTIONS OVERLEAF

INSTRUCTIONS

Use black ink.

Write your answer to each question in the space provided. If you need extra space use the lined pages at the end of this booklet. The question numbers must be clearly shown.

Answer ALL the questions.

Use the Insert to answer Questions 1 and 2.

INFORMATION

The total mark for this paper is 60.

The marks for each question are shown in brackets [].

Quality of extended response will be assessed in questions marked with an asterisk (*).

ADVICE

Read each question carefully before you start your answer.

Section A

Answer ALL the questions.

1 (a) When E James installed the password manager app, the app gave some hints and tips on how to secure their phone including how to prevent access to the data stored on their phone.

Two of the hints and tips they were given were to:

make sure that their phone is running the latest operating system (OS) by installing updates

install an anti-malware app.

(i) Explain how each of these protect their data.

OS Updates _____

Anti-malware _____

(ii) Identify and explain TWO other methods that could be used to prevent access to data stored on the phone.

Method 1 _____

Description _____

Method 2 _____

Description _____

- (b) (i) Two types of cyber security incident that could be caused by an individual obtaining the passwords that are stored in the password manager are account lockout and destruction.

Describe these types of cyber security incident.

Account Lockout _____

Destruction _____

- (ii) Identify ONE other type of cyber security incident that could be caused by an individual obtaining the passwords stored in the password manager.

[1]

- (c) Threats to the data stored on E James’s phone can be classified as accidental or intentional. Describe what is meant by an accidental and an intentional cyber security threat.

Accidental _____

Intentional _____

(d) Describe TWO methods that could be used during a cyber attack, to obtain the passwords stored in the password manager.

1

2

[4]

(e) A cyber security attack has taken place and E James is advised that they need to reduce the impact of the theft of the passwords.

(i) Describe ONE action that could be made to reduce the impact of the theft of the passwords.

[2]

(ii) Explain how the action you have described above will reduce the impact.

[3]

(iii) Identify ONE other action E James could take.

[1]

Section B

Answer ALL the questions.

3 Padas Travel Company has suffered a cyber security incident. Its server was hacked and all customer information stolen. The information stolen included:

Customer personal details

Customer financial details

Details about the holidays they have booked.

Following the cyber security incident, Padas Travel Company has hired a security company to produce a cyber security incident report about the theft of data.

(a) Identify TWO areas that could have been impacted by the theft of the customer data.

1 _____

2 _____

[2]

(b) Describe TWO items that need to be considered in the review section of the cyber security incident report.

1

2

[4]

4 Two of the objectives of security are maintaining confidentiality and integrity of data. Describe what is meant by confidentiality and integrity.

Confidentiality _____

Integrity _____

5 Companies are targeted by different types of attacker, each with their own separate agenda.

(a) Draw a line to connect each description of an attacker to the correct type. [3]

Description of Attacker	Type of Attacker
Uses someone else's codes to hack into the computer	Phisher
Sells information on weaknesses in computer systems	Script Kiddie
Sends an email pretending to be from the organisation	Vulnerability Broker

(b) Identify ONE other type of attacker.

[1]

END OF QUESTION PAPER



Oxford Cambridge and RSA

Copyright Information:

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact the Copyright Team, OCR (Oxford Cambridge and RSA Examinations), The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.