

Monday 17 January 2022 – Morning

Level 3 Cambridge Technical in IT

05839/05840/05841/05842/05877 Unit 3: Cyber security

Time allowed: 1 hour

C384/2201

You must have:

• a clean copy of the Pre-release (inside this document)



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Please write clea	arly in black ink.
Centre number	Candidate number
First name(s)	
Last name	
Date of birth	D D M M Y Y Y

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 (*).
- · This document has 16 pages.

ADVICE

· Read each question carefully before you start your answer.

	AMINER ONLY
Question No	Mark
1	/29
2	/10
3	/13
4	/4
5	/4
Total	/60

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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
[4]

(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
	Wethou 2
	Description
	[6]

(b)	(i)	Two types of cyber security incident that could be caused by an individual obtain the passwords that are stored in the password manager are account lockout and destruction.	_
		Describe these types of cyber security incident.	
		Account Lockout	
		Destruction	
			[4]
	(ii)	Identify one other type of cyber security incident that could be caused by an individual obtaining the passwords stored in the password manager.	
			. [Դ]

(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
	[4]

stored in the password manager.

(d) Describe two methods that could be used during a cyber attack, to obtain the passwords

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]

	Evaluate the ethical considerations of using a password manager.
	[10]
•	

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]

Following the publication of the cyber security incident report, Padas Travel Company has decided to investigate the use of monitoring systems as part of their cyber security risk management system.

(c)*	Evaluate the use of monitoring systems as a method of cyber security risk management.
	[7]

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

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

Type of Attacker
Phisher
Script Kiddie
Vulnerability Broker

[3]

4

5

(b)	Identify one other type of attacker.
	[1]

END OF QUESTION PAPER

ADDITIONAL ANSWER SPACE

If additional answer space is required, you should use the following lined pages. The question numbers must be clearly shown in the margins - for example, 2 or 3(c).



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