OCR
Oxford Cambridge and RSA

Wednesday 15 January 2025 – Morning

Level 3 Cambridge Technical in IT

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

Time allowed: 1 hour
C384/2501

C384--2501

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

05839-03

Please write clearly in black ink. **Do not write in the barcodes.**

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

First name(s) _____

Last name _____

Date of birth | D | D | M | M | Y | 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 page at the end of this booklet. The question numbers must be clearly shown.
- Answer **all** the questions.
- Use the Insert to answer the questions in Section A.

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 **12** pages.

ADVICE
- Read each question carefully before you start your answer.

Section A

Use the case study on **Cyber Security Course** in the **Insert** to answer the questions in this section.

Triangle Widgets is conducting a review into its cyber security.

1 The first stage in the review is to identify vulnerable assets.

(a) Identify **two** different **assets** Triangle Widgets has that could be the target of a cyber security incident.

Asset 1 .....

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Asset 2 .....

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

(b) Describe how the risk to Triangle Widgets can be analysed if an asset is compromised.

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..... **[4]**

As part of the review, the Triangle Widgets is looking at how its cyber security can be improved.

2 One area of improvement is the introduction of new security measures and controls.

(a) Describe **two operational** considerations Triangle Widgets needs to consider when implementing new security measures and controls.

Consideration 1 .....

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Consideration 2 .....

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[4]

The review has identified that Triangle Widgets should install an intrusion prevention system (IPS).

(b) Explain **two** features of an **intrusion prevention system (IPS)** that Triangle Widgets can use to improve its cyber security.

Feature 1 .....

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Feature 2 .....

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[4]

The review has identified that Triangle Widgets should use device management.

(c) Explain how Triangle Widgets can use **device management** to improve its cyber security.

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..... **[3]**

The review has identified that Triangle Widgets has a number of staff who work remotely and this is an area for concern.

(d) Explain why **remote working** is a concern for cyber security for Triangle Widgets.

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..... **[3]**

3 As part of the review Triangle Widgets is looking into how it would react if it was the victim of a cyber security incident. Triangle Widgets is running a table top exercise simulating the release of all its customers' personal details.

(a) Describe **two** actions Triangle Widgets can take to reduce the **impact** of this cyber security incident on its **customers**.

Action 1 .....

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Action 2 .....

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[4]

The cyber security incident needs to be categorised.

(b) Identify the **four** types of **incident category**.

Type 1 .....

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Type 2 .....

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Type 3 .....

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Type 4 .....

.....

[4]

One external authority that would need to be informed of the cyber security incident is the police.

(c) Identify **two other** external organisations that would need to be informed of the cyber security incident.

For **each** organisation, explain why they need to be informed.

Organisation 1 .....

Why informed .....

.....

Organisation 2 .....

Why informed .....

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[4]

Information has been received from the police of specific cyber security attacks against other companies in the same industry across the globe.

4* Discuss the impacts that cyber security incidents can have as a **global problem**.

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Section B

You do **not** need the case study to answer these questions.

5* Explain why an individual needs to protect their personal data.

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..... **[10]**

6 There has been an increase in the number of online cyber security attacks.

One type of attackers are hacktivists.

(a) Explain **one** target a hacktivist could attack.

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

Another type of attackers are insiders.

(b) Describe **two** motivations for an **insider**.

Motivation 1 .....

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Motivation 2 .....

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[4]

(c) Describe **two methods** that could be used by an attacker to target a person to gain information that could be used to access their online accounts.

Method 1 .....

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Method 2 .....

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[4]

A person is one type of target for cyber security threats.

(d) Identify **one other** type of target.

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..... **[1]**

END OF QUESTION PAPER

EXTRA ANSWER SPACE

If you need extra space use this lined page. You must write the question numbers clearly in the margin.

DO NOT WRITE ON THIS PAGE