

CAMBRIDGE TECHNICALS LEVEL 3 (2016)

Examiners' report

IT

05838–05842, 05877

Unit 3 January 2024 series

Contents

Introduction4

Unit 3 series overview5

Section A overview6

 Question 1 (a) (i)6

 Question 1 (a) (ii)7

 Question 1 (b) (i)8

 Question 1 (b) (ii)8

 Question 1 (b) (iii)*9

 Question 2 (a)10

 Question 2 (b)10

 Question 3 (a) (i)11

 Question 3 (a) (ii)11

 Question 3 (a) (iii)11

 Question 3 (a) (iv)11

 Question 3 (b) (i)12

 Question 3 (b) (ii)12

 Question 3 (b) (iii)13

Section B overview14

 Question 4 (a)14

 Question 4 (b)15

 Question 4 (c)15

 Question 516

 Question 6*16

Introduction

Our examiners' reports are produced to offer constructive feedback on candidates' performance in the examinations. They provide useful guidance for future candidates.

The reports will include a general commentary on candidates' performance, identify technical aspects examined in the questions and highlight good performance and where performance could be improved. The reports will also explain aspects which caused difficulty and why the difficulties arose, whether through a lack of knowledge, poor examination technique, or any other identifiable and explainable reason.

Where overall performance on a question/question part was considered good, with no particular areas to highlight, these questions have not been included in the report.

A full copy of the question paper and the mark scheme can be downloaded from [Teach Cambridge](#).

Would you prefer a Word version?

Did you know that you can save this PDF as a Word file using Acrobat Professional?

Simply click on **File > Export to** and select **Microsoft Word**

(If you have opened this PDF in your browser you will need to save it first. Simply right click anywhere on the page and select **Save as . . .** to save the PDF. Then open the PDF in Acrobat Professional.)

If you do not have access to Acrobat Professional there are a number of **free** applications available that will also convert PDF to Word (search for PDF to Word converter).

Unit 3 series overview

This unit is mandatory for the Extended Certificate, Diploma and Extended Diploma and optional for all pathways for the Introductory Diploma and Foundation Diploma.

The unit focuses on:

- an understanding of cyber security and the issues surrounding it
- measures that can be used to protect against cyber security incidents
- an understanding of how to manage cyber security incidents.

The paper is divided into two sections – A and B. Section A is worth 60% (40 marks) and are based around a pre-release scenario. The pre-release contains areas for further research that the candidate is expected to undertake and which form the basis of the questions to be asked. Section B is worth 40% (20 marks) and each question has its own short scenario.

Candidates who did well on this paper generally:	Candidates who did less well on this paper generally:
<ul style="list-style-type: none"> • used technical terms • related their responses to the scenario in the question • used the keywords in the question to give appropriate depth to their responses • learnt the key definitions from the specification. 	<ul style="list-style-type: none"> • answered the question they thought was being asked, not the one actually being asked • repeated the same point several times in different ways • gave an answer that had been eliminated in the question.

Section A overview

The pre-release identifies key research topics that the candidates should have spent some time working on. They need to have cross referenced the topics against the specification. The pre-release material assists the candidates in what to study and can be used to give an insight into the answers to certain questions.

Question 1 (a) (i)

1 PH Virtual Challenges suspects that its organisation's data is being stolen by an insider.

(a)

(i) Explain why PH Virtual Challenges needs to **protect** its organisation's data.

.....

.....

.....

.....

.....

.....

..... [3]

The first research point on the pre-release material was the types of data stored by PH Virtual Challenges and why it needs to be protected. Candidates should have studied the different types of data stored. Unfortunately, when answering this question, the majority of candidates ignored 'organisation' and focused on the word data and gave examples to and referenced personal data.

Misconception



The specification divides the type of data into three – personal, organisation and state. It is important that the candidate can differentiate between these and examples of data in each category.

Question 1 (b) (i)

(b) PH Virtual Challenges suspects the insider is **stealing** customer data.

(i) Identify **three** different ways that an insider could **steal** customer data from the network.

Way 1

Way 2

Way 3

[3]

Very often the answers were generalised – hacking or using someone else’s account. A large proportion of responses were about methods of access to data rather than the act of stealing it. The most successful answers were those that gave examples related to physical theft of the data.

Question 1 (b) (ii)

(ii) Describe **two** different ways that the theft of data can impact the **safety** of the customer.

Way 1

.....

Way 2

.....

[4]

Safety was the key part of the question. Many answers gave generalised ways that the data could be used which did not impact on the safety of the customer. Candidates who scored well in this question gave specific examples how data that was stolen could be used to impact on the safety – either physical, emotional or financial of the customer.

Question 2 (a)

2 PH Virtual Challenges has identified that it has been subjected to a **system attack**.

(a) Explain, using an example, what a **system attack** means.

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

This was not answered very well with many candidates giving examples of attacks that could have been system or physical. In many answers this was due to a lack of explanation. The majority of marks obtained for this question were by the example.

Question 2 (b)

(b) Describe why an attack on the data held by PH Virtual Challenges might be **state sponsored**.

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

This was poorly done by the majority of candidates. The pre-release latitudinal and longitudinal data gave some ideas as to how this question might have been answered and some candidates had obviously interpreted this. To many candidates gave answers from the past paper where a similar question appeared.

Question 3 (a) (i)

3 When responding to a cyber security incident, PH Virtual Challenges follows a **handbook**.

(a)

(i) Why is it **important** to list the responsibilities of individuals in the **handbook**?

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

The majority of candidates answered this well and achieved the mark. In those candidates who did not achieve the mark, the most common error was a repetition of the word responsibility from the question.

Question 3 (a) (ii)

(ii) Why is it **important** to list the individuals to contact in the **handbook**?

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

Most candidates answered this well and achieved the mark. Those who did not either focused on why the handbook should be printed rather than digital or gave answers related to identifying the customers.

Question 3 (a) (iii)

(iii) Why is it **important** to list the procedures to be followed in the **handbook**?

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

The majority of candidates answered this well and achieved the mark. In those candidates who did not achieve the mark, as with 3(a)(i) the most common error was a repetition of the keyword from the question.

Question 3 (a) (iv)

(iv) Why is it **important** to know the **extent** of the incident?

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

There were many different good answers to this question with those candidates who followed the flow of the question getting it right. The question is about responding to a cyber security incident. Answers that related to after the incident were not relevant and incorrect.

Question 3 (b) (iii)

(iii) Explain why, following a cyber security incident, the section in the CSIR on recommendation of changes might **not** contain any recommendations.

.....

.....

.....

..... [2]

This question was answered very well by the majority of candidates with many creative and correct answers.

Section B overview

This section is not based on the pre-release material. Each question is given a short context and candidates are expected to use it, where appropriate, within their responses.

Question 4 (a)

Taylor has become concerned about their personal security.

- 4**
(a) Taylor has installed a security alarm in their house. When activated it gives out a high-pitched continuous sound.

Describe **one advantage** and **one disadvantage** of the use of a security alarm.

Advantage

.....

.....

.....

Disadvantage

.....

.....

.....

[4]

The advantage was very well answered with the majority of candidates achieving both the marks. The disadvantage was not very well answered. Candidates gave answers relating to cost, the alarm system being hacked or the alarm going off because of pets. In all of these the candidate identified but did not describe their answer, losing marks.

Question 5

5 Give **two** ways **organised crime** could target Taylor's phone.

Way 1

.....

Way 2

.....

[2]

Most candidates understood what was meant by organised crime but the ways that they identified were too generalised and would not have worked as a method of targeting the phone.

Question 6*

6* Explain how Taylor could use cyber security risk management to protect their **digital vulnerabilities**.

.....

.....

.....

.....

.....

..... [7]

As with the previous essay those that explained the process of risk management achieved marks in the top band.

Too many answers however were based around just one of the aspects – prevention - and were not explained or exemplified. This limited the marks that could be awarded.

A few candidates seemed to think that 'cyber security risk management' was an app to be downloaded and updated rather than a process.

Need to get in touch?

If you ever have any questions about OCR qualifications or services (including administration, logistics and teaching) please feel free to get in touch with our customer support centre.

Call us on
01223 553998

Alternatively, you can email us on
support@ocr.org.uk


For more information visit

 **ocr.org.uk/qualifications/resource-finder**

 **ocr.org.uk**

 **facebook.com/ocrexams**

 **twitter.com/ocrexams**

 **instagram.com/ocrexaminations**

 **linkedin.com/company/ocr**

 **youtube.com/ocrexams**

We really value your feedback

Click to send us an autogenerated email about this resource. Add comments if you want to. Let us know how we can improve this resource or what else you need. Your email address will not be used or shared for any marketing purposes.



I like this



I dislike this

Please note – web links are correct at date of publication but other websites may change over time. If you have any problems with a link you may want to navigate to that organisation's website for a direct search.



OCR is part of Cambridge University Press & Assessment, a department of the University of Cambridge.

For staff training purposes and as part of our quality assurance programme your call may be recorded or monitored. © OCR 2024 Oxford Cambridge and RSA Examinations is a Company Limited by Guarantee. Registered in England. Registered office The Triangle Building, Shaftesbury Road, Cambridge, CB2 8EA. Registered company number 3484466. OCR is an exempt charity.

OCR operates academic and vocational qualifications regulated by Ofqual, Qualifications Wales and CCEA as listed in their qualifications registers including A Levels, GCSEs, Cambridge Technicals and Cambridge Nationals.

OCR provides resources to help you deliver our qualifications. These resources do not represent any particular teaching method we expect you to use. We update our resources regularly and aim to make sure content is accurate but please check the OCR website so that you have the most up to date version. OCR cannot be held responsible for any errors or omissions in these resources.

Though we make every effort to check our resources, there may be contradictions between published support and the specification, so it is important that you always use information in the latest specification. We indicate any specification changes within the document itself, change the version number and provide a summary of the changes. If you do notice a discrepancy between the specification and a resource, please [contact us](#).

You can copy and distribute this resource in your centre, in line with any specific restrictions detailed in the resource. Resources intended for teacher use should not be shared with students. Resources should not be published on social media platforms or other websites.

OCR acknowledges the use of the following content: N/A

Whether you already offer OCR qualifications, are new to OCR or are thinking about switching, you can request more information using our [Expression of Interest form](#).

Please [get in touch](#) if you want to discuss the accessibility of resources we offer to support you in delivering our qualifications.