

**CAMBRIDGE TECHNICALS LEVEL 3 (2016)**

**Examiners' report**

**IT**

**05838–05842, 05877**

**Unit 1 Summer 2022 series**

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## 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 OCR.

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## Unit 1 series overview

Overall candidates were well-prepared and attempted the majority of questions. More centres now seem to prepare candidates for an examination that will require terminology from the specification. However, there is still a tendency to answer questions using either non-technical language or very generic terms (for example the question on attributes for a network manager) and the later, more technical questions have again not been prepared for.

<b>Candidates who did well on this paper generally did the following:</b>	<b>Candidates who did less well on this paper generally did the following:</b>
<ul style="list-style-type: none"><li>• made sure to identify first in an identify and describe question</li><li>• answered well on Questions 19 and 20</li><li>• made several well thought out points in the Level of Response questions.</li></ul>	<ul style="list-style-type: none"><li>• did not identify first in an identify and describe question</li><li>• did not answer Questions 19 and 20.</li></ul>

## Section A overview

Few candidates were seen who achieved full marks for Part A but most candidates achieved half of the marks. Questions 1, 2, 5, 6, 13 and 15 were most commonly answered correctly. The main areas of difficulty in this paper were Questions 7 to 11.

## Section B overview

Full marks were quite often not achieved for Question 16(a). A high proportion of candidates provided responses for all the questions although some of these were not relevant. Questions 19(b) and 19(c) were quite often not attempted by some candidates.

There was good evidence of candidates providing a context to their responses on the long response questions. This paper provided a good differentiation between candidate abilities with many candidates scoring low marks for the more technical responses to Questions 19 and 20.

### Question 16 (a)

**16** When the new offices are opened, the AAA IT Support team need to install new computer systems in the offices for the staff.

**(a)** Identify and describe **two** output devices that the AAA IT Support team could install in the new offices.

1 .....

.....

.....

.....

.....

.....

2 .....

.....

.....

.....

.....

**[4]**

Many candidates achieved full marks here. However, there were a number of candidates who offered **input devices** for their response. Some candidates successfully identified a suitable output device but were unable to describe its purpose.

### Question 16 (b)

**(b)** The new computer systems contain different components.  
Explain the purpose of the following components.

Fibre channel port

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

Graphics card

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

Power supply

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

**[6]**

Most candidates gained marks from their knowledge of graphics cards. Very few candidates knew the purpose of a fibre channel port. Unfortunately, many candidates were not technical enough in their response for power supply (usually answering supplies power). Where candidates did attempt a technical response, it was commonly to convert AC to DC.

### Question 17\*

**17\*** AAA need to decide on the type of application software to install on the new computer systems.

Discuss the advantages and disadvantages of installing and using bespoke application software on the AAA computer systems.

**[10]**

Where candidates knew what a bespoke application was, they generally offered good responses ranging from the top of mark band 2 into mark band 3.

## Question 18

- 18** AAA have used spreadsheet software to track the cost of the purchase and installation of the new computer systems.

Explain one disadvantage of using spreadsheet software to track the cost of the purchase and installation of the new computer systems.

.....

.....

.....

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

Candidates in general did not score highly on this question, with many given zero marks. The majority of responses stated that a disadvantage of the spreadsheet software was that it was 'hard to use', however there were some that offered more technical responses concerning data repetition.



### Question 19 (a)

19 Fig. 1 is a diagram of the peer-to-peer network that AAA have installed in their Cardiff office.

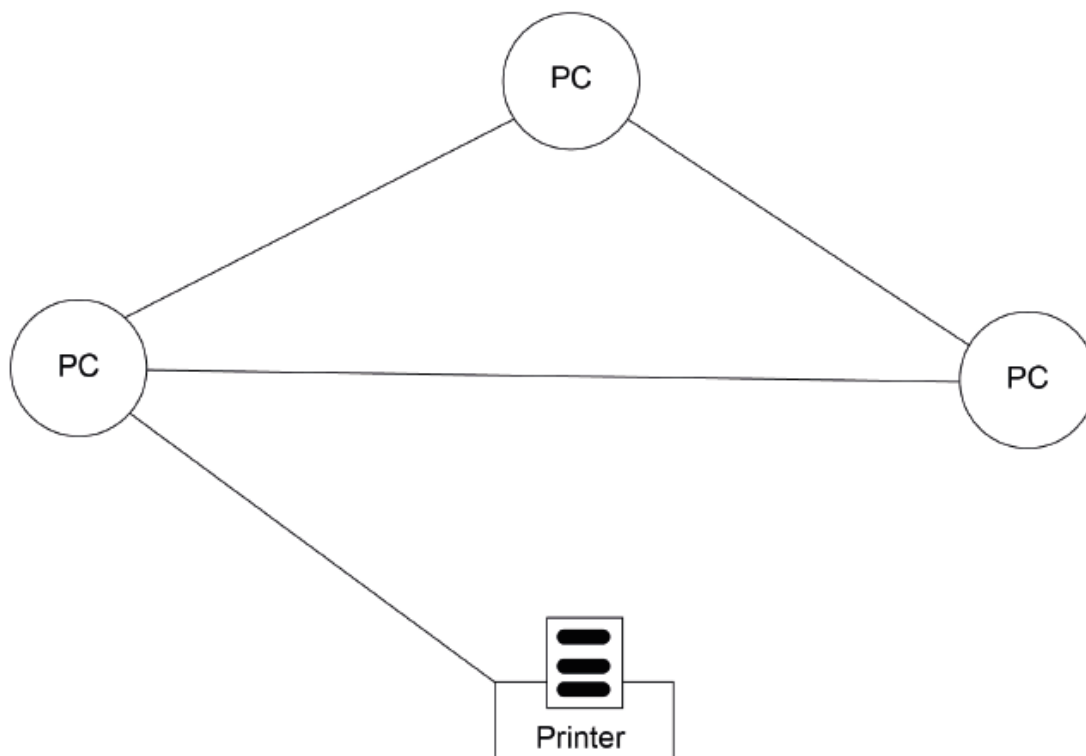


Fig. 1

(a) Explain two characteristics of a peer-to-peer network.

1 .....

.....

.....

2 .....

.....

.....

[4]

Candidates who were generally more successful across the paper offered characteristics that feature only on a peer-to-peer network (for example the absence of a central server). Many candidates described what they saw in the diagram above or answered with characteristics generically applicable to any network.

### Question 19 (b)

(b) The three offices will be linked together using a WAN.

Identify and describe **one** characteristic of the ADSL and ISDN connectivity methods that could be used to create a WAN.

ADSL .....

.....

.....

.....

.....

ISDN .....

.....

.....

.....

.....

**[6]**

Many candidates declined to answer this technical question. Many candidates did not identify a characteristic and then go on to describe in more detail.

#### Exam Technique

It is very important for candidates present their answer as requested. In an Identify and Describe answer the candidate must first Identify before any marks may be awarded for Describe.

### Question 19 (c)

**(c)** A default gateway will need to be set up as part of the WAN.

Explain the term default gateway.

.....

.....

.....

.....

.....

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

This is again one of the more technical questions on the paper, but many candidates gave a response based on what they understood of the words default and gateway.

## Question 20 (a)

**20 (a)** AAA have decided to install a wired mesh network topology in each of the offices.

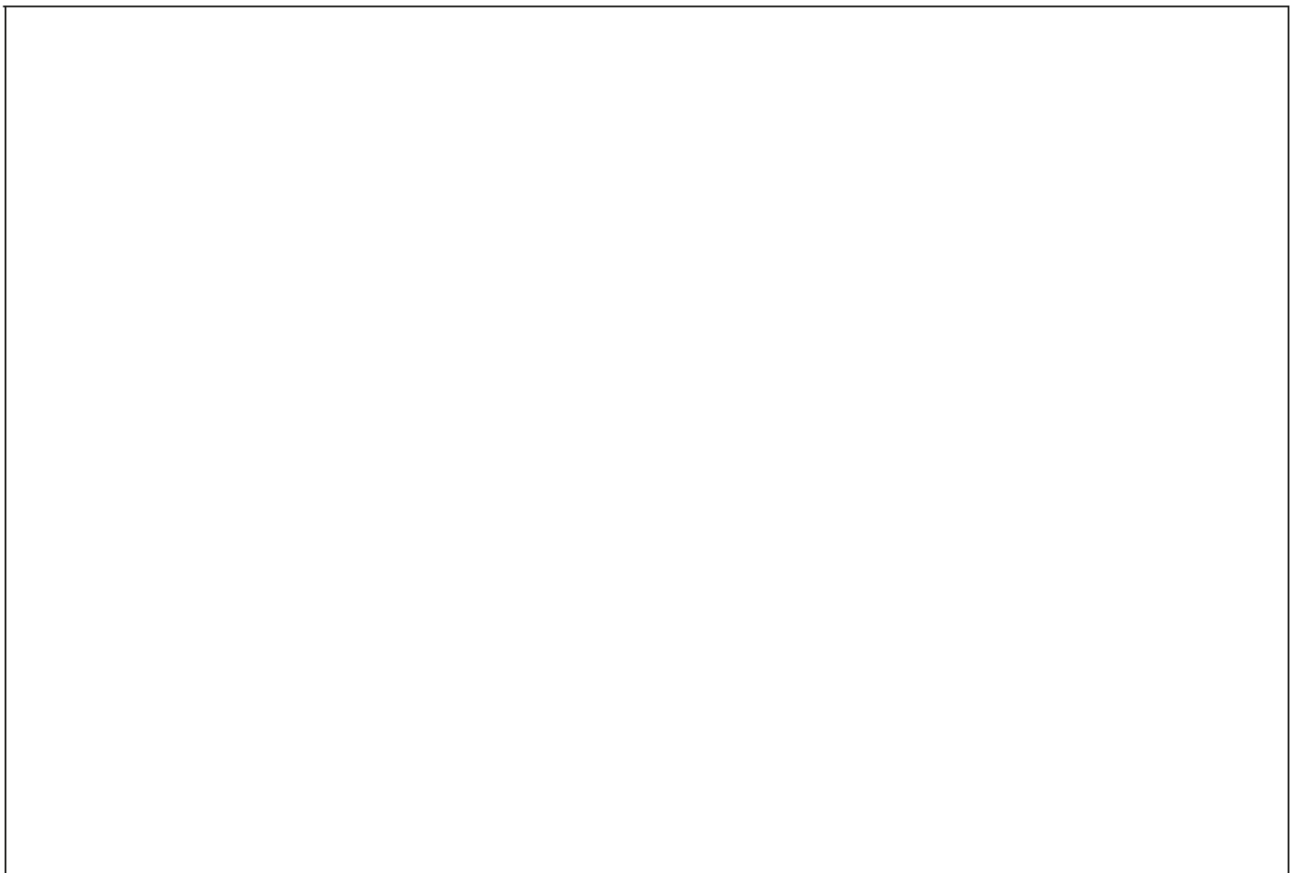
Each office will have:

- 4 PCs
- 1 Printer
- 1 Internet access point

In the space provided draw a topology diagram of a wired mesh network for one of the offices.

Marks will be awarded for:

- content
- connections



**[4]**

This question was the most consistently well answered on the whole paper with most candidates able to gain 3 or 4 marks. Very few candidates declined to answer this question.

### Question 20 (b)

**(b) Explain one advantage of using a wired mesh network topology in the offices.**

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

Candidates interpreted this question in two different ways. Some candidates gave advantages of using a wired network and others a mesh network. Most of the former correct responses concentrated on secure transfer of data where there were many correct responses for mesh, the most popular was that if one PC failed it would not impact on the rest of the network.

### Question 21 (a)

**21 Extra staff will be employed at the new offices. The staff will have access to client information.**

**(a)\* Discuss the operational issues that should be considered to increase the security of the client information.**

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

In general, this was well answered when the candidate offered suggestions for what AAA could do to improve security. Several candidates gave good responses covering technical and people controls. A few candidates did offer potential security issues but did not give any controls that could be put in place.





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