



Oxford Cambridge and RSA

# Monday 16 May 2022 – Morning

## Level 3 Cambridge Technical in IT

05838/05839/05840/05841/05842/05877 Unit 1: Fundamentals of IT

Time allowed: 1 hour 30 minutes  
C380/2206



**You must have:**

- a calculator



Please write clearly in black ink.

Centre number

Candidate number

First name(s) \_\_\_\_\_

Last name \_\_\_\_\_

Date of birth

### INSTRUCTIONS

- Use black ink. You can use an HB pencil, but only for graphs and diagrams.
- Write your answer to each question in the space provided. You can use extra paper if you need to, but you must clearly show your candidate number, the centre number and the question numbers.
- Answer **all** the questions.

### INFORMATION

- The total mark for this paper is **80**.
- 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.

FOR EXAMINER USE ONLY	
Question No	Mark
Section A: 1-15	/15
Section B: 16	/10
17	/10
18	/2
19	/13
20	/6
21	/12
22	/12
<b>Total</b>	<b>/80</b>

**SECTION A**

Answer **all** the questions.

Put a tick (✓) in the box next to the **one** correct answer for each question.

**1** Which of the following is an internal storage component?

**A** Cloud

**B** Firewire

**C** Flash drive

**D** Solid state drive

**[1]**

**2** Which of the following connectivity methods requires line of sight?

**A** Bluetooth

**B** Fibre optic

**C** GSM

**D** Microwave

**[1]**

**3** Which of the following devices supports encapsulation?

**A** Hub

**B** Modem

**C** Router

**D** Switch

**[1]**

4 Select the correct order of measurement, smallest to largest.

A Gibi, Tebi, Pebi, Kibi,

B Kibi, Gibi, Tebi, Pebi

C Kibi, Mebi, Tebi, Gibi

D Kibi, Tebi, Gibi, Pebi

[1]

5 Which of the following is the binary figure for the decimal figure 134?

A 10000110

B 10100101

C 10101000

D 11100110

[1]

6 Which of the following is the purpose of a Management Information System (MIS)?

A Combine data to make business decisions

B Detect and correct errors in code

C Edit code

D Track the implementation of a business project

[1]

7 Which of the following is classified as business software?

A Database

B Integrated design environment

C Multimedia

D Word processor

[1]

8 Which of the following is a feature of a single user operating system?

A Does not support standalone systems

B Is a time-sharing operating system

C Multiple users can use multiple resources at one time

D Supports more than one profile

[1]

9 Which of the following is an installable tool used to deal with software problems?

A Baseline test

B Log

C Software patch

D System snapshot

[1]

10 Which of the following is **not** a benefit of server virtualisation?

A Enables business continuity

B Reduces initial capital outlay

C Reduces the amount of physical storage needed

D Simplifies data centre management

[1]

11 Complete the following sentence.

\_\_\_\_\_ uses copper wires to carry analogue voice data.

A DSL

B ISDN

C MAN

D PSTN

[1]

12 Which of the following is a formal written communication skill used to provide information to a customer?

A Help file

B Letter

C Online discussion

D Social network

[1]

13 Which of the following is a personal attribute needed by a web designer?

A Appearance

B 'Can do' attitude

C Leadership skills

D Numerical skills

[1]

14 Which of the following is **not** an operational issue?

A Change management

B Disaster planning and recovery

C Security of information

D Use of information

[1]

15 Complete the following sentence.

\_\_\_\_\_ is the real-time interception of private communications.

A Eavesdropping

B Phishing

C Social engineering

D Virus

[1]

**Section A Total:**  
**(for examiner use only)**

**SECTION B**

Answer **all** the questions.

Astatine Advertising Agency (AAA) is a small advertising agency based in a single building in Cardiff. The company is expanding quickly and is opening offices in Exeter and Leicester. The three offices will be used by staff who create the advertising campaigns for AAA's clients. Documents used in the campaigns are printed by a separate company, Westwood Printing.

**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 .....

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2 .....

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**[4]**

**(b)** The new computer systems contain different components.

Explain the purpose of the following components.

Fibre channel port

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Graphics card

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Power supply

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**[6]**

**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]**

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

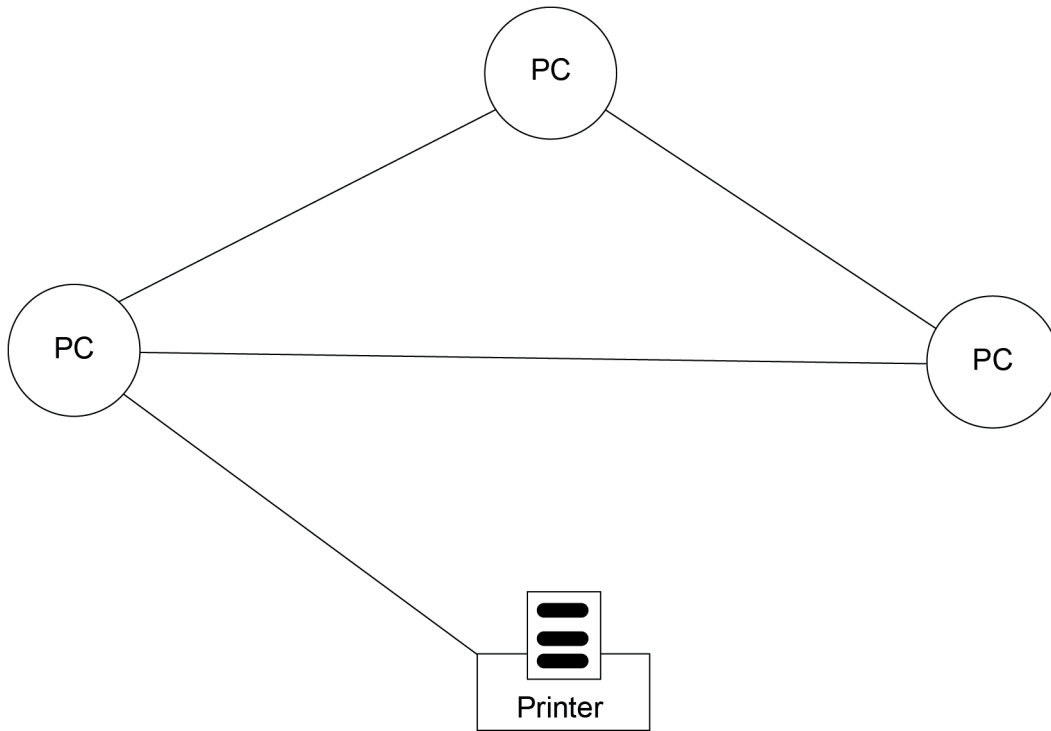


Fig. 1

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

1 .....

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2 .....

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[4]

**(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 .....

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ISDN .....

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**[6]**

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

Explain the term default gateway.

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**[3]**

**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]**

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

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



**(b)** AAA have decided to introduce an Acceptable Use Policy.

Explain why an Acceptable Use Policy is needed by AAA.

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..... [2]

**22** Communication skills are an important part of any job role in AAA.

**(a)** Identify and describe **two** situations where verbal skills could be used.

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2 .....

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..... [6]





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