

Wednesday 8 January 2025 – Morning

Level 3 Cambridge Technical in IT

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

Time allowed: 1 hour 30 minutes

C380/2501



No extra materials are needed.



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

Centre number

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 Candidate number

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First name(s) _____

Last name _____

Date of birth

	D	D	M	M	Y	Y	Y	Y
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INSTRUCTIONS

- Use black ink.
- 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.

Section A

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

1 Which form of storage is lightweight, highly portable and robust?

A Cloud

B Flash

C Hard drive

D SAS

[1]

2 Which of the following is **not** a characteristic of fibre connectivity?

A Impervious to electromagnetic interference

B Increased bandwidth

C Low attenuation

D Widely available in rural areas

[1]

3 Which type of software provides an opportunity to try before you buy?

A Bespoke

B Closed source

C Open source

D Shareware

[1]

4 Which of the following is a ready-made operating system available for sale?

A Bespoke

B Database

C Off-the-shelf

D Open source

[1]

5 Which of the following protocols is responsible for error and congestion reporting in the network layer of the TCP/IP stack?

A ICMP (Internet Control Message Protocol)

B POP (Post Office Protocol)

C TCP (Transmission Control Protocol)

D UDP (User Datagram Protocol)

[1]

6 Complete the following sentence.

Peer-to-Peer networks contain PCs that _____ .

A Are directly connected to each other

B Connect through a hub

C Transfer data through a server

D Use network-level login details

[1]

7 Which of the following is **not** required to configure a network?

A Default gateway

B Hypervisor

C IP address

D Subnet mask

[1]

8 Which of the following is used to create a local area network (LAN)?

A ADSL

B Ethernet

C ISDN

D Leased Line

[1]

9 Complete the following sentence.

The purpose of a Customer Relationship Management (CRM) business system is to

_____.

A Gather information to decide which staff can help a caller

B Generate information to aid business decision-making

C Provide a single contact point for business users

D Provide a system to store and manage business user leads

[1]

10 Which of the following allows for an immediate response to extra questions?

A Closed questioning

B Email

C Group discussion

D Letter

[1]

11 Which of the following is a communication skill that **cannot** be used on an email?

A Body language

B Formal language

C Informal language

D Instant messaging

[1]

12 Which of the following is a need that can affect the scale of change required by an organisation?

A Bias

B Code of conduct

C Earthquake

D Improved networking

[1]

13 Which of the following is a physical security method?

A Anti-virus

B Encryption

C Radio Frequency Identification (RFID)

D Username/Password

[1]

14 Which legislation covers the safe disposal of computer equipment?

A Computer Misuse Act

B Data Protection Act

C Environmental Protection Act

D General Data Protection Regulation

[1]

15 Which of the following is a benefit to a business of using a mainframe computer?

A Cheap

B Portable

C Scalable

D Small in physical size

[1]

Section B

A school is upgrading its network. Over the last few years staff have been able to work, flexibly at home in their planning time. Many events including open evenings and progress consultation evenings are also now taking place online.

16 The school manages its own network, with a server room on the school premises.

(a) Identify and describe **two** input devices that could be used in the server room.

Input Device

Description

.....

.....

Input Device

Description

.....

.....

[4]

The CRT monitors in the server room are being replaced with touchscreen monitors.

(b) Explain **one** benefit of using touchscreen monitors in the server room.

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[2]

17 The network manager has purchased a tablet computer to use to monitor the school network.

(a) Explain **one** advantage of using a tablet computer.

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..... [2]

(b) Explain **one** disadvantage of using a tablet computer.

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..... [2]

18 Packets of data are transferred across the network.

(a) Explain what is a **byte**.

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..... [2]

(b) Explain what is a **kilobyte**.

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..... [2]

19 The school has several physical servers in the server room.

Explain the **purpose** of each of the following servers.

Web server

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Mail server

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Print server

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[6]

(b) Explain **two** advantages and **one** disadvantage of using project management software to manage the upgrading of the school computer system.

Advantage 1

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Advantage 2

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Disadvantage

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[6]

21 Problems occur during the installation of the upgraded computer system.

Explain how the troubleshooting tools of logs and baselines could be used to solve the problems.

Logs

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Baselines

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[4]

22 The network manager must explain the upgraded system to the school governors.

(a) Identify and describe **one** communication technology that the network manager could use for this task.

Communication Technology

Description

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[3]

23 Identify and explain **one** driver for change that could have led to the move to the upgraded network and virtualised servers.

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..... [3]

24 The upgraded computer system requires new security measures.

(a) One threat to the data stored on the upgraded computer system is a virus.

Identify **three** other threats to the data stored on the upgraded network.

1

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2

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3

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[3]

Anti-virus software is installed on the upgraded computer system.

(b) Explain why anti-virus software should be installed on the upgraded computer system.

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[2]

(c) Identify **two** other forms of digital security that can be used on the virtualised server.

1

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2

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[2]

END OF QUESTION PAPER

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