City & Guilds

5220-522 JUNE 2019
Level 2 Technical Certificate in Digital Technologies
Level 2 Digital Technologies – Theory exam

If provided, stick your candidate barcode label here.

Tuesday 4 June 2019
09:30 – 12:00

Candidate name (first, last)

First

Last

Candidate enrolment number

Date of birth (DDMMYYYY)

Gender (M/F)

Assessment date (DDMMYYYY)

Centre number

Candidate signature and declaration*

- If additional answer sheets are used, enter the additional number of pages in this box. ➡ 0 0
- Before taking the examination, **all candidates** must check that their barcode label is in the appropriate box. Incorrectly placed barcodes may cause delays in the marking process.
- Please ensure that you staple additional answer sheets to the **back** of this answer booklet, clearly labelling these with your full name, enrolment number, centre number and qualification number in BLOCK CAPITALS.
- All candidates need to use a **black/blue** pen. **Do not** use a pencil or gel pen, unless otherwise instructed.
- If provided with source documents, these documents **will not** be returned to City & Guilds, and will be shredded. Do not write on the source documents.
- ***I declare that I had no prior knowledge of the questions in this examination and that I will not divulge to any person any information about the questions.**

You should have the following for this examination
- a pen with blue or black ink

General instructions
- The marks for questions are shown in brackets.
- Answer **all** questions.
- Answer the questions in the spaces provided. Answers written in margins or on blank pages will **not** be marked.
- Cross through any work you do not want to be marked.

1   State **four** types of mobile computer systems that can be used for tasks outside an
    office environment.   (4 marks)

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2   Explain how **each** of the following computer systems can be used in a large organisation.
    •   Mainframe.
    •   Desktop.   (4 marks)

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3   Explain how **each** of the following components store data that is written to them.
     •   USB portable storage drive.
     •   Digital Video Disk (DVD).
     •   Hard Disk Drive (HDD).   (6 marks)

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4   State **four** types of application software that can be used to produce documents for
     use in an organisation.   (4 marks)

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5   Explain how **each** of following network protocols can be used by software installed on
     an individual's computer.
     •   SMTP
     •   IMAP
     •   POP3   (6 marks)

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6   Explain **three** benefits of using the network topology shown in Figure 1 in a small office network.   (6 marks)
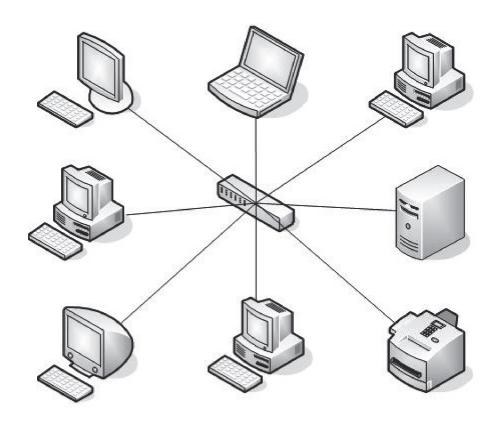

Figure 1

7   List **four** technology vulnerabilities that can compromise the security of a
     computer system.   (4 marks)

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8   Explain how the security of a computer system can be compromised by **each** of the
     following software vulnerabilities.
     •   Backdoor entry.
     •   Upgrades.   (4 marks)

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9   Describe how an administrator can use the following methods to reduce the risk of the
      security of IT systems being compromised.
      •   Update software.
      •   Manage user access rights.
      •   Removable media control.   (6 marks)

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10   Identify **two** reasons why data would be routinely backed up by an organisation.   (2 marks)

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11   Describe why an administrator may use the following tools to support an effective
      backup strategy.
      •   Operating system utilities.
      •   File transfer protocol.
      •   Cloud backup.   (6 marks)

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12 State **four** procedures that can be carried out by a helpdesk to support users.   (4 marks)

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13 Describe how a support team can use the following interactions to identify the cause of a problem being reported by an end user.
  •   Open questions.
  •   Closed questions.
  •   Emails.   (6 marks)

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14　A local animal rescue charity has asked for a networked office computer system to handle its administration processes when dealing with its clients. You have been asked to report on the provision of the hardware for the system.

They have three office-based staff and one who works out of the office to complete inspection visits. The system must be able to cope with a planned future increase of staff and it must allow everyone to share files and use a single printer.

Discuss what would be included in your report, describing how the proposed system can be implemented.　　　　　　　　　　　　　　　　　　　　　　　　(9 marks)

15 The animal charity has accepted the proposals for the networked system as specified
    in Question 14.

    This must be fully installed and configured with relevant software to allow the:
    •   production of marketing materials
    •   sending and receipt of e-mails
    •   management of their financial accounts.

    They also require ongoing user support and guidance for a period of two years.

    Discuss the software requirements for the proposed system, making
    recommendations to meet their needs.   (9 marks)

End of examination