



**5220-536 JUNE 2019**

**Level 3 Advanced Technical Extended Diploma in  
Digital Technologies (720)**

Level 3 Digital Technologies (System Infrastructure) – Theory exam (2)

If provided, stick your candidate  
barcode label here.

**Wednesday 12 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. ➡
- 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** stages of a 'system life cycle' used when implementing new systems. (4 marks)

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- 2 Explain why the following factors are taken into account when defining a project scope for the development of a system.

- Business requirements.
- User requirements.

(4 marks)

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- 3 Explain how the following design diagrams can be used when documenting a new system.
- Entity relationship.
  - Data flow diagram.

(4 marks)

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- 4 State **two** types of Cloud services that can be used to support business activities.

(2 marks)

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(6 marks)

- [illegible]

(4 marks)

7

(2 marks)

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8

- DNS.
- DHCP.
- IP v4.

(6 marks)

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

9

(2 marks)

- (6 marks)

[illegible]

- (2 marks)

- 12 Describe how the following methods can be used to determine a probable cause to a fault.
- Trend analysis.
  - What if scenario.

(4 marks)

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- 13 Explain how **each** of the following can contribute to the effective maintenance of technical support within a business environment.
- Service Level Agreements (SLA).
  - Remote Support Services.

(4 marks)

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- 14 List **four** benefits that can be achieved by implementing a formal infrastructure management strategy.

(4 marks)

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- 15 Explain one benefit to an organisation of using **each** of the following centralised computing facilities.

- Edge computing.
- Grid computing.

(4 marks)

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16 Explain the type of technical support that an organisation can expect to receive from the following.

- Tier 1 support.
- Escalated support.

(4 marks)

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- Discuss the available technologies and any considerations that must be taken into account when planning the upgrade.

(9 marks)

- 18 An engineering company is considering the use of an entirely remote, third party Cloud- based service to store and back up their Computer Aided Design (CAD) drawings and client data.

Discuss the available technologies and any considerations that must be taken into account when planning the new system.

(9 marks)

[illegible]