



5220-530 FEBRUARY 2018

Level 3 Advanced Technical Certificate in Digital Technologies

Level 3 Digital Technologies – Theory exam (1)

If provided, stick your candidate  
barcode label here.

Monday 26 February 2018  
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 any additional answer sheets are used, enter the additional number of pages in this box.
- Please ensure that you **staple** additional answer sheets to the **back** of this answer booklet, clearly labelling them 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.
- 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 assessment and that I will not divulge to any person any information about the questions.**

### 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.
- Write all your working out and answers in this booklet.

- 1 a) State **two** key stages in project management life cycles. (2 marks)

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- b) Explain the purpose of **each** stage stated in Question 1a). (4 marks)

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- 2 a) State **two** risks or threats to an IT system. (2 marks)

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- b) Describe an action that can be used to mitigate or reduce **each** risk or threat stated in Question 2a). (4 marks)

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- (6 marks)

[illegible]

- 4 a) State **two** types of media used for physical network connectivity. (2 marks)

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- b) Explain one security vulnerability for **each** of the types of media stated in Question 4a). (4 marks)

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- 5 a) State **two** hardware interconnection devices used in a network. (2 marks)

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- b) Within a network, explain the purpose of **each** device stated in Question 5a). (4 marks)

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- (6 marks)

[illegible]

- (2 marks)

- (4 marks)

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- 9 Describe how **two** software development life cycle models are used in a development process.

(6 marks)

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- 10 a) State **two** types of permanent storage used in a computer system.

(2 marks)

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- b) For **each** storage type stated in Question 10a), explain how data is stored on the device.

(4 marks)

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11 a) State **two** of the fundamental principles of Object Oriented Programming.

(2 marks)

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b) Explain how **each** principle stated in Question 11a) is used in computer programming.

(4 marks)

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12 Explain one benefit of using Integrated Software Suites.

(2 marks)

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- (9 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.



- 14 A small grocers' shop chain with separate branches wants to create a shared goods ordering system that will be accessed through a PC provided in the manager's office of each shop.

Discuss the steps the business can take to complete the development process.

(9 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.