



5220-520 MAY 2018

Level 2 Technical Award in Digital Technologies

Level 2 Technical Award in Digital Technologies – Theory Exam

If provided, stick your candidate barcode label here.

Tuesday 22 May 2018
09:30 – 12:00

Candidate name (first, last)

First

[illegible]

Last

[illegible]

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 State one image file extension for **each** of the following.

- Compressed file.
- Uncompressed file.

(2 marks)

2 Describe one advantage and one disadvantage of using a network.

(4 marks)

3 State **two** network topologies used for creating a network.

(2 marks)

4 Explain the **main** purpose of **two** network protocols.

(4 marks)

5 Explain **three** different methods that can be used to secure a network.

(6 marks)

- 6 Describe one action that can be taken to reduce the impact of cyberbullying on an individual. (2 marks)

- 7 Explain the purpose of the Copyright, Designs and Patents Act. (2 marks)

- 8 Explain **two** advantages of using VOIP for digital communication. (4 marks)

- 9 a) State **two** principles of the Data Protection Act 1998. (2 marks)

- b) Describe how an organisation can comply with the **two** principles stated in Question 9a). (4 marks)

- 10 State **two** ways image editing software can be used to improve an image. (2 marks)

- 11 Describe how vector and raster images are created. (4 marks)

- 12 Explain one advantage for the use of **both** vector and raster images. (4 marks)

- 13 a) State **two** different types of graph/chart that can be used to display information to a large business audience. (2 marks)

- b) Describe **two** features of **each** of the graph/chart types stated in Question 13a) that make it useful for large business audiences. (4 marks)

- 14 a) State **two** different types of digital content used within websites/e-mails to engage with audiences. (2 marks)

- b) Describe how the **two** types of content stated in Question 14a) can be used to engage with an audience. (4 marks)

- 15 State **four** sources used for obtaining **secondary** data. (4 marks)

16 Describe one advantage for **each** of the following **two** file structures that may be used in databases.

- Flat file.
- Relational.

(4 marks)

17 Plan promotional material for a school presentation evening to encourage participation by students. The content **must** include details of previous winners, a schedule of events for inclusion in a website.

Discuss file types that may be included in the promotional material to make the content engaging to the target audience.

(6 marks)

- (12 marks)

This image shows a full page of blank, lined paper. It features approximately 20 evenly spaced horizontal grey lines across its entire width, providing a guide for writing. The paper itself is a clean, off-white color. There are no margins, text, or other markings present on the page.