



CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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0417/11

May/June 2023

1 hour 30 minutes

You must answer on the question paper.

No additional materials are needed.

- Answer **all** questions.
- Use a black or dark blue pen.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You may use an HB pencil for any diagrams, graphs or rough working.

- The total mark for this paper is 80.
- The number of marks for each question or part question is shown in brackets [].
- No marks will be awarded for using brand names of software packages or hardware.

This document has **12** pages. Any blank pages are indicated.

- 1 A book has an ISBN which is 330247204X

Tick (✓) the most appropriate data type for the ISBN.

- A Numeric: integer ☐
- B Text ☐
- C Boolean ☐
- D Date ☐

[1]

- 2 Identify the hardware from the descriptions given.

(a) A volatile internal memory that stores the current instruction.

..... [1]

(b) A printed circuit board containing the CPU and other components of a computer.

..... [1]

(c) A printed circuit board that controls the output to a monitor.

..... [1]

(d) A printed circuit board that is installed in a computer so that the computer can be connected to a network.

..... [1]

- 3 A headteacher is setting up a newsletter to send to parents of pupils at a school. She has some photographs saved on storage devices that she needs to place in the newsletter.

State **two** communication methods which the headteacher could use to upload the photographs onto the school network.

1

2

[2]

- 4 (a) Describe the purpose of a web browser.

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..... [2]

- (b) A company may use an intranet or an extranet.

Describe the differences between an intranet and an extranet.

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..... [2]

- 5 State the safety issue that is most likely to occur for each of these causes.

- (a) Spilling drinks on computer equipment

..... [1]

- (b) Overloading sockets by plugging in too many devices

..... [1]

- (c) Trailing cables across the floor

..... [1]

- (d) Placing a laser printer at the edge of a table

.....

..... [1]

- 6 A student has set up a password for his laptop computer. The password he has chosen is Px2zY!Cg3?bd

(a) Discuss the benefits and drawbacks of using this password.

This image shows a full page of white paper with horizontal dashed lines, typical of primary school handwriting practice paper. The lines are evenly spaced and run across the entire width of the page. There are no margins, text, or other markings present.

[6]

- (b)** The student could have protected his laptop computer by using two-factor authentication. This could have combined his password with a biometric method.

State **two** examples of biometric methods he could use.

1

2

[2]

- 7 A systems analyst has been asked to carry out an analysis of a company's current computer system.

(a) State **three** methods of analysing the current system.

- 1
- 2
- 3

[3]

- (b) The systems analyst is working with a team to create some new software. The software documentation will be stored on the cloud.

Describe how the team can use the cloud to share the documentation.

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[4]

- (c) Members of the team can use video-conferencing to join business meetings from different locations around the world.

Describe, giving reasons, **three** disadvantages of using video-conferencing for business meetings rather than meeting in person.

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[6]

- 8 (a)** Compare Optical Mark Readers (OMRs) with Optical Character Readers (OCRs). Your answer must include similarities and differences.

This image shows a full page of white paper with horizontal dashed lines, typical of primary-ruled notebook paper. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

- (b)** Identify **two** uses of Optical Mark Recognition (OMR).

1

2

[2]

- 9 (a)** Absolute and relative file paths are used in the content layer when creating a web page.

- (i) Explain the differences between an absolute file path and a relative file path.

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- (ii) Explain why absolute file paths should **not** be used for hyperlinks to locally-saved web pages.

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- (b) Anchors and hyperlinks are both used in HTML.

Compare an anchor with a hyperlink. Your answer must include similarities and differences.

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[4]

- 10 Some people use dialogue-based user interfaces to operate their car audio system.

- (a) Describe what is meant by a dialogue-based user interface.

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[2]

- (b) Describe the benefits and drawbacks of using a dialogue-based user interface in this way.

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[4]

- 11** Portable hard drives can be Solid State Drives (SSDs) or Hard Disk Drives (HDDs).

Explain why the SSD may be better to use than the HDD.

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[4]

- 12** Many media companies now provide media streaming for users to watch their television programmes.

(a) Explain what is meant by the term media streaming.

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[2]

(b) Describe the benefits and drawbacks of media streaming.

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[4]

13 gif and jpg file formats are used to store images.

(a) Give **one** reason for using each of the file formats. Each of your reasons must be different.

gif

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jpg

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[2]

(b) Explain the differences between the two file formats.

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[6]

- (c) The file size of an image can be reduced by changing the file format of the image.

State **two** other ways of reducing the file size of an image.

1

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2

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[2]

- 14** Identify the most appropriate method for reducing data entry errors from the descriptions given.

- (a) Manually checking the data without reference to the original copy.

..... [1]

- (b) Checking that the data being entered is reasonable.

..... [1]

- (c) Preventing errors when data is copied from one medium to another.

..... [1]

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