



CANDIDATE
NAME

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CENTRE
NUMBER

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CANDIDATE
NUMBER

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9626/12

February/March 2024

1 hour 45 minutes

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.
- Calculators must **not** be used in this paper.

- The total mark for this paper is 70.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages.

- 1 Spreadsheet software can be used for computer modelling.

Describe the characteristics that make spreadsheet software suitable for computer modelling.

[6]

- 2 A data dictionary is required when creating a relational database.

Identify and describe **four** components that should be included in a data dictionary.

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[8]

- 3 Keith wishes to ensure that his computer is at its optimum performance.

Identify and describe **three** different types of utility software he should use.

Utility 1

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Utility 2

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Utility 3

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[6]

4 An airline company uses online processing to allow passengers to book their seats.

(a) Describe how online processing is used in this scenario.

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..... [4]

(b) Describe **two** benefits for passengers of using online processing when booking seats.

Benefit 1

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Benefit 2

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..... [2]

- 5** An apartment has a controlled central heating system. This system includes a microprocessor.

Explain how the temperature in the apartment is controlled by the system.

[6]

- 6** Some computer systems have a command line interface (CLI).

Evaluate the use of a CLI.

[6]

7 The IT manager of RockICT can purchase either off-the-shelf software or custom written software.

(a) Describe **three** advantages for RockICT of purchasing off-the-shelf software.

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(b) Describe **three** advantages for RockICT of purchasing custom written software.

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- 8 A secretary of a company has been asked to transfer all the staff records from the current paper-based system to a computer database. The secretary will use validation and verification to check the data.

Explain why both validation and verification are needed in this scenario.

[6]

- 9** Encryption can be used to protect data sent in an email.

Evaluate the use of encryption for this purpose.

[7]

- 10** Sound editing software can be used to alter the sampling rate in audio files.

- (a)** Explain what is meant by the term sampling rate.

[2]

(b) Explain how the sampling rate can affect the audio files.

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11 Explain what is meant by the term open-source file format.

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..... [3]

- 12** A digital divide exists between the more technologically aware and the less technologically aware nations.

Analyse this type of digital divide.

[6]

[6]

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