



Cambridge International AS & A Level

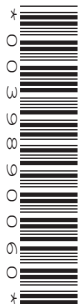
CANDIDATE
NAME

CENTRE
NUMBER

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INFORMATION TECHNOLOGY

9626/31

Paper 3 Advanced Theory

May/June 2024

1 hour 45 minutes

You must answer on the question paper.

No additional materials are needed.

INSTRUCTIONS

- 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.

INFORMATION

- 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. Any blank pages are indicated.

1 JavaScript uses loops to execute a block of code using iterative methods.

(a) Describe what is meant by an iterative method.

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..... [2]

(b) Explain how a `do/while` loop differs from a `while` loop.

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..... [2]

(c) Explain why a `while` loop might be used instead of a `for` loop in JavaScript code.

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..... [1]

3 Developers can use either evolutionary or throw-away prototyping to create prototypes of a new interface.

(a) Describe **two** advantages of using evolutionary prototyping.

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..... [2]

(b) Describe **one** disadvantage of using evolutionary prototyping.

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..... [1]

(c) Describe **two** advantages of using throw-away prototyping.

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..... [2]

(d) Describe **one** disadvantage of using throw-away prototyping.

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..... [1]

5 Computer devices can connect to a local area network (LAN).

Wi-Fi connections can only be used within range of a wireless access point (WAP).

(a) Explain why Wi-Fi connections to a WAP have a limited range.

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(b) Explain how the connection range of Wi-Fi can be increased.

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..... [3]

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