



Cambridge International AS & A Level

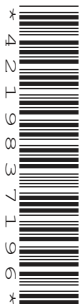
CANDIDATE
NAME

CENTRE
NUMBER

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INFORMATION TECHNOLOGY

9626/12

Paper 1 Theory

February/March 2023

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 Data is collected and processed to become information. Many factors affect the quality of the resulting information.

(a) Describe what is meant by accurate information.

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..... [1]

(b) Describe how the use of interviews and questionnaires for collecting data may affect the accuracy of the resulting information.

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..... [6]

(b) Flowcharts often contain subroutines.

(i) Draw the symbol used to represent a subroutine in a flowchart.

[1]

(ii) State what you would expect to see in the first box of a subroutine.

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..... [1]

5 Explain why encryption is needed.

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..... [4]

6 Sensors are used to measure physical variables.

(a) Describe these sensors and give an appropriate use in a monitoring system for each.

(i) Light
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..... [2]

(ii) Temperature
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..... [2]

(b) Sensors need to be calibrated before use.

Evaluate the different forms of calibration.

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..... [6]

9 Describe what is meant by the malware terms.

(a) worm

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..... [4]

(b) Trojan

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..... [4]

10 Describe what is meant by the term open source file format. Include in your answer an explanation of why open source file formats are needed.

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..... [5]

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