



Cambridge International AS & A Level

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INFORMATION TECHNOLOGY

9626/01

Paper 1 Theory

For examination from 2025

SPECIMEN PAPER

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.

1 An operating system is system software that manages computer hardware and software resources.

Describe **three** tasks of an operating system.

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..... [3]

2 A company is investigating the quality of products provided by a local supermarket. The company is using direct and indirect sources to collect data.

Give **two** examples of how the company could collect data for each source.

Direct source 1

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Direct source 2

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Indirect source 1

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Indirect source 2

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[4]

4 A company has an online ordering system which makes use of a transaction file and a master file.

(a) The transaction file contains details of the goods ordered, details about the customers and the total amount for each order.

Identify **two** other items which would be in the transaction file.

1

2

[2]

(b) Customers pay for their orders at the end of the month.

The master file contains all customer details and how much money they owe. The master file is updated from the transaction file.

Describe the data processing needed to update the master file.

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[6]

5 Audio files can be edited.

(a) Describe what echo is when applied to an audio clip.

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..... [2]

(b) Explain why noise reduction is applied to an audio clip.

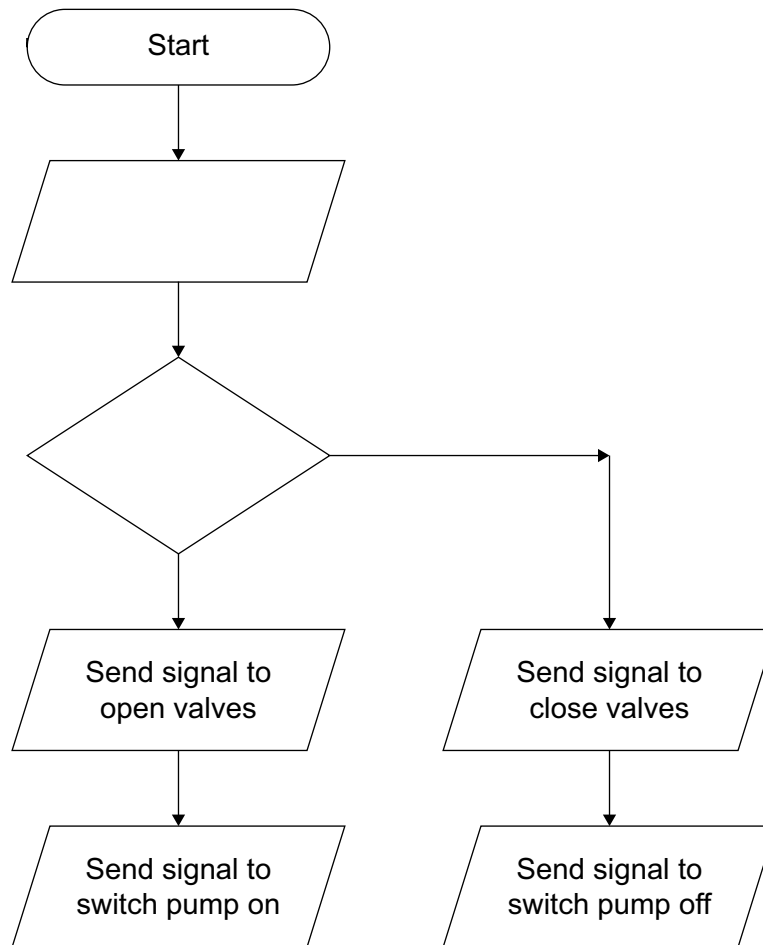
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..... [2]

(c) Describe the term sampling resolution.

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..... [2]

6 A house has a microprocessor-controlled central heating system.

Complete the flow chart to show how the temperature in the house is continuously controlled.



[5]

7 The manager of a shop has been asked to present information about sales figures.

(a) State the most suitable type of chart or graph to show sales trends over time.

..... [1]

(b) State the most suitable type of chart or graph to show the sales figures and names of the 20 best-selling items.

..... [1]

8 (a) Describe what is meant by proprietary software and open-source software.

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(b) Explain why open-source software is needed.

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12 Malware is intrusive software used by cyber criminals.

Describe each of the following types of malware.

(a) spyware

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..... [2]

(b) adware

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(c) worm

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(d) ransomware

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