



Cambridge International AS & A Level

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INFORMATION TECHNOLOGY

9626/13

Paper 1 Theory

October/November 2025

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 (a) Describe what is meant by data.

..... [1]

(b) Describe what is meant by information.

..... [1]

2 A hospital nurse records direct data about her patients every day.

(a) Describe the benefits of using direct data in this context.

..... [3]

(b) Describe the drawbacks of using direct data in this context.

..... [3]



3 An unauthorised person can try to obtain login details to bank accounts.

(a) Describe how vishing can be used to obtain these login details.

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..... [2]

(b) Identify **two** ways of preventing login details from being obtained by vishing.

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..... [2]



4 A knowledge base is one component of an expert system.

(a) Describe what is meant by the term knowledge base.

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..... [1]

(b) Describe how a knowledge base is used in an expert system.

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5 (a) Explain the reasons why sensors must be calibrated before they are used.

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..... [2]





(b) Compare one-point calibration with multipoint calibration.

[5]

6 Describe what utility software is and why it is needed on a computer system.

[3]



7 (a) Describe the term dynamic parameter query.

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..... [2]

(b) Describe the benefits of using dynamic parameter queries when using a database.

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..... [3]

8 Sound files can be edited.

Describe the following features. For each feature, give a reason why it is used.

(a) overdubbing

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..... [2]





(b) equalisation

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..... [2]

(c) reverberation

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..... [2]

- 9 A programmer is developing a new piece of software. The programmer has decided to write code that needs to be interpreted so that it will run.

Justify the programmer's decision.

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..... [4]





10 A space rocket uses a guidance system.

Describe how this guidance system uses real-time processing.

[6]





11 Describe **four** characteristics of a supercomputer.

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[4]

12 Describe what is meant by the term MIPS.

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..... [2]





13 A car company uses simulations to test its cars.

Discuss the benefits and drawbacks of using computer simulations in this context.

[8]

[8]





14 Identify **two** groups of people who can be negatively affected by the digital divide. For each group, suggest a way the digital divide can be reduced.

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..... [4]

15 Discuss the importance of referential integrity.

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