



# **Cambridge International AS & A Level**

CANDIDATE  
NAME

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CENTRE  
NUMBER

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NUMBER

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## **INFORMATION TECHNOLOGY**

**9626/11**

Paper 1 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 (a) Describe, giving an example, what is meant by the term data.

Description.....

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.....

Example.....

.....  
.....

[2]

- (b) Give an example of information and explain why your chosen example is considered to be information.

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[2]

- 2 Identify **four** factors which can affect the quality of information.

- 1 .....
- 2 .....
- 3 .....
- 4 .....

[4]

- 3** Describe the computer processing involved in an automatic stock control system.

[7]

- 4** Describe the term indexed sequential access.

[8]

5 A bank uses an expert system to help customers with financial planning.

- (a) Describe the use of **four** components of an expert system. Your answers **must** relate to financial planning.

1 .....

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2 .....

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3 .....

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4 .....

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[4]

- (b)** Describe the benefits, to the bank, of using an expert system.

[6]

[6]

- (c) State **three** drawbacks, to the bank, of using an expert system.

.....

2 .....

.....

3 .....

.....

[3]

- 6** An airline company uses a flight simulator to train its pilots.

Discuss the advantages and disadvantages of using a flight simulator in this scenario.

[8]

7 Compilers and linkers are types of system software.

(a) Describe the role of a compiler.

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..... [3]

(b) Describe the role of a linker.

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..... [3]

- 8** Create a pseudocode algorithm to allow a number to be entered and to output a result when the number is:

- divided by 4 if it is less than 8
  - divided by 8 if it is between 8 and 12 inclusive
  - divided by 12 if it is any other number.

Write the pseudocode algorithm using CASE . . . ENDCASE.

[6]

- 9** A company in Nairobi, Kenya, uses a database to store all its customer details.

Evaluate the use of static and dynamic parameters in a query to search the database for customers in Nairobi, Kenya.

[8]

10 Explain how each of these methods keeps data safe from unauthorised users.

(a) encryption

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..... [3]

(b) a firewall on a network

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..... [3]

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