



Cambridge International AS & A Level

CANDIDATE
NAME



CENTRE
NUMBER

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CANDIDATE
NUMBER

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INFORMATION TECHNOLOGY

9626/12

Paper 1 Theory

May/June 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.

- (a)** Describe the benefits of getting data from indirect data sources.

[4]

- [4]

- 2** The spreadsheet shows the prices of various items in a clothes shop. The discounted price for a jumper is calculated by using the formula in cell F12.

F12 : ✕ ✓ f_x =E12-(VLOOKUP(D12,\$D\$5:\$E\$8,2,FALSE)*E12)								
▲	A	B	C	D	E	F	G	H
1								
2								
3				Discount code				
4								
5				A	25%			
6				B	20%			
7				C	10%			
8				D	5%			
9								
10	Item				Price	Discounted price		
11								
12	Jumper			B	\$36.00	\$28.80		
13	Skirt			A	\$25.00	\$18.75		
14	Blouse			D	\$30.00	\$28.50		
15	Trousers			A	\$40.00	\$30.00		
16	Jeans			C	\$33.00	\$29.70		
17	Dress			B	\$50.00	\$40.00		
18	Trainers			A	\$55.00	\$41.25		
19	Shoes			D	\$60.00	\$57.00		
20								

- (a)** The formula in cell F12 is =E12-(VLOOKUP(D12,\$D\$5:\$E\$8,2,FALSE)*E12)

Describe how this formula works.

..... [5]

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- Describe how the following components of an expert system are used in the process of diagnosing the fault.

- [2]

- [2]



- Contrast these two types of software.

[4]

- [5]

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- Explain what is meant by indexed sequential access.

[5]

- [2]



- 9 Eric has made a spreadsheet that he has shared with a number of friends. Some of his friends cannot open the spreadsheet.

Identify **three** possible reasons the spreadsheet will not open once received. For each reason, suggest a way Eric could have prevented the problem.

Reason 1

.....

Way 1

.....

.....

Reason 2

.....

Way 2

.....

.....

Reason 3

.....

Way 3

.....

.....

[6]





Evaluate the use of a dialogue interface in this context.

[6]



- 11 A college database contains details about students. Part of the database is shown.

StudentID	FirstName	FamilyName	PhoneNumber
AB37689	Mohammed	Abbas	016324908367
AH83965	Jonathan	Olsen	016328332901
BV72189	Suzanne	Usher	016325599100
DY64817	Hua	Owyang	016323652331
KT52964	Isabella	Mancini	016328899477
PS54200	Ben	Quansah	016329677901

Identify and describe **two** validation checks that are suitable to use on the StudentID field.

Validation check 1

Description 1

.....

.....

.....

Validation check 2

Description 2

.....

.....

.....

[4]





- 12 Banks process a large number of transactions simultaneously. They use mainframe computers for transaction processing.

Explain why mainframe computers are used by banks for this type of processing.

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..... [3]



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