



# Cambridge International AS & A Level

CANDIDATE  
NAME
CENTRE  
NUMBER

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CANDIDATE  
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## INFORMATION TECHNOLOGY

9626/32

Paper 3 Advanced 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.



1 3D printing is used to create objects.

(a) Describe the process of 3D printing an object.

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..... [4]

(b) Describe how 3D printing is used to improve healthcare.

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2 Two characteristics of a network are its topology and its architecture.

(a) Describe what is meant by network topology.

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(b) Describe what is meant by network architecture.

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- Describe how a WAP carries out this role.

[6]



- Analyse the use of **three** other selection tools that are provided by bitmap image-editing software.

..... [6

[8]

[8]



Describe the tasks that are carried out when creating a test plan.

[6]

- Compare, by commenting on the similarities and differences, activity-on-node and activity-on-arrow PERT diagrams.

[6]





8 Computer animation software can move and reshape objects.

(a) Describe how inbetweening (tweening) can be used to create the illusion of smooth movement of an object.

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(b) Morphing can be used to smoothly change a shape into another shape.

Describe how animation software uses pixel mapping to morph one shape into another.

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9 JavaScript statements can contain comparison operators such as `>` and `<`.

(a) Describe the purpose of comparison operators.

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(b) Explain the differences in function between the `===` and `!==` comparison operators.

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10 Blockchain technology is used as a distributed ledger in cryptocurrencies.

(a) Describe what is meant by a distributed ledger.

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(b) Describe **two** items of data that would be stored in a cryptocurrency's distributed ledger.

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[8]

[8]

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