



Cambridge International AS & A Level

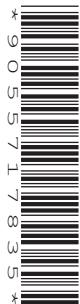
CANDIDATE
NAME

CENTRE
NUMBER

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INFORMATION TECHNOLOGY

9626/32

Paper 3 Advanced Theory

February/March 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.

- 1** Near Field Communication (NFC) is a communication method.

Describe how NFC can be used by mobile devices.

[6]

2 Explain why break statements, functions and comments are used in JavaScript code.

(a) Break statements

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..... [2]

(b) Functions

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.....
.....
.....
.....
..... [2]

(c) Comments

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..... [2]

- 3** Describe the Agile method used to develop software.

[6]

- 4** Justify the use of lossy compression when storing and using bitmap images.

[6]

[6]

- 5 Objects in computer animations have properties.

Describe the following properties.

(a) Orientation

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.....
.....
..... [3]

(b) Transparency

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.....
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.....
.....
.....
..... [3]

- 6 Draw **three** different symbols used in a data flow diagram (DFD). For each symbol, state its purpose.

Symbol 1

Purpose 1

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.....
.....

Symbol 2

Purpose 2

.....
.....
.....

Symbol 3

Purpose 3

.....
.....
.....

[6]

- 7 Many companies have access control strategies to protect their data.

Explain how the use of an access control strategy can minimise the risks to computer data.

[6]

- 8** Discuss the benefits and drawbacks of the use of cryptocurrencies by individuals.

[8]

- 9** Botnets are software applications that are connected together over the internet.

Describe how botnets attack computer systems.

[6]

- 10** Alpha testing is carried out in the final stages of software development.

Describe the process of alpha testing.

[6]

- 11** Discuss the benefits and drawbacks of using virtual servers for hosting websites.

[8]

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