



Cambridge International AS & A Level

CANDIDATE
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INFORMATION TECHNOLOGY

9626/32

Paper 3 Advanced Theory

February/March 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 Programmers can use JavaScript to make a web page react when an HTML event occurs.

(a) Describe what is meant by an HTML event.

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..... [2]

(b) Describe the action that causes each of the following HTML events to start.

(i) onmouseover()

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..... [1]

(ii) onmouseout()

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..... [1]

(iii) onload()

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..... [1]





(a) Describe the architecture of peer-to-peer networks.

[2]

[6]



3 Many network servers are virtual servers or are run from server farms.

(a) Describe what is meant by a virtual server.

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..... [2]

(b) Describe a server farm.

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..... [2]

(c) Describe **one** benefit to a company of using virtual servers.

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..... [1]

(d) Describe **one** drawback to a company of using virtual servers.

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..... [1]





- 4 In computer animation, frames are played in sequence to create the illusion that an object is moving.

(a) Describe what is meant by a frame in a computer animation.

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..... [2]

(b) Explain how changes in the frame rate can affect how objects appear to move.

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..... [4]





- 5 The Open Systems Interconnection (OSI) model for communications has seven layers that define the protocols to be used when devices communicate with each other.

Describe the function of the presentation layer of the OSI model.

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..... [3]

- 6 Performance Evaluation and Review Technique (PERT) charts are used when planning a project.

(a) Describe each of these components of a PERT chart.

(i) float

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..... [1]

(ii) milestone

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..... [1]





(b) In a project, tasks are linked to each other by dependencies.

- (i) One type of dependency is when a task cannot start until other tasks are fully completed and finished.

Describe **two** other types of dependency that can be found in a project.

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..... [2]

- (ii) Describe **two** uses of dependencies in PERT charts.

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..... [2]



[8]

[8]



Describe the benefits and drawbacks of central bank digital base money.

[6]

(a) Describe how the IoT can be used in the homes of individuals.

[4]

[4]



It is using phased implementation to replace its point-of-sale terminals in every department.

Discuss the advantages and disadvantages to the store of using phased implementation rather than direct changeover.

[8]

Analyse the use of vector graphics on a website.

[6]

[6]

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