



Cambridge International AS & A Level

CANDIDATE
NAME

CENTRE
NUMBER

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INFORMATION TECHNOLOGY

9626/32

Paper 3 Advanced 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.

- 1** Devices on a network can be connected by Wi-Fi.

Describe how a Wi-Fi connection is used to transfer data between devices.

[6]

- 2 Web pages can be made more attractive and easier to read by using colours. All major web browsers support the use of HSL to specify the colours used in web pages.

Explain how HSL is used to specify colours.

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..... [6]

- 3** Describe the differences between 2D and 3D computer animation.

[6]

- 4 JavaScript code has been developed for an interactive website. White box testing is carried out by the developers.

(a) Describe how white box testing is used to test the code.

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(b) Describe **one** way that JavaScript code can add interactivity to a web page.

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..... [1]

- (c) HTML events occur when users interact with a web page.

Describe how JavaScript code can be made to react to an HTML event.

[5]

[5]

- 5 Data flow diagrams (DFD) are drawn when designing a new computer system.

- (a) Explain the purpose of a DFD.

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..... [2]

- (b) When a new computer system is being designed, the designers draw a level 0 (context-level) DFD before drawing a level 1 DFD.

Describe **two** differences between a level 0 DFD and a level 1 DFD.

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6 Project management software (PMS) is used to support a project.

(a) Describe how PMS can be used to manage the costings of a project.

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(b) Explain how PMS can help in decision making during a project.

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- 7 Explain how technology-enhanced learning can have an impact on the autonomy of learners.

[6]

- 8** A software developer has been asked to create a gaming app for a smartphone.

Analyse the use of the waterfall method of software development in this scenario.

[8]

- 9** A company network has a file server and a print server. Employees store their files on the file server and use the print server when they need hard copies of their work.

(a) Discuss the benefits and drawbacks of the use of a print server on company networks.

[8]

- (b) The company also has an FTP server. Its web designers use FTP to upload and download files between the FTP server and their workstations.

Evaluate the use of FTP in this scenario.

[6]

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