Cambridge Assessment International Education

Cambridge International AS & A Level

CANDIDATE NAME									
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0123456789

INFORMATION TECHNOLOGY **9626/03**

Paper 3 Advanced Theory **For examination from 2025**

SPECIMEN PAPER **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.

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1 **(a)** Computer animation can use time lapse.

Describe the process used to create the illusion of movement with time lapse.

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(b) Computer animations usually contain secondary components in addition to the primary components.

Explain why secondary components are used in computer animations.

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2 Discuss the positive impacts of video-conferencing on learning.

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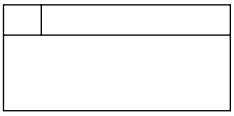
3 Data flow diagrams (DFD) are used to represent the movement of data in, through and out of a system.

(a) Describe the purpose of the following symbols in a DFD.

(i) 

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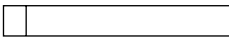
(ii) 

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(b) Describe how the flow of data is represented in a DFD.

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(c) A level 0 (context-level) diagram is often created when developing a DFD for a system.

Describe what is meant by a level 0 diagram.

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4 The CMYK colour system is used to produce colours in computer graphic design systems.

Describe how the CMYK system produces colours.

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5 Virtual reality can be used in health care.

(a) Describe why virtual reality is used in the training of doctors. Include examples in your answer.

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(b) Describe why virtual reality is used in the treatment of patients. Include examples in your answer.

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6 Describe how information technology is used to monitor individuals to prevent crime.

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7 Evaluate the use of cloud computing by banks.

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8 Discuss the advantages and disadvantages of using fibre optic cables instead of copper cables to carry internet services to customers.

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9 Analyse the privacy concerns of individuals caused by data mining.

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10 JavaScript statements are made up of a number of components.

Explain how each of the following components is used in JavaScript statements.

(a) keywords

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(b) comments

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11 In the initiation stage of a project, two of the tasks are to identify the objectives of the project and to scope the project.

Describe **two** other tasks that must be done during this stage.

Task 1 .....

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Task 2 .....

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[4]

12 Mail merge is used by project managers to create emails and documents to send to members of the project team.

Explain why mail merge is used when creating these emails and documents.

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..... [2]

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