



# Cambridge International AS & A Level

CANDIDATE  
NAME

CENTRE  
NUMBER

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**INFORMATION TECHNOLOGY**

**9626/33**

Paper 3 Advanced Theory

**October/November 2020**

**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 90.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **16** pages. Blank pages are indicated.

1 LANs and WANs use protocols to send, receive and route data across networks.

Describe, in detail, each of the following protocols.

(a) Dynamic Host Configuration Protocol (DHCP)

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..... [2]

(b) BitTorrent

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..... [2]

(c) User Datagram Protocol (UDP)

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..... [2]

(d) Transmission Control Protocol (TCP)

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..... [2]









JavaScript uses the display capabilities of web browsers' windows to output the results of its scripts.

**(b)** Explain why JavaScript uses a browser's windows to display results of running scripts.

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..... [1]

**6** A company makes shoes and boots and uses automatic stock control in its operations.

Describe how automatic stock control could be used by the company.

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7 A bank is installing a new computer system to replace its existing system.

Analyse the suitability of the parallel running implementation method in this situation.

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- 9 When creating letters by mail merge, mail merge rules can be used to automatically select data from sources for inclusion in the letters.

Describe the use of the following mail merge rules to select data.

**(a) If...Then...Else**

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..... [3]

**(b) Next Record If**

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..... [3]

**(c) Skip Record If**

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..... [2]





**12** A company has a local area network (LAN) that can be accessed by its staff using their desktop and laptop computers as well as their smartphones.

**(a)** Describe the role of wireless access points (WAPs) in the network.

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**(b)** Describe how wireless access points (WAPs) can be configured to improve network security.

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