

CANDIDATE  
NAME

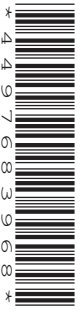
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**INFORMATION TECHNOLOGY**

Paper 3 Advanced Theory

**9626/31**

**May/June 2017**

**1 hour 45 minutes**

Candidates answer on the Question Paper.

No Additional Materials are required.

**READ THESE INSTRUCTIONS FIRST**

Write your Centre number, candidate number and name in the spaces at the top of this page.

Write in dark blue or black pen.

You may use an HB pencil for any diagrams, graphs or rough working.

Do not use staples, paper clips, glue or correction fluid.

DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.

At the end of the examination, fasten all your work securely together.

The number of marks is given in brackets [ ] at the end of each question or part question.

Any businesses described in this paper are entirely fictitious.

This document consists of **14** printed pages and **2** blank pages.









4 A wide area network uses a number of different protocols.

(a) Describe each of the following wide area network (WAN) protocols.

(i) HDLC:

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

(ii) Frame relay:

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.....[2]

(b) An updated version of a free operating system has to be downloaded quickly. The operating system is contained in a very large file. There is a choice of using 'BitTorrent' or file transfer protocol (FTP) for the download.

Explain, with reasons, which method of download would be preferable.

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