

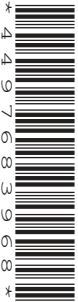
CANDIDATE
NAME

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NUMBER

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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.

1 A bank has strategies in place to safeguard its information technology (IT) services. You have been asked to check and update the strategies that are designed to try and prevent IT disasters from happening, the strategy for disaster recovery management and the strict password policy.

(a) Describe how you would use risk analysis to check the strategy for disaster recovery management.

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(b) The bank's strict password policy has rejected these two passwords:

abc
1234AAA

Explain why they have been rejected.

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- (c) Explain the precautions that you would take to try and prevent a disaster happening to the data used by the IT services.

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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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(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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- 9 Dylan works for a graphics design company producing images in GIF, JPEG and PNG file formats. He has been asked to produce some high-quality still images for use in advertising on the World Wide Web. He has to choose one of the file formats to store the images.

Choose the most appropriate file format by comparing the features of the three different formats.

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