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INFORMATION TECHNOLOGY

9626/03

Paper 3 Advanced Theory

For Examination from 2017

SPECIMEN PAPER

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 or graphs.

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 **15** printed pages and **1** blank page.



1 A television station makes its programmes in studios on the ground and transmits them via satellites to receivers in viewers' homes.

(a) Describe how a programme is transmitted from the station's studio to a viewer's satellite receiver.

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..... [4]

(b) Explain **two** advantages to the viewer of using satellites to receive television programmes.

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(c) Explain **two** disadvantages to the viewer of using satellites to receive television programmes.

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5 In computer programming, explain what is meant by the following terms.

(a) variable

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..... [2]

(b) iteration

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..... [2]

(c) loop

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..... [2]

7 RockIT is an international company. The managers communicate with their international colleagues using web conferencing. They also use video conferencing to communicate with each other.

(a) Describe the features of a web conference.

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(b) Describe how data is transmitted and converted in a video conference from one site to another.

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8 Shafiq has just logged on to a secure website.

(a) Describe how he knows that this website is secure.

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(b) Describe the steps that the web browser will go through to ensure that Shafiq has logged on to a secure website.

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9 (a) Describe what is meant by the use of biometrics when protecting devices from being accessed by unauthorised people.

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(b) Many people are becoming concerned that too much reliance is being placed on the use of biometrics to protect devices from being accessed by unauthorised people.

Evaluate the suitability of biometrics for this purpose.

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