

Cambridge International AS & A Level

CANDIDATE NAME					
CENTRE NUMBER			CANDIDATE NUMBER		

0 1 2 3 4 5 6 7 8 9

INFORMATION TECHNOLOGY

9626/03

Paper 3 Advanced Theory

For examination from 2020

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

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	elevision station makes its programmes in studios on the ground and transmits them via ellites to receivers in viewers' homes.
(a)	Describe how a programme is transmitted from the station's studio to a viewer's satellite receiver.
	[4]
(b)	Explain two advantages to the viewer of using satellites to receive television programmes.
	1
	2

)	Explain two disadvantages to the viewer of using satellites to receive television programmes
	1
	2
	(2)

Anderson Chemicals have a computerised payroll system which has recently become out of date.

(a)	Discuss the advantages and disadvantages of the different methods Jasbir could use fo collecting information.

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Describe h	now he wou	na ao ano,			Ü	ara carry ca	IL.
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of an existing classroom into a new computer room.
Describe how Safina would use these tools to plan the project.
rea

4 A bank has a number of offices all over the world. Each office has a local area network (LAN). The LANs are connected together to create a wide area network (WAN) for use by its staff.

One of the office managers wants to improve the speed and efficiency of his office LAN. He wants to replace the existing copper cabling with an alternative communication method.

methods	•					
		•••••	 	 	 	
			 	 	 	•••••

(b)	Describe the role of three types of server that might be found in an office LAN.
	[6]

(c)	Explain how the bank could use encryption techniques to attempt to prevent its data from being read by unauthorised people.
	91

In c	computer programming, explain what is meant by the following terms.	
(a)	variable	
		•••
		2
(b)	iteration	
		2
(c)	loop	
	•	۰.

Identi	fy the posi	tive and n	egative i	implicati	ons for s	ociety.		

RockIT is an international company. The senior managers are based on the same site

	I use face-to-face meetings to communicate with each other. The senior managers use eo-conferencing to communicate with the company's other offices around the world.
(a)	Describe the features of a video-conference.

(b)	The senior managers meet in the same room each week in a face-to-face meeting. Explain why the senior managers would use face-to-face meetings rather than video-conferencing.				
	161				

Sna	natiq has just logged on to a secure website.				
(a)	Describe how he knows that the website is secure.				
	[2]				
(b)	Describe the steps that the web browser will go through to ensure that Shafiq has logged on to a secure website.				
	F 49				

9	(a)	Describe what is meant by the use of biometrics when protecting devices from being accessed by unauthorised people.		
		[2]		
	(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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