



Cambridge International Examinations

Cambridge International Advanced Subsidiary and Advanced Level

CANDIDATE NAME				
CENTRE NUMBER		CANDIDATE NUMBER		

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.



	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.							
	[4]							
(b)	Explain two advantages to the viewer of using satellites to receive television programmes.							
	1							
	2							
	[2]							

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

2	And	erson Chemicals have a computerised payroll system which has recently become out of date.
		oir, a systems analyst, has been asked to update the current system and will need to research problem.
	(a)	Discuss the advantages and disadvantages of the different methods Jasbir could use for collecting information.

(b)	After developing the new computerised payroll system Jasbir will need to create a test plan.
	Describe how he would do this, including the type of testing he would carry out.
	[4]
(c)	When the new computerised payroll system is implemented, perfective maintenance will be carried out. Describe two other types of maintenance and suggest reasons why they would be needed in
	this scenario.
	ΓΔ'

Safina, a project manager, uses a number of project management tools for planning the conversion of an existing classroom into a new computer room.
Describe how Safina would use these tools to plan the project.
[6]

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.

1110	thods.							
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(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.										
	[6]										

In c	omputer programming, explain what is meant by the following terms.	
(a)	variable	
		[2]
(b)	iteration	
		[2]
(c)	loop	
		[2]

		J	ve impli		•			
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	ckIT is an international company. The managers communicate with their international colleagues ng web conferencing. They also use video conferencing to communicate with each other.
(a)	Describe the features of a web conference.

(b)	Describe how data is transmitted and converted in a video conference from one site to another.
	[6]

Shafiq has just logged on to a secure website.			
(a)	Describe how he knows that this 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.		
	[41]		
	141		

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