

#### **OXFORD CAMBRIDGE AND RSA EXAMINATIONS**

**General Certificate of Secondary Education** 

# INFORMATION AND COMMUNICATION TECHNOLOGY

2359/01

PAPER 3 (FOUNDATION TIER)

Friday 20 JANUARY 2006

Afternoon

1 hour

Candidates answer on the question paper. No additional materials are required.

TIME 1 hour

#### **INSTRUCTIONS TO CANDIDATES**

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

Answer all the questions.

Write your answers, in blue or black ink, in the spaces on the question paper.

#### **INFORMATION FOR CANDIDATES**

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

No marks will be awarded for using brand names of software packages or hardware.

The total number of marks for this paper is 60.

FOR EXA	MINER'S U	SE ONLY			
Question Number					
1	3				
2	5				
3	5				
4	4				
5	4				
6	2				
7	3				
8	8				
9	6				
10	6				
11	7				
12	3				
13	4				
TOTAL	60				

This question paper consists of 10 printed pages and 2 blank pages.

### Answer all questions.

1	Underline	three	types	of	software.
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programming language	database hard	disk drive	
random access memory	touch screen	operating system	[3]

2 Below are five statements.

Tick whether each statement is true or false.

	True (✔)	False (✔)
A GUI uses icons		
DVD players use microprocessors		
MICR is used to read bar codes		
OCR is used to recognise scanned text		
ROM loses its contents when the computer is switched off		

3 Joanna has a number of text files, music files, and video files stored on the hard disk drive of her computer. She wants to transfer these files onto removable storage media. She can use CDs, DVDs or floppy disks.

(a) Draw a line to link each medium to its storage capacity.

Medium Storage capacity	
CD	1.44 Mb
DVD	650 Mb
Floppy disk	4.7 Gb

[3]

[5]

(b)	Give <b>two</b>	reasons f	for transferri	ng the file	s onto th	nese remo	vable storag	e media.

Reason 1	
Reason 2	

[2]

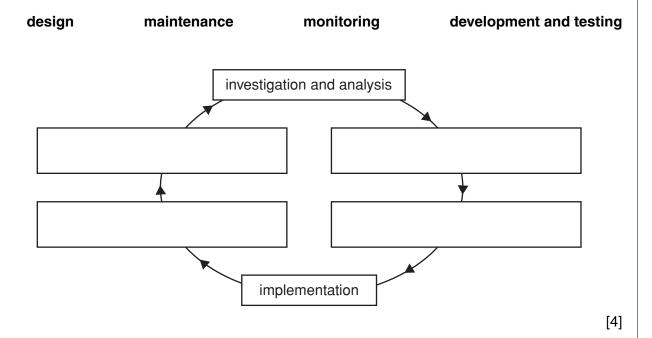
**4** Bar-code readers, graphics tablets, optical mark readers (OMR) and touch screens are all used to input data to a computer.

Draw a line to link each input method to its everyday use.

Input method	Everyday use
Bar-code readers	In fast food restaurants
Graphics tablets	In designers' offices
OMR	At supermarket checkouts
Touch screens	In school registration systems

**5** Below is a diagram showing the main stages of the systems cycle.

Complete the diagram using the words in this list.



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6	When data is entered into a computer database it may be coded.
	Give <b>two</b> reasons why this is done.
	Reason 1
	Reason 2
	[2]
7	Once data is stored on a computer it may be encrypted.
	What is encryption and why is it used?
	[3]

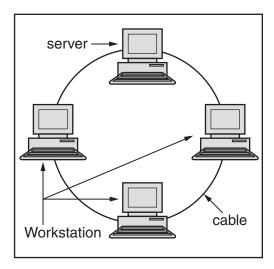
8		chool has an intranet for the staff and students to use. Some of the files stored on the anet are confidential.		
	(a)	Describe ways these confidential files can only be accessed by staff.		
		[4]		
	(b)	Give two reasons why a school may have an intranet.		
		Reason 1		
		Reason 2		
		[2]		
	Stat	if and students also have access to the Internet.		
	(c)	Give <b>two</b> reasons why a school might also need access to the Internet.		
		Reason 1		
		Reason 2		
		[2]		

9

	ocal authority is planning to send a booklet to disabled people in the area. It will give alls about the services the authority offers.
(a)	Describe <b>two</b> benefits to some disabled people of receiving this information as a multi-media presentation on a CD instead of a booklet.
	Benefit 1
	Benefit 2
	[4]
(b)	Give <b>two</b> disadvantages for some disabled people of receiving the information on a CD.
	Disadvantage 1
	Disadvantage 2

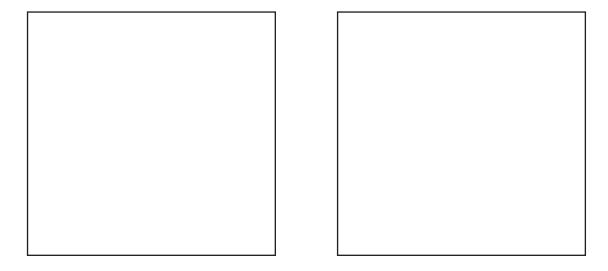
**10** A Local Area Network (LAN) has a server and three workstations. One possible topology for this network is shown in Fig.1.

Draw, name and label two other possible topologies.



Name: Ring

Fig. 1



 11 Tacita Jones works in a garage. She wants to invite all of the customers to test drive a new car. She has prepared this document which is now ready to be mail-merged.

ORC Cars Motor Lane Greenhampton Middleshire GT6 8JK
12 January 2006
< <title>&gt; &lt;&lt;FirstName&gt;&gt; &lt;&lt;Address1&gt;&gt; &lt;&lt;Address2&gt;&gt; &lt;&lt;City&gt;&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Dear &lt;&lt;Title&gt;&gt; &lt;&lt;LastName&gt;&gt;&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;We are pleased to give &lt;&lt;&lt;b&gt;Title&gt;&gt;&lt;/b&gt; &lt;&lt;&lt;b&gt;FirstName&gt;&gt;&lt;/b&gt; &lt;&lt;&lt;b&gt;LastName&gt;&gt;&lt;/b&gt; the opportunity to test drive, for one week, our latest Zebra X34 luxury saloon car. To arrange a mutually convenient time, please contact Mr Harry Sousa on 01923 746753 during the next two weeks.&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;Yours sincerely&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;T Jones&lt;br&gt;Sales and Customer Service Manager&lt;/td&gt;&lt;/tr&gt;&lt;tr&gt;&lt;td&gt;&lt;/td&gt;&lt;/tr&gt;&lt;/tbody&gt;&lt;/table&gt;</title>

(a)	Describe the steps she has taken to prepare this document and the further steps needed to produce the individual invitations ready to be sent to different customers.
	[5]

(D)	customers rather than typing each letter individually.
	Advantage 1
	Advantage 2
	[2]
The	first stage in the creation of a new ICT system is to investigate the existing system.
	in the table below stating which investigation method would be used in the given umstances.

12

When appropriate	Investigation method
When a large number of people need to be consulted	
To confirm what <b>actually</b> happens in the present system	
When a few key personnel need to be consulted	

[3]

13	3 The use of mobile phones to take and send digital pictures is now common.				
	(a) Give two benefits of taking and sending pictures using a mobile phone.				
		Benefit 1			
		Benefit 2			
		[2	<u>'</u> ]		
	(b)	Give <b>two</b> problem s that may arise from using a mobile phone to take pictures.			
		Problem 1			
		Problem 2			
		oı	)1		

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