

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

**General Certificate of Secondary Education** 

# INFORMATION AND COMMUNICATION TECHNOLOGY

2359/01

PAPER 3 (FOUNDATION TIER)

Tuesday 7 JUNE 2005

Morning 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 EXAMINER'S USE		
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
13		
14		
TOTAL		

## Answer all questions.

1 (a) Identify these two ways of presenting data for direct input into a computer.

rei	An image has been moved due to third party copyright restrictions  Details: An image of a barcode	third party cop  Details: An im	een removed due to yright restrictions nage of a cheque nd a sort code			
Way	<i>t</i> 1	Way 2	[2]			
(b)	Underline two storage devices	5.				
	monitor	Hard disk drive	bar-code reader			
	central processing unit	mouse driver	CD-RW drive	[2]		
(c)	Underline two items which we	ould be needed by a family	's computer.			
	control devices	operating system	graphics tablet			
	central processing unit	sensors	robotic arm	[2]		
	A newsletter for supermarket staff is to be produced using a computer. It will include pictures of staff working.					
Give	three advantages of using a d	igital camera to obtain the	pictures.			
Ad	vantage 1					
••••				•••••		
Ad	vantage 2			• • • • • • • • • • • • • • • • • • • •		
••••				•••••		
Ad	Advantage 3					
				[3]		

2

**3** A spreadsheet is used to calculate the cost of a disco. Fig. 1 shows part of the spreadsheet. Fig. 2 shows the formulas used in this part of the spreadsheet.

	А	В	С	D	Е
1		•	Year 10 Dis	CO	
2					
	Tickets	Ticket	Food	Disco	
3	Sold	Income	Income	Cost	Total In
4	10	£35.00	£12.00	£150.00	£47.00
5	20	£70.00	£24.00	£150.00	£95.00
6	30	£105.00	£36.00	£150.00	£141.00
7	40	£140.00	£48.00	£150.00	£188.00

Fig. 1

	А	В	С	D	Е
1			Year 10 Dis	sco	
2					
3	Tickets Sold	Ticket Income	Food Income	Disco Cost	Total In
4	10	= A4*3.5	= A4*1.2	150	= B4+C4
5	20	= A5*3.5	= A5*1.2	150	= B5+C5
6	30	= A6*3.5	= A6*1.2	150	= B6+C6
7	40	= A7*3.5	= A7*1.2	150	= B7+C7

Fig. 2

(a)	State <b>two</b> other cells that would change if the number 30 in row 6 was altered.
	Cell 1
	Cell 2[2]
(b)	Describe how you would test that the formulas were working as expected.
	[2]

4	Both	n RAM and ROM are used in computers.
	(a)	State what ROM is.
		[1]
	(b)	Give <b>one</b> example of when ROM is used.
		[1]
5	Micı	roprocessors are used in automatic washing machines.
		ntify <b>two</b> other household appliances that have a microprocessor. For each, state <b>one</b> of the microprocessor in the appliance.
	Hou	sehold appliance 1
	Use	
	Hou	sehold appliance 2
	Use	)
		[4]
6		lain why it is often necessary to use encryption when transmitting data across the rnet.
		[2]

7 Below is the front cover of a leaflet for a wildlife park.

An image has been removed due to third party copyright restrictions

Details: An image of the front cover of a leaflet for a wildlife park

(a)	State the best type of computer package to produce this leaflet.
	[1]
(b)	The illustrations were taken from the clip-art library that was part of the package.
	Give three advantages of using the clip-art library for this purpose.
	Advantage 1
	Advantage 2
	Advantage 3
	[3]
(c)	Give three features of a Graphical User Interface (GUI) that would make changing the contents of the leaflet easier for an inexperienced computer user.
	Feature 1
	F eature 2
	Feature 3
	[c]

8	State <b>three</b> different methods a systems analyst might use to collect information about a system that the systems analyst is investigating.			
	Met	nod 1		
	Met	nod 2		
	Met	nod 3[3]		
9	A co	empany uses batch processing to produce wage slips for its employees.		
	(a)	Describe 'batch processing'.		
		[2]		
	(b)	Give <b>two</b> reasons why 'real-time processing' is <b>not</b> used for this task.		
		Reason 1		
		Reason 2		
		[2]		
10	Befo	ore creating a database the file structure has to be designed.		
	Give	e two items that need to be included in the design of the file structure.		
	Item	1		
	Item	2		
		[2]		

	st supermarkets have Point-of-Sale (POS) terminals which use bar code readers to input a. These produce itemised bills for customers.
(a)	Give <b>two</b> advantages to the customer of receiving an itemised bill.
	Advantage 1
	Advantage 2[2]
(b)	Give <b>two</b> advantages to the supermarket of giving the customer an itemised bill.
	Advantage 1
	Advantage 2
	[2]
(c)	Explain how an automatic stock control system linked to the POS terminals would work.
	[5]

12	The final stage in the systems life cycle process is evaluation. Identifying the good and bad points of the final system is one part of this evaluation stage.
	Describe <b>two</b> other processes undertaken during the evaluation stage.
	Process 1
	Process 2
	[4]
13	A Training Officer is to give a multi-media presentation. She has a laptop computer with a fast processor, graphics card and the appropriate software already installed.
	Describe the use of ${\bf two}$ extra items of hardware she might use for developing and displaying the presentation.
	Item 1
	Item 1

14	As	each	organisation wishes to keep in touch with its representatives throughout the world. of its representatives already has access to a computer they have decided to the use of video conferencing.
	(a)		te <b>two</b> additional items of hardware the representatives would need for video ferencing.
		Iten	າ 1
		Iten	1 2[2]
	(b)	(i)	Give <b>two</b> advantages to the organisation of using video conferencing in this situation.
			Advantage 1
			Advantage 2
			[2]
		(ii)	Give <b>two</b> disadvantages to the aid worker of using video conferencing in this situation.
			Disadvantage 1
			Disadvantage 2
			[6]

## **BLANK PAGE**

## **BLANK PAGE**

#### **BLANK PAGE**

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (OCR) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.