OCR
RECOGNISING ACHIEVEMENT

OXFORD CAMBRIDGE AND RSA EXAMINATIONS

General Certificate of Secondary Education

INFORMATION AND COMMUNICATION TECHNOLOGY

PAPER 3 (FOUNDATION TIER)

2359/01

Wednesday **7 JUNE 2006** Morning 1 hour

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

Candidate Name

Centre Number

Candidate Number

TIME 1 hour

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and candidate number in the boxes above.
- Answer **all** the questions.
- Write your answers, in blue or black ink, in the spaces on the question paper.
- Do not write in the bar code. Do not write in the grey area between the pages.
- **DO NOT** WRITE IN THE AREA **OUTSIDE** THE BOX BORDERING EACH PAGE. ANY WRITING IN THIS AREA WILL NOT BE MARKED.

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		
Question No.	Max. mark	Mark
1	2	
2	2	
3	3	
4	2	
5	4	
6	5	
7	6	
8	8	
9	2	
10	2	
11	6	
12	9	
13	5	
14	4	
TOTAL	60	

This question paper consists of 8 printed pages and 4 blank pages.

[Turn over

Answer **all** questions.

1 Underline **two** developments in ICT that make it easier for people to work from home.

bar-code readers	**cheap personal computers**	**databases**
digital watches	**electronic mail**	**joysticks**

[2]

2 Underline **two** security measures used in computer systems.

analysis	**encryption**	**evaluation**
MICR	**passwords**	**touch screens**

[2]

3 Tick **three** benefits to librarians of using a computerised library system.

	Tick (✓)
They can sort books alphabetically on the shelves.	
They can find names of authors very quickly.	
They can have longer breaks.	
They can send reminders automatically.	
They can search for books kept at other libraries while a customer waits.	
They can put returned books back on the shelves very quickly.	

[3]

4 Underline **two** methods of inputting data to a computer.

central processing unit	**graphics tablet**	**mail merge**
OCR	**plotter**	**RAM**

[2]

5 A computer has two types of memory, RAM and ROM.

(a) What does **RAM** stand for?

..... [1]

(b) What is RAM used for?

.....

..... [1]

(c) What does **ROM** stand for?

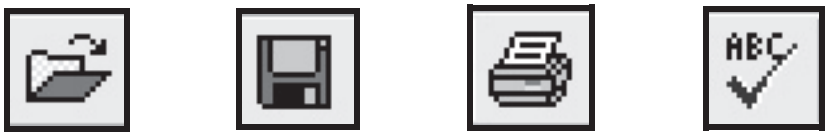
..... [1]

(d) What is ROM used for?

.....

..... [1]

6 Most computers use a graphical user interface (GUI). Below are some examples of icons in a GUI.



(a) What is an icon?

.....

..... [1]

(b) Why are icons used in GUIs?

.....

.....

.....

..... [2]

(c) A keyboard is used to input data.

Give **two** other input devices commonly used with a GUI.

Device 1 .....

Device 2 ..... [2]

7 A company sells DVDs over the Internet.

(a) Give **two** reasons why the company might ask a customer to enter codes when ordering DVDs.

Reason 1 .....

.....

Reason 2 .....

..... [2]

When a DVD is sold, a customer enters a six digit code which is checked by the computer.

(b) **(i)** State what this method of checking is called.

..... [1]

(ii) Give **one** reason why this type of check is used.

.....[1]

The current computer system cannot cope with the number of orders. The company decides to put in a new system.

(c) Give **two** methods the company could use to implement (introduce) the new system.

Method 1 .....

.....

Method 2 .....

..... [2]

8 The Police National Computer (PNC) holds data about criminals and crimes.

(a) Describe **two** methods the police could use to ensure this data is **not** lost or corrupted.

Method 1 .....

.....

.....

.....

Method 2 .....

.....

.....

..... [4]

(b) Some of the data held on the PNC is encrypted.

(i) What is encrypted data?

.....

..... [1]

(ii) Give **one** reason why data is encrypted.

.....

..... [1]

The police archive some data.

(c) Describe what the term *archive* means.

.....

.....

.....

..... [2]

9 Explain why an aeroplane flying on autopilot uses real-time processing rather than batch processing.

.....

.....

.....

..... [2]

10 Give **two** actions that are illegal under the Computer Misuse Act.

Action 1 .....

.....

Action 2 .....

..... [2]

11 When creating a computer system it has to be analysed, designed, developed, tested and implemented.

Tick **one** box in each row that **best** describes the stage when each step would take place.

Step	Analysing (✓)	Designing (✓)	Developing, Testing and Implementing (✓)
Check the system gives the required output.			
Create the data and file structures.			
Describe any validation required.			
Draw diagrams to describe the system processing.			
Interview future users about their requirements.			
Specify suitable hardware and software.			

[6]

12 Many garden centres grow tropical plants in greenhouses with computer-controlled environmental systems.

(a) State **four** pieces of hardware, other than a computer, that would be necessary in this system.

1. .....

2. .....

3. .....

4. ..... [4]

(b) Describe how a computer system can control the environment in a greenhouse.

.....

.....

.....

.....

.....

.....

.....

.....

.....

..... [5]

13 A supermarket uses Electronic Funds Transfer (EFT) to accept payment.

(a) At the checkout, a customer uses a bank card to pay for goods.

Describe the steps that occur after the card is handed to the cashier.

.....

.....

.....

.....

.....

.....

.....

..... [4]

(b) Give **one** advantage to the supermarket of using EFT instead of accepting cheques for payment of goods.

.....

..... [1]

14 LANs and WANs are different types of network.

Describe the features of these two types of network.

LAN .....

.....

.....

.....[2]

WAN .....

.....

.....

..... [2]

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