OCR
RECOGNISING ACHIEVEMENT

GCSE

INFORMATION AND COMMUNICATION TECHNOLOGY

PAPER 3 (Foundation Tier)

THURSDAY 18 JANUARY 2007

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

F 2359/01

Morning

Time: 1 hour

Candidate
Name

Centre
Number

Candidate
Number

INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and Candidate number in the boxes above.
- Answer **all** the questions.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Do **not** write in the bar code.
- Do **not** write outside the box bordering each page.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [ ] at the end of each question or part question.
- The total number of marks for this paper is **60**.
- No marks will be awarded for using brand names of software packages or hardware.

FOR EXAMINER'S USE

Question Number	Maximum Marks	Marks Awarded
1	2	
2	4	
3	4	
4	3	
5	3	
6	4	
7	2	
8	6	
9	4	
10	4	
11	3	
12	5	
13	6	
14	3	
15	7	
TOTAL	**60**	

This document consists of **8** printed pages.

Answer **all** questions.

1 Circle **two** input devices.

DVD   loudspeaker   monitor

mouse   touch screen   printer   [2]

2 Choose **one** of the types of software listed below to complete each of the sentences.

database
desktop publisher (DTP)
spreadsheet
word processor

A .... is most suitable for producing a school magazine.

A .... is most suitable for storing details about all of the pupils.

A .... is most suitable for producing a letter to send to all parents.

A .... is most suitable for producing school accounts.   [4]

3 Complete each sentence below using **one** item from the list.

bar code reader
graphics tablet
icons
multimedia

A program that uses text, graphics animation and sound is called ....

A graphical user interface (GUI) uses ....

A .... is used in supermarkets to input data.

A .... is used to input drawings into a computer.

                                                                                                                [4]

4 A school network manager needs to prevent unauthorised access to data.

Tick **three** methods the network manager could use.

	✓
Give different user names and passwords to staff and students.	
Install a firewall.	
Back up data regularly.	
Lock the rooms where the computers are kept.	
Use virus checkers.	
Ensure all software is licensed.	

[3]

5 Tick **three** applications which use real-time processing.

	✓
Automatic pilot systems.	
Clearing cheques in a bank.	
Controlling the environment in a greenhouse.	
Producing telephone bills.	
Printing payslips.	
Controlling a nuclear reactor.	

[3]

6 The table shows a number of statements about internal memory.

Tick **one** box in each row to show whether the following statements refer to RAM or ROM.

	RAM (✓)	ROM (✓)
Stores the data being processed.		
Data can be changed.		
Data is fixed when the chip is made.		
Data is lost when the computer is switched off.		

[4]

[Turn over

7 Bank cards contain microchips.

State **two** items of data that are stored on the microchip.

Item 1 ....

....

Item 2 ....

.... [2]

8 Students have been given the task of finding multimedia information about how computers work.

(a) State **two** advantages of using the Internet to search for this information.

Advantage 1 ....

....

Advantage 2 ....

.... [2]

(b) State **one** disadvantage of using the Internet to search for this information.

Disadvantage ....

.... [1]

(c) Give **two** reasons why the school uses a broadband Internet connection instead of a dial-up connection.

Reason 1 ....

....

Reason 2 ....

.... [2]

(d) State **one portable** storage medium suitable for saving large files of multimedia information.

.... [1]

9 A small company has decided to computerise its stock control system.

(a) State **two** fact-finding methods that could be used to obtain information about the current system.

Method 1 ....

....

Method 2 ....

.... [2]

(b) Explain why parallel running is often chosen as a method of implementation.

....

....

....

.... [2]

10 The stages needed to produce mail-merged letters are shown below.

A	Choose the merge option to add individual details to the letter.
B	Place the variables into the template letter.
C	Type the template letter using a word processor and save it.
D	Print the letters.
E	Use an existing database, or create a new one, and enter the required personal data.
F	Attach the data source to the template letter.

Write down the correct order of these stages.

The first two have been done for you.

Stage
C
E

[4]

11 A bank stores personal data about its customers on a computer file. This personal data is protected by the Data Protection Act.

State **three** requirements of the Act that the bank must comply with.

Requirement 1 ....

....

Requirement 2 ....

....

Requirement 3 ....

.... [3]

12 A new computer system contains a number of components and is supplied with user documentation.

(a) Details of input and output devices are included in the user documentation.

Give **two** other items of information about the hardware which would be included in the user documentation.

Item 1 ....

....

Item 2 ....

.... [2]

(b) The contact details are also included in the user documentation.

Give **three** other items that should also be included.

Item 1 ....

....

Item 2 ....

....

Item 3 ....

.... [3]

13 Below is part of a data capture form which has been used to collect data about the vehicles using a particular road.

Vehicle type	Number of wheels	Registration year	
Saloon	4	1999	
Minibus	6	2006	
Hatchback	4	2003	
Saloon	4	2004	
Truck	12	1998	
Hatchback	4	1999	
Minibus	6	2007	
Truck	12	2005	

(a) (i) Suggest a more efficient way of recording the data in the 'Vehicle type' column.

....

.... [1]

(ii) Give **two** reasons why this is a better way.

Reason 1 ....

....

Reason 2 ....

.... [2]

The person entering the data into the computer makes a mistake and this error message appears:

'The data just entered is unreasonable. Please re-enter the data.'

(b) What is this type of checking, done by the computer, called?

.... [1]

(c) Registration number plates on cars were first used in 1903.

Complete the rule below which could be applied by the computer to the data in the 'Registration year' column.

Registration year must be

greater than or equal to ………………… **AND** less than or equal to …………………   [2]

[Turn over

14 A computerised registration system is to replace the manual system in a school.

Give **three** possible benefits of the computerised system.

Benefit 1 ....

....

Benefit 2 ....

....

Benefit 3 ....

.... [3]

15 (a) There are a number of stages in the development of a new ICT system.

State **four** tasks carried out during the design stage.

Task 1 ....

....

Task 2 ....

....

Task 3 ....

....

Task 4 ....

.... [4]

(b) Describe **one** other stage in the development of a new ICT system.

....

....

....

....

....

.... [3]