OCR
RECOGNISING ACHIEVEMENT

GCSE

INFORMATION AND COMMUNICATION TECHNOLOGY

PAPER 3 (Higher Tier)

THURSDAY 18 JANUARY 2007

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

H **2359/02**

Morning

Time: 1 hour 15 minutes

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	3	
4	5	
5	6	
6	6	
7	7	
8	8	
9	3	
10	7	
11	4	
12	5	
TOTAL	60	

This document consists of **10** printed pages and **2** blank pages.

Answer **all** questions.

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

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

   ....

   ....

   ....

   .... [2]

2 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]

3 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]

4 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]

[Turn over

5 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]

6 Normal, abnormal and extreme data is used to test a database.

(a) What is meant by the term abnormal data?

....

.... [1]

(b) What is meant by the term extreme data?

....

.... [1]

(c) People using a library can borrow up to six books at a time. The library needs to test its new database for recording book details.

Tick **one** box in each row to describe the type of data used.

The first one has been done for you.

Number of Books	Normal (✓)	Abnormal (✓)	Extreme (✓)
2	✓		
1			
7			
6			
−1			

[4]

[Turn over

7   Explain why a graphical user interface (GUI) is considered easier to use than a command line interface.

....

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....

.... [7]

8 A computer user logs on to the Internet via an Internet Service Provider (ISP) to read any emails sent to them.

(a) Explain what the Internet is.

....

....

....

.... [2]

(b) Describe **three** services, other than email, that the ISP may offer.

Service 1 ....

....

....

....

Service 2 ....

....

....

....

Service 3 ....

....

....

.... [6]

[Turn over

9 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]

10 (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]

11 Describe how an expert system is created.

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....

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.... [4]

12 A student uses his computer at home to complete a multimedia presentation. He now has to get the presentation to school.

Discuss the possible ways he could transfer this work onto the school's computer network.

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.... [5]

10

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