OCR
RECOGNISING ACHIEVEMENT

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2359/01

GENERAL CERTIFICATE OF SECONDARY EDUCATION

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 3 (Foundation Tier)

FRIDAY 6 JUNE 2008

Morning
Time: 1 hour

Candidates answer on the question paper
Additional materials: No additional materials are required

Candidate Forename		Candidate Surname	

Centre Number		Candidate Number	

INSTRUCTIONS TO CANDIDATES

• Write your name in capital letters, your Centre Number and Candidate Number in the boxes above.
• Use blue or black ink. Pencil may be used for graphs and diagrams only.
• Read each question carefully and make sure that you know what you have to do before starting your answer.
• Answer **all** the questions.
• Do **not** write in the bar codes.
• Write your answer to each question in the space provided.

INFORMATION FOR CANDIDATES

• The number of marks for each question 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	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
TOTAL	

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

[Turn over

1   Underline **two** ways of keeping data safe.

                    authorising   backing up   encrypting

                        hacking   sorting   searching

<div align="right">[2]</div>

2   The diagram shows some features of a typical graphical user interface (GUI).
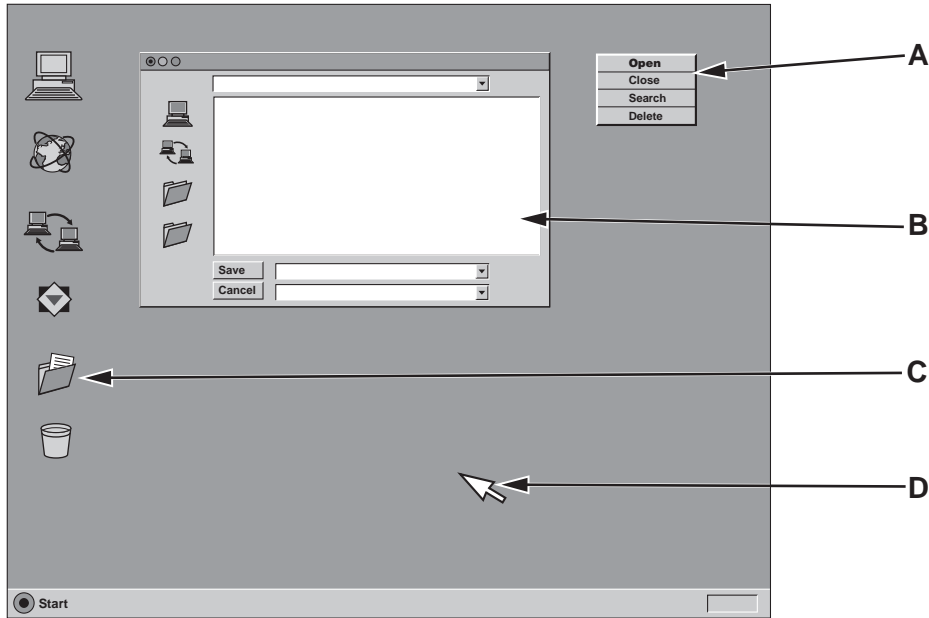
   Choose **one** of the features listed below to complete each of the following sentences.

   an icon
   a menu
   a pointer
   a window

   A is ....

   B is ....

   C is ....

   D is .... [4]

3 The table shows a list of storage media.

Tick **one** box in each row to show whether or not data can be changed.

	Data **can** be changed (✓)	Data **cannot** be changed (✓)
Hard disk		
ROM		
RAM		
CD-ROM		
CD-RW		

[5]

4 Underline **two** devices used for data capture.

bar code reader   **CD-ROM**   **monitor**

mouse   **OCR**   **speaker**

[2]

5 Multimedia presentations may contain data in the form of text.
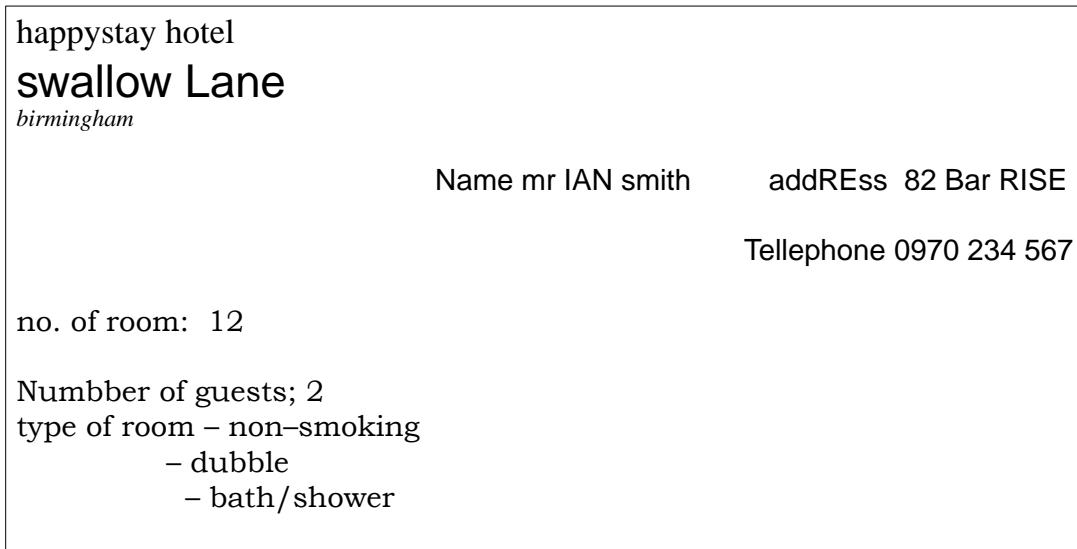
State **two** other forms of data that a multimedia presentation may contain.

1 ....

2 .... [2]

[Turn over

6 This is an example of a screen output from a hotel database.

> happystay hotel
>
> swallow Lane
> *birmingham*
>
> Name mr IAN smith   addREss 82 Bar RISE
>
> Tellephone 0970 234 567
>
> no. of room: 12
>
> Numbber of guests; 2
> type of room – non–smoking
>   – dubble
>   – bath/shower

Identify **four** problems with the design of the screen.

1 ....

....

2 ....

....

3 ....

....

4 ....

.... [4]

7 The diagram shows a star network. Label the items at **A**, **B** and **C**.

A...

B...

C...
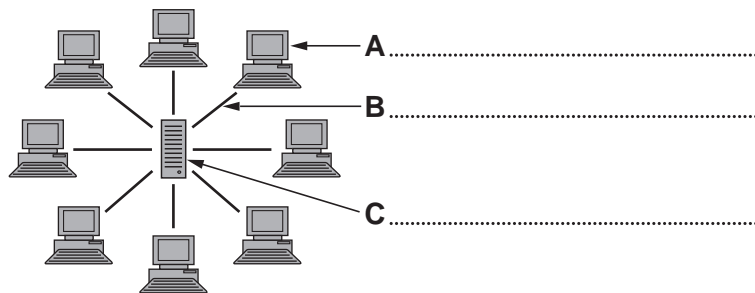
[3]

8   Tick **one** box in each row to show which type of software carries out the task shown.

Task	Operating System (✓)	Applications software (✓)	Utility (✓)
managing memory			
formatting disks			
creating a 3D image of a car			
creating a report from a database			
scanning for viruses			

[5]

9   A hospital has three sites some distance apart. It has a wide area network (WAN) that is connected between these sites.

Give **one** method of communication that could connect the network between the two sites.

....

.... [1]

10   A supermarket has a database which it uses for stock control. The database is updated as goods are sold at the checkout.

Details of some goods are entered into the database at the checkout using keyboards and keypads.

Identify **two** other devices that could be used to collect data from the goods and give **one** reason why each device would be used.

Device 1 ....

Reason ....

....

Device 2 ....

Reason ....

.... [4]

[Turn over

11 A patient is admitted to hospital. His details are given to a secretary on a form and the secretary copies these into the hospital's database.

(a) The secretary carefully checks the details in the database against those on the form.

What is this process called?

.... [1]

(b) The hospital is registered under the Data Protection Act and the patient's details are protected by law.

State **three** ways that the law protects the patient's details.

Way 1 ....

....

Way 2 ....

....

Way 3 ....

.... [3]

(c) The hospital needs the following personal details about the patient:

first name, last name, age and home address.

(i) Why would it **not** be sensible to store the age of the patient in the database?

....

.... [1]

(ii) How can this problem be overcome?

....

.... [1]

(iii) More than one field is used for storing the home address.

Why is this useful?

....

....

....

.... [2]

12 An online store has a warehouse from which it sends out goods.

(a) The database of items in the warehouse is stored on a hard disk.

State **two** reasons why the database is stored on a hard disk rather than a CD-ROM.

Reason 1 ....

....

Reason 2 ....

.... [2]

(b) The data on the hard disk is regularly archived.

What is an archive?

....

....

....

.... [2]

(c) Explain the advantages to the company of selling its goods online.

....

....

....

....

....

....

....

.... [4]

[Turn over

8

13 A company replaces its old computer system with a new system.

   (a) State **two** tasks that must be done before the operators can use the new system.

   Task 1 ....

   ....

   Task 2 ....

   .... [2]

   (b) For six months, the company uses the old system alongside the new system.

   Give **one** reason for doing this.

   ....

   .... [1]

14 A car manufacturer uses robots to make its cars.

   One advantage of using robots is that human error is eliminated.

   (a) Give **two** reasons why errors might still occur.

   Reason 1 ....

   ....

   Reason 2 ....

   .... [2]

   (b) Give **two** advantages, other than eliminating human errors, of using robots.

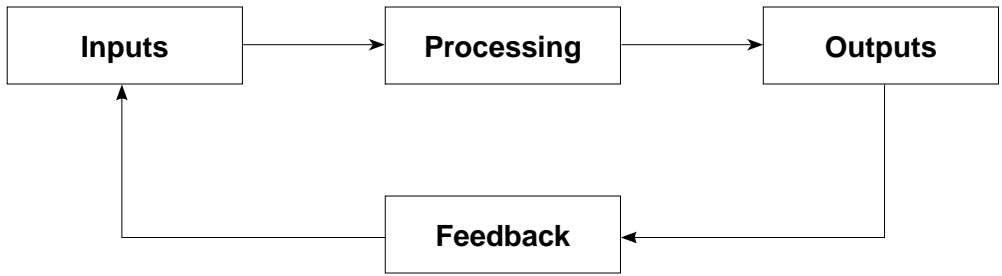   Advantage 1 ....

   ....

   Advantage 2 ....

   .... [2]

15 The diagram shows the control feedback loop system for controlling the central heating of a house.

```
┌──────────┐        ┌──────────────┐        ┌──────────┐
│  Inputs  │───────▶│  Processing  │───────▶│ Outputs  │
└──────────┘        └──────────────┘        └──────────┘
      ▲                                            │
      │             ┌──────────────┐               │
      └─────────────│   Feedback   │◀──────────────┘
                    └──────────────┘
```

(a) Identify **two** items of data that will be input to this system.

Data item 1 ....

....

Data item 2 ....

.... [2]

(b) Identify **one** output from this system.

....

.... [1]

(c) Explain what is meant by feedback.

....

....

....

.... [2]

10

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