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GENERAL CERTIFICATE OF SECONDARY EDUCATION

INFORMATION AND COMMUNICATION TECHNOLOGY

2359/01

Paper 3
(Foundation Tier)

**Friday 5 June 2009
Morning**

Duration: 1 hour

Candidate Forename		Candidate Surname	

Centre Number						Candidate Number				

INSTRUCTIONS TO CANDIDATES

- Write your name clearly in capital letters, your Centre Number and Candidate Number in the boxes above.
- Use 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, however additional paper may be used if necessary.

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.
- This document consists of **8** pages. Any blank pages are indicated.

OCR is an exempt Charity

Turn over

1 Circle **two** data collection methods.

buzzer   **CD ROM**   **MICR**

OMR   **plotter**   **[2]**

2 Tick whether the following statements about the use of robots in factories are true or false.

Statement	True (✓)	False (✓)
More workers are now employed		
Workers have had to retrain		
The working environment is a lot more dangerous		
The quality of work is more consistent		
The total wage bill has gone up		

[5]

3 Tick **three** applications which use batch processing.

	✓
A computerised hotel booking system	
A computerised central heating system	
Clearing cheques in a bank	
Printing credit card bills	
Inputting data from OMR exam papers	
A microprocessor controlled washing machine	

[3]

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

A graphics tablet

Magnetic tape

A memory stick

OCR

ROM

.... is used to back up data from file servers.

.... is used to convert a scanned image to a text file.

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

.... is used to store the BIOS of a computer system.

.... is used to store work so that you can take it home from school.

[5]

5 A computerised payroll system is being tested at a company where no worker earns less than £100 and no worker earns more than £1000.

Tick **one** box in each row to show whether the item of test data is normal, abnormal or extreme data.

Data	Normal (✓)	Abnormal (✓)	Extreme (✓)
10			
100			
350			
ten			

[4]

6 Tick **three** items that are part of a graphical user interface (GUI).

Item	✓
Command line	
Menu	
Pointer	
Printer	
Sensor	
Window	

[3]

7 When an item is purchased from a supermarket the checkout operator needs to input the details of the pre-packed goods.

(a) Name an input device, other than a keyboard, which would be most suitable for entering the details of the pre-packed goods.

.... **[1]**

(b) Name the validation check that would be performed on the data entered.

.... **[1]**

The checkout operator also needs to input details from the customer's bank card.

(c) Name the input device, other than a keyboard, that would be used to enter these details.
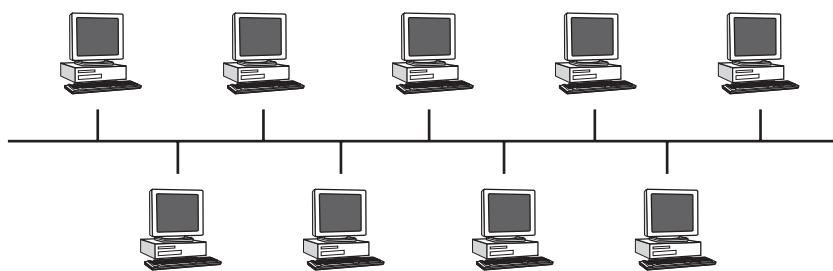
.... **[1]**

(d) Give **two** items of data that would be read from the customer's bank card.
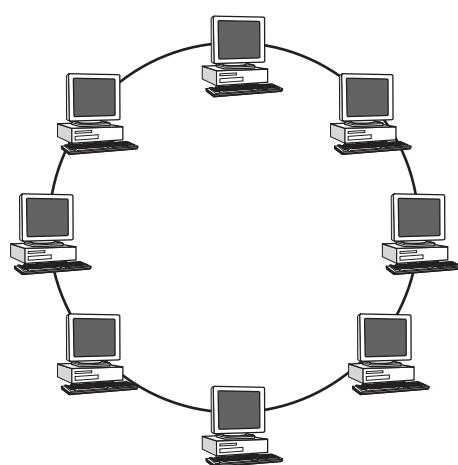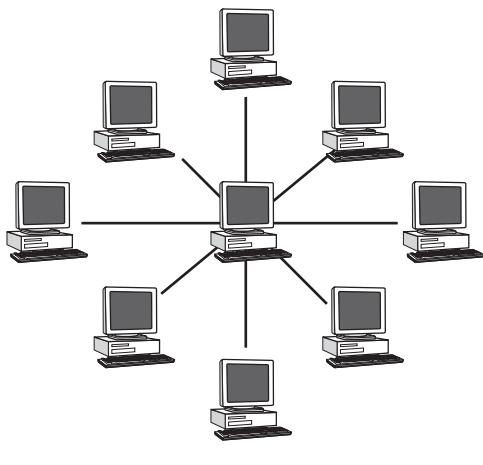
Item 1 ....

Item 2 .... **[2]**

8 Name the following network topologies:

Name ....

Name ....   Name ....   **[3]**

9 (a) A system is about to be computerised. Interviewing users is one method of collecting information about the system.

Identify **one** other method.

....

.... **[1]**

(b) Explain why interviewing users is **not** always the best method of collecting information.

....

....

....

.... **[2]**

Turn over

10 Describe how each of the following methods is used to prevent unauthorised access to data.

(a) Encryption ....

....

....

.... **[2]**

(b) Passwords ....

....

....

.... **[2]**

(c) Biometric data ....

....

....

.... **[2]**

11 Many greenhouses are now computer controlled.

Tick **three** reasons why computers are used instead of humans.

	✓
Readings are more accurate	
The situation is too dangerous for humans	
Computers cannot take readings regularly	
Computers don't forget to take readings	
Computers can react a lot quicker to a situation than humans	
Humans do not need to take breaks	

[3]

12 A school has decided not to publish its magazine any more. It will put the information on its website instead.

Describe **three** features of a website that would **not** be available in a desktop published version.

Feature 1 ....

....

....

....

Feature 2 ....

....

....

....

Feature 3 ....

....

....

.... **[6]**

13 Describe the differences between a WAN and a LAN.

....

....

....

....

....

.... **[3]**

14 (a) Describe what is meant by teleworking.

....

....

....

....

....

....

....

.... **[3]**

(b) Describe the advantages of teleworking to the worker.

....

....

....

....

....

....

....

....

....

....

....

.... **[6]**