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**GENERAL CERTIFICATE OF SECONDARY EDUCATION  
INFORMATION AND COMMUNICATION  
TECHNOLOGY**

**2359/01**

Paper 3 (Foundation Tier)

Candidates answer on the question paper.

**OCR supplied materials:**  
None

**Other materials required:**  
None

**Thursday 16 June 2011  
Afternoon**

**Duration: 1 hour**



Candidate forename		Candidate surname	
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Centre number						Candidate number				
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**MODIFIED LANGUAGE**

**INSTRUCTIONS TO CANDIDATES**

- Write your name, centre number and candidate number in the boxes above. Please write clearly and in capital letters.
- Use black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully. Make sure you know what you have to do before starting your answer.
- Write your answer to each question in the space provided. Additional paper may be used if necessary but you must clearly show your candidate number, centre number and question number(s).
- Answer **all** the questions.
- Do **not** write in the bar codes.

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

1 Circle **two** storage media used for moving data from one computer to another.

**CD-R**

**DVD**

**Fixed hard disk**

**Graph plotter**

**MICR**

**Microphone**

[2]

2 Tick whether the following statements are true or false.

	<b>True (✓)</b>	<b>False (✓)</b>
A control program is used in a microwave oven		
A database is used to store patient records in a hospital		
A spreadsheet is used to manage personal finance		
A word processor is used to produce letters		
An internet browser is used to create a slide show		

[5]

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

**A bar code reader**

**A graphics tablet**

**A touch screen**

**Voice input**

..... is used to help people who have no use of their hands to enter data into a computer.

..... is used to enter free hand drawings into a computer.

..... is used in libraries to input data from books.

..... is used by waiters in restaurants to select options at a till.

[4]

- 4 Tick **three** applications which use online processing.

	✓
A company's payroll system	
A computerised theatre booking system	
Entering the details of a new consignment of books in a library	
Paying a bill using home banking	
Printing examination certificates	
Withdrawing money at an ATM	

[3]

- 5 The table shows a number of statements about actions carried out in the systems life cycle. Tick **one** box in each row to show whether the action is carried out during the analysis phase or the design phase of the systems life cycle.

	Analysis (✓)	Design (✓)
Establishing the input, output and processing required		
Interviewing users of the current system		
Selecting fields for a database		
Specifying any validation required		

[4]

- 6 The table shows a number of statements about types of network.  
Tick **one** box in each row to show whether the following statements are true or false.

	True (✓)	False (✓)
A LAN needs satellite communications to link computers		
A network within a school would be a LAN		
A WAN usually covers a very small area		
The internet is a WAN		

[4]

- 7 The table shows a number of statements about checking data.  
Tick **one** box in each row to show whether the following are methods of validation or verification.

	Validation (✓)	Verification (✓)
A check digit		
A range check		
Double entry		
Visually checking data		

[4]

- 8 A school website contains text and graphics.  
Give **four** other features that could be used to make the website more interesting.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

..... [4]

- 9 Data is often encrypted before it is transferred across the internet.  
Tick whether each of the following statements about encryption is true or false.

	True (✓)	False (✓)
Data is encrypted to prevent viruses		
Encryption prevents hackers from deleting the data		
Encryption requires a key to decrypt the data		
Encryption scrambles the data so that it cannot be understood		

[4]

- 10 Name and describe **two** of the main features of a Graphical User Interface (GUI).

1 .....

.....

.....

.....

.....

2 .....

.....

.....

.....

..... [4]

- 11 Identify **two** changes in employment patterns for bank workers, other than unemployment, due to the introduction of home banking.

1 .....

.....

2 .....

..... [2]

**12** Organisations that collect personal data have a legal obligation to protect that data. Identify **four** principles from the Data Protection Act which the organisations must follow.

1 .....

.....

2 .....

.....

3 .....

.....

4 .....

..... [4]

**13** A company needs to update its computer system. A new system has been developed and tested. Name and describe **three** alternative strategies which could be used to implement the new system.

1 .....

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.....

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2 .....

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3 .....

.....

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..... [6]

14 A group of car mechanics have asked a computer company to develop an expert system for them.

Identify the stages in the development of this expert system.

.....

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.....

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.....

.....

..... [4]

15 Many supermarkets now have a website which allows customers to shop online.

(a) Describe the advantages of online shopping **to the customer**.

.....

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.....

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.....

.....

..... [3]

(b) Describe the advantages of online shopping **to the supermarket**.

.....

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.....

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..... [3]

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