H

GENERAL CERTIFICATE OF SECONDARY EDUCATION

INFORMATION AND COMMUNICATION TECHNOLOGY

Paper 3
(Higher Tier)

2359/02

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.

Turn over

1 Describe how each of the following methods are used to prevent unauthorised access to data.

(a) Encryption ....

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.... **[2]**

(b) Passwords ....

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.... **[2]**

(c) Biometric data ....

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.... **[2]**

2 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]

3 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 ....

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   Feature 2 ....

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   Feature 3 ....

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   .... **[6]**

4 Describe the differences between a WAN and a LAN.

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   .... **[3]**

5   **(a)** Describe what is meant by teleworking.

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.... **[3]**

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

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.... **[6]**

6 Explain, using examples, the differences between validation and verification.

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.... **[6]**

Turn over

7 A company has decided to computerise its operations. The systems analyst is unsure which method of implementation to use.
Discuss the different methods available.

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.... **[7]**

8 Robots are now used in the production of motor cars.

Discuss the advantages and disadvantages of using robots.

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.... **[8]**

9 An expert system is to be created to help in the diagnosis of patient illnesses.
Describe the steps required to create such a system.

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.... **[4]**

Turn over

10 A student has started a piece of work on a computer at school. She would like to take this home. Discuss the suitability of the different media and devices she could use to do this. She does not have internet access at home.

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.... **[8]**