

GENERAL CERTIFICATE OF SECONDARY EDUCATION
INFORMATION AND COMMUNICATION TECHNOLOGY
 Paper 3 (Higher Tier)
THURSDAY 17 JANUARY 2008

Morning
 Time: 1 hour 15 minutes

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



* C O P / T 4 1 3 0 6 *

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.
- Do **not** write outside the box bordering each page.
- Write your answer to each question in the space provided.
- Additional answer space is available on the lined pages at the back of this booklet. Answers on these pages **must** be clearly numbered.

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	
1	
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10	
11	
12	
TOTAL	

This document consists of **9** printed pages and **3** lined pages.

1 The laptop computers in a school are using a wireless connection to the network.

Give **one** advantage and **one** disadvantage of using a wireless connection for the laptops.

Advantage

.....

Disadvantage

..... [2]

2 Explain why an electricity supply company uses batch processing to prepare its bills.

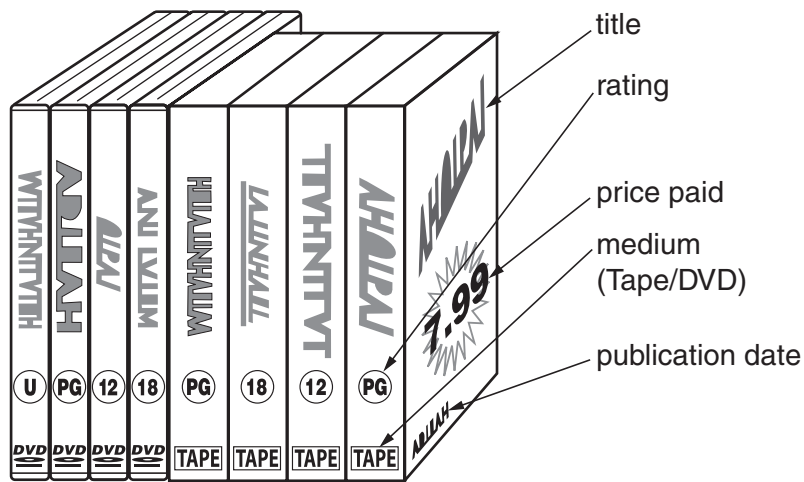
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..... [2]

3 Eve is creating a database of her collection of videos and DVDs.



(a) She creates five fields for her database.

Complete the table to show the most suitable data type for each of the fields.

Field	Data type
Title	
Rating	
Price paid	
Medium (Tape/DVD)	
Publication date	

(b) Eve sets up some validation rules.

Why does she do this?

.....
..... [1]

(c) State **one** validation method that could be used for the 'Medium (Tape/DVD)' field.

.....
..... [1]

(d) Describe how Eve would verify the entries.

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.....
.....
..... [2]

4 An expert system can be used to play chess.

(a) Give **one** other example of an expert system.

..... [1]

(b) Give **two** benefits of using an expert system.

Benefit 1

.....

Benefit 2

..... [2]

5 Describe **three** changes to the way businesses and industry operate caused by the introduction of ICT.

1

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2

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3

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..... [6]

6 Explain how files stored on a computer network may be protected from unauthorised users.

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..... [3]

7 (a) What is meant by 'electronic fraud'?

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..... [2]

(b) Explain how a person can avoid being the victim of electronic fraud.

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..... [4]

8 A book shop is still using a card index system to store details of the books in stock. The shopkeeper wants to replace it with a computerised system. An analysis is being made of the current system.

State the inputs, processing and outputs that occur when a customer asks the shopkeeper for a book.

(i) Inputs

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..... [2]

(ii) Processing

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..... [2]

(iii) Outputs

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..... [2]

9 Explain how an electricity supply company would use a turnaround document as part of its billing system.

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..... [4]

10 Test data is used to test a new system.

(a) What is meant by extreme data?

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..... [1]

(b) What is meant by abnormal data?

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..... [1]

(c) What is meant by normal data?

.....
..... [1]

Please turn over for the next question

