

GCSE
INFORMATION AND
COMMUNICATION TECHNOLOGY
(Higher Tier)
TUESDAY 22 MAY 2007

H 2357/02

Afternoon

Time: 1 hour 15 minutes

Additional materials: No additional materials are required.



Candidate
Name

Centre
Number

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Candidate
Number

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INSTRUCTIONS TO CANDIDATES

- Write your name, Centre number and Candidate number in the boxes above.
- Answer **all** the questions.
- Use blue or black ink. Pencil may be used for graphs and diagrams only.
- Read each question carefully and make sure you know what you have to do before starting your answer.
- Do **not** write in the bar code.
- Do **not** write outside the box bordering each page.
- WRITE YOUR ANSWER TO EACH QUESTION IN THE SPACE PROVIDED. ANSWERS WRITTEN ELSEWHERE WILL NOT BE MARKED.

INFORMATION FOR CANDIDATES

- The number of marks is given in brackets [] at the end of each question or part question.
- No marks will be awarded for using brand names of software packages or hardware.
- The total number of marks for this paper is **60**.

For Examiner's Use		
Question No.	Max. Marks	Mark
1	5	
2	6	
3	6	
4	3	
5	10	
6	5	
7	2	
8	2	
9	3	
10	6	
11	6	
12	6	
Total	60	

This document consists of **11** printed pages and **1** blank page.

- 1 Kathryn carried out a survey amongst her friends about their preferred school uniform.

Kathryn wrote her results on the tally sheet shown below.

	V-neck jumper	Polo neck shirt	Shirt and tie
Like			
Dislike			
Don't care			

She makes a spreadsheet of her results and fills in the data:

	A	B	C	D
1		V-neck jumper	Polo neck shirt	Shirt and tie
2	Like	21	6	1
3	Dislike	9	22	27
4	Don't care	3	5	5
5	Total	=SUM(B2:B4)	=SUM(C2:C4)	=SUM(D2:D4)

- (a) She checks the entries in her spreadsheet against the results on her tally sheet to see if she has copied them correctly.

What is this process called?

.....[1]

(b) She wants to display the results of the 'shirt and tie' questions in a bar chart.

Describe how she would do this.

.....
.....
.....
.....
.....
.....
.....
.....[4]

2 Carla is using her computer to create an advertising poster for a school fashion show. She wants to include pictures.

(a) There are many ways Carla could obtain suitable pictures.

For each of the following, give **one** example of the type of picture for which it is most suitable.

Scanner

.....

Digital camera.....

.....

Clip art.....

.....

Painting package

.....[4]

(b) State **two** reasons why Carla should use a desktop publishing package rather than a word processor to create her poster.

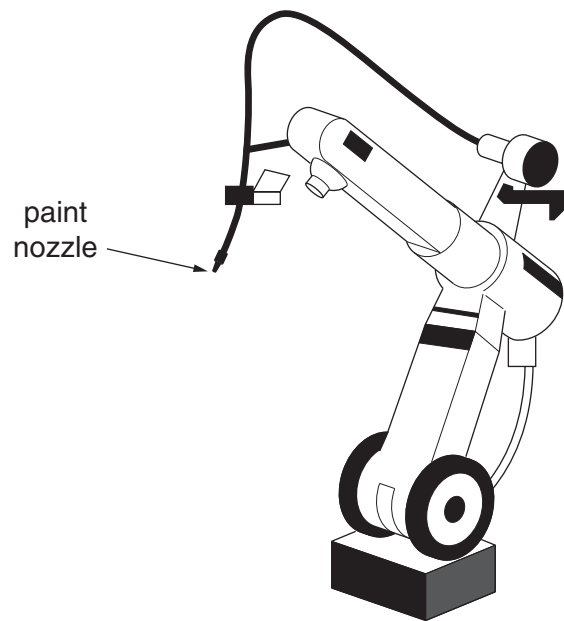
Reason 1

.....

Reason 2

.....[2]

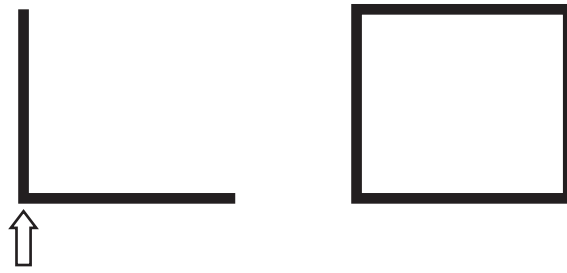
- 3 A robot arm has a paint nozzle used to paint shapes on cars.



The robot arm is controlled by a computer using these instructions.

<i>INSTRUCTION</i>	<i>MEANING</i>
REPEAT n []	Repeat the instructions in square brackets n times
FORWARD n	Move n cm forward
BACKWARD n	Move n cm backward
LEFT n	Turn left n degrees
RIGHT n	Turn right n degrees
OFF	Stop paint flow
ON	Start painting

The robot arm is programmed to paint these shapes on the car:



It starts painting at ↑.

Complete the program sequence below to paint the shapes on the car:

ON
 FORWARD 40
 OFF
 BACKWARD.....
 RIGHT 90

.....
 FORWARD 40
 OFF
 FORWARD 20

..... 90

ON
 REPEAT [..... RIGHT 90]

[6]

4 Give **three** advantages of having school computers connected in a network.

Advantage 1

.....

Advantage 2

.....

Advantage 3

.....

[3]

11
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