

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

**F 2357/01**

Afternoon

Time: 1 hour

Additional materials: No additional materials are required.



Candidate  
Name

Centre  
Number

|  |  |  |  |  |
|--|--|--|--|--|
|  |  |  |  |  |
|--|--|--|--|--|

Candidate  
Number

|  |  |  |  |
|--|--|--|--|
|  |  |  |  |
|--|--|--|--|

**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**.

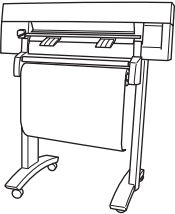
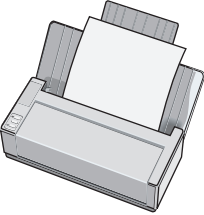



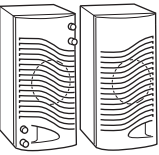
| For Examiner's Use |            |      |
|--------------------|------------|------|
| Question No.       | Max. Marks | Mark |
| 1                  | 10         |      |
| 2                  | 2          |      |
| 3                  | 2          |      |
| 4                  | 3          |      |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

This document consists of **12** printed pages.

- 1 Using the list below, name the items shown in the table. Tick **one** box in each row to show whether the item is used for input or output.

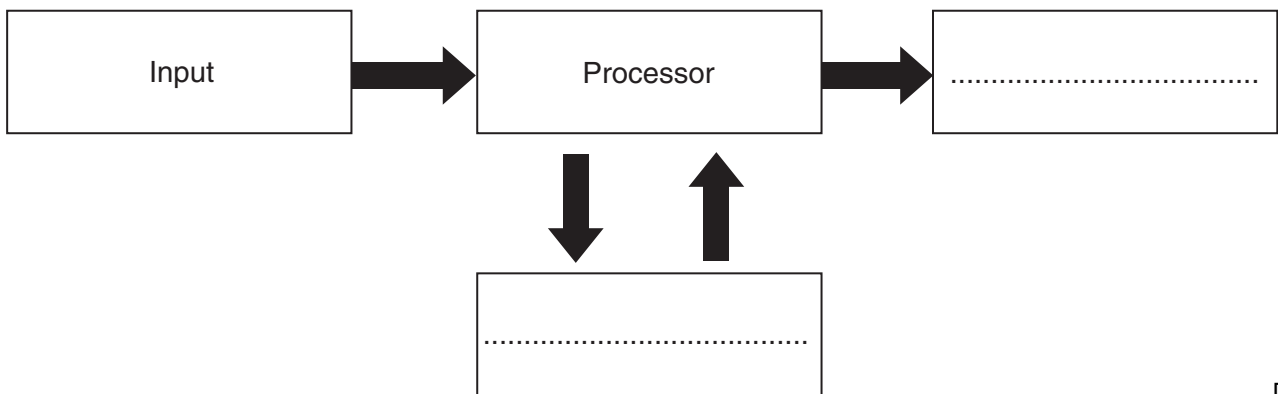
joystick      keyboard      microphone      mouse      plotter  
 printer      remote control      robot arm      speakers

The first one has been done for you.

| Item  | Name of item | INPUT<br>(✓) | OUTPUT<br>(✓) |
|---|--------------|--------------|---------------|
|    | plotter      |              | ✓             |
|   |              |              |               |
|  |              |              |               |
|  |              |              |               |
|  |              |              |               |
|  |              |              |               |

[10]

2 Complete this diagram of a typical computer system.









[2]

3 Tick **two** changes that have occurred due to the introduction of microprocessors.

| Change                                | Tick (✓) |
|---------------------------------------|----------|
| DVD players are in common use         |          |
| Books can be checked out of libraries |          |
| Cinema tickets can be bought          |          |
| Microwave ovens are in common use     |          |


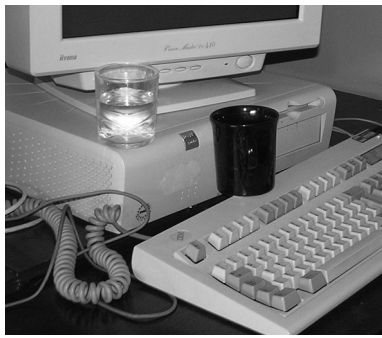
[2]

- 4 Tick **one** box in each row to show which graphics feature has been used to change the original image into the changed image.

| Original Image  | Changed Image   | Flip<br>(✓)              | Rotate<br>(✓)            | Crop<br>(✓)              | Layer<br>(✓)             |
|---|---|--------------------------|--------------------------|--------------------------|--------------------------|
|  |  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  |  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|  |  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

[3]

- 5 The photographs show some unsafe situations in a computer room. In the space next to each photograph write down why it is unsafe. The first one has been done for you as an example.

| Safety Issue  | Why it is unsafe                                       |
|---|--|
|    | <p><i>The monitor could fall and hurt someone.</i></p> |
|   |  |
|  |  |
|  |  |

[3]

6 Harold has used a word processor to write his history homework.

Here is some of his homework.

Histry Hoemwork by Harold

Abraham Lincoln, 16<sup>th</sup> President of the United States of America apoke at Gettysburgh on November 19, 1863. He sed :

“Four score and seven years ago our fathers brought forth on this continent, a new nation, conceived in Liberty and dedicated to the proposition that all men are created equal.”

(a) Harold needs to use the spell-checking tool.

Describe what this does.

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

(b) Harold fully justifies his text.

State what this does to his text.

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

(c) Harold decides to make the title stand out.

State **three** ways he might do this.

Way 1 .....

.....

Way 2 .....

.....

Way 3 .....

.....[3]

7 Give **two** ways of preventing a virus from affecting your computer.

Way 1 .....

.....

Way 2 .....

.....[2]

8 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 starts to fill 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             |                 | 27            |
| 4 | Don't care | 3             | 5               | 5             |
| 5 | Total      | =SUM(B2:B4)   |                 |               |

(a) What value should she write in cell C3?

.....[1]

(b) What does the formula in cell B5 do?

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

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

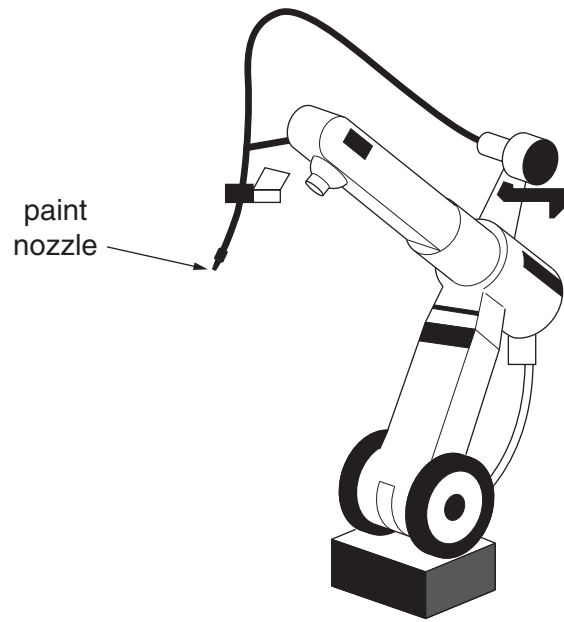
What is this process called?

.....[1]





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



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

| <b>INSTRUCTION</b> | <b>MEANING</b>                                       |
|--------------------|--|
| 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]

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

Advantage 1 .....

.....

Advantage 2 .....

.....

Advantage 3 .....

.....

[3]

**PLEASE TURN OVER FOR THE LAST QUESTION.**

12 (a) Fax, video-conferencing and email are commonly used to communicate in business.

Tick **one** box in each row to show which method would be most suitable for each task shown.

| Task                               | Fax<br>(✓) | Video-conferencing<br>(✓) | Email<br>(✓) |
|------------------------------------|------------|---------------------------|--------------|
| Sending a signed legal document    |            |                           |              |
| Sending a personal message         |            |                           |              |
| Having a face-to-face conversation |            |                           |              |
| Sending a short sound file         |            |                           |              |

[4]

(b) State **two** ways an email message can be addressed to several people.

Way 1.....  
 .....

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

(c) One advantage of email compared to ordinary letter post is that it can be sent to several people at once.

Explain other advantages of using email.

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

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