

FOR OFFICIAL USE

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F

	KU	PS
Total Marks		

0560/401

NATIONAL
QUALIFICATIONS
2007

WEDNESDAY, 2 MAY
9.00 AM – 10.00 AM

COMPUTING STUDIES
STANDARD GRADE
Foundation Level

Fill in these boxes and read what is printed below.

Full name of centre

Town

Forename(s)

Surname

Date of birth

Day Month Year

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Scottish candidate number

--	--	--	--	--	--	--	--	--	--

Number of seat

Read each question carefully.

Attempt **all** questions.

Write your answers in the space provided on the question paper.

Write as neatly as possible.

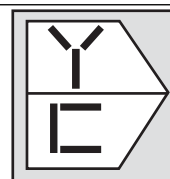
Answer in sentences wherever possible.

Before leaving the examination room you must give this book to the invigilator. If you do not, you may lose all the marks for this paper.



- (a)

Samantha

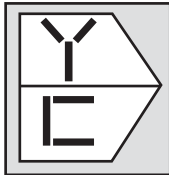


amended

- (iii) The word **is** has to be _____

1. (continued)

- (d) The letter has now been changed.

<p>24 June 07</p> <p>Barn Youth Club</p> <p>Dear Member,</p> <p>The Annual General Meeting will now take place on <u>Sunday</u> 1 July at 7.30pm. Attendance at the meeting is mandatory.</p> <p>Regards</p> <p><i>Samantha</i></p>	
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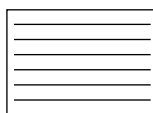
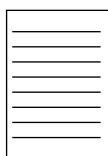
Use the following words to complete the sentences.

*underlined**bold**italics*

- (i) Annual General Meeting is in _____.
- (ii) Sunday has been _____.
- (iii) Samantha is in _____.
- (e) The layout of the main text in the letter has been justified.
What type of justification has been used?
Tick (✓) **one** box only.

Centre Justified ☐Left Justified ☐Right Justified ☐

- (f) Samantha wishes to print out the letter with a landscape layout.
Which option below is a landscape layout?
Tick (✓) **one** box only.



3
2
1
0

1
0

1
0

[Turn over]

2. (a) Part of a spreadsheet is shown.

From the list of words below, label the spreadsheet.

column *formula* *value* *cell* *row*

Use each word only **once**.

	A	B	C	D	E	F
1						
2						=B2*E2
3						
4						
5						
6	14					
7						

Labels to be placed in boxes:

- Box 1 (above B2): *cell*
- Box 2 (above F2): *formula*
- Box 3 (right of row 4): *row*
- Box 4 (left of cell A6): *value*
- Box 5 (below D6): *column*

5
4
3
2
1
0

- (b) A local newsagent keeps track of the paper boys' wages on his spreadsheet.

	A	B	C	D	E	F	G	H
1	Newsag							Weekly
2	Name	Sun	Mon	Tue	Thu	Fri	Sat	Wages
3								
4	Callum	£3.00					£3.00	£6.00
5	Neil		£2.50	£2.50	£2.50	£2.50		£10.00
6	Aidan	£3.00	£2.50			£2.50		£8.00
7	Reece			£2.50	£2.50		£3.00	£8.00
8								
9							Total Wages	£32.00

- (i) The word "**Newsagent**" was entered into cell A1 but does not fit.
What must be done to fix this?

1
0

3. Mrs Borland is a dentist. She keeps her patients' records on a computer.

(a) Which application would be best suited for this task?

Tick (✓) **one** box only.

Word Processing ☐ Database ☐ Graphics ☐

1
0

(b) Samples of the dental records are shown below.

First Name	Stuart	Andrew	Gillian	John
Surname	Forrest	Taylor	Bell	Simpson
Date of Birth	17/10/90	14/01/90	09/03/91	14/07/91
Street	1 Nova Street	31 Corsa Ave	47 Burn Street	1 Canada Ave
Town	Boat	Garten	Lomond	Maple
Appointment	15/05/07	15/05/07	26/06/07	30/10/07

(i) State the number of fields shown above. _____

1
0

(ii) State the number of records shown above. _____

1
0

(c) A new patient called Elaine Johnstone joins the dental practice.

What must the dentist do with the information Elaine Johnstone has given her?

1
0

(d) Use **search** or **sort** to complete the following sentences.

(i) The dentist wants to know who has an appointment on 15/05/07.

The dentist should _____ on the field Appointment.

(ii) The dentist wants a list of all patients in alphabetical order.

The dentist should _____ on the field Surname.

(iii) The dentist wants a list of patients over 18 years old.

The dentist should _____ on the field Date of Birth.

3
2
1
0

KU	PS
1 0	1 0
1 0	1 0
1 0	1 0

3. (continued)

(e) At the end of the week the dentist makes a *backup* of her patient file.

(i) What is a backup?

(ii) State **one** reason for keeping a backup.

(f) Before loading the patient file the dentist must type in a password.

State **one** reason for typing this password.

[Turn over

- | | | | |
|---------------------|-----------------|-----------------|----------------------|
| <i>CD-ROM drive</i> | <i>trackpad</i> | <i>mouse</i> | <i>printer</i> |
| <i>floppy disk</i> | <i>monitor</i> | <i>keyboard</i> | <i>DVD-ROM drive</i> |

(i) An output device that produces a paper copy.

- Tick (✓) **one** box only.

a piece of hardware

1

on-line tutorial

1

a program

1

- State **one** difference between RAM and ROM.

KU	PS
1 0	
1 0	
1 0	
1 0	
1 0	

4. (continued)

(d) (i) How many *bytes* are there in a *kilobyte* (Kb)?

(ii) Which of the following is the largest?

Tick (✓) **one** box only.

1 Mb ☐ 1 Tb ☐ 1 bit ☐

(iii) What does *bit* stand for?

(e) While using the computer, users should keep their files tidy by storing them

in ROM.

☐

on paper.

☐

in folders.

☐

Tick (✓) **one** box only.

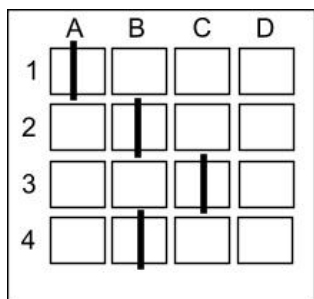
[Turn over

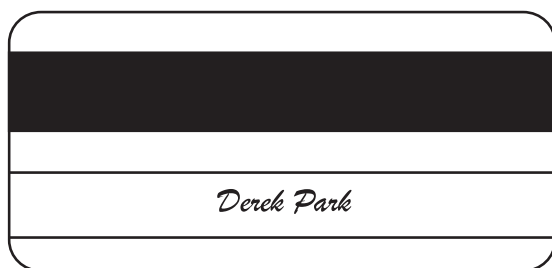
5. Supermarkets make daily use of computers.

(a) There are many ways of inputting data.

Match the following terms with the appropriate diagrams.

bar code *magnetic stripe* *mark sense*







3
2
1
0

(b) The supermarket uses a *mainframe* computer linked to *terminals*.

(i) Explain why the supermarket uses a mainframe computer.

1
0

(ii) What is a terminal?

1
0

The supermarket has just introduced a new computerised system.

<i>speed</i>	<i>initial</i>	<i>retrained</i>	<i>accurate</i>
--------------	----------------	------------------	-----------------

The _____ cost of the computer system is high.

4
3
2
1
0

(d) The data processing cycle in the supermarket is very important.

data storage *data input* *data preparation*

```
graph TD; A([Data collection]) --> B([Data process]); B --> C([Data output]); C --> D([Data collection]);
```

The diagram illustrates a circular flow of data science stages. It consists of four oval nodes arranged in a circle. The top node is labeled "Data collection". The bottom node is labeled "Data process". The left node is labeled "Data output". The right node is unlabeled. Arrows indicate a clockwise flow: from "Data collection" to "Data process", from "Data process" to "Data output", from "Data output" to "Data collection", and from the unlabeled right node to "Data process".

3
2
1
0

6. The army now use robots to help defuse bombs.

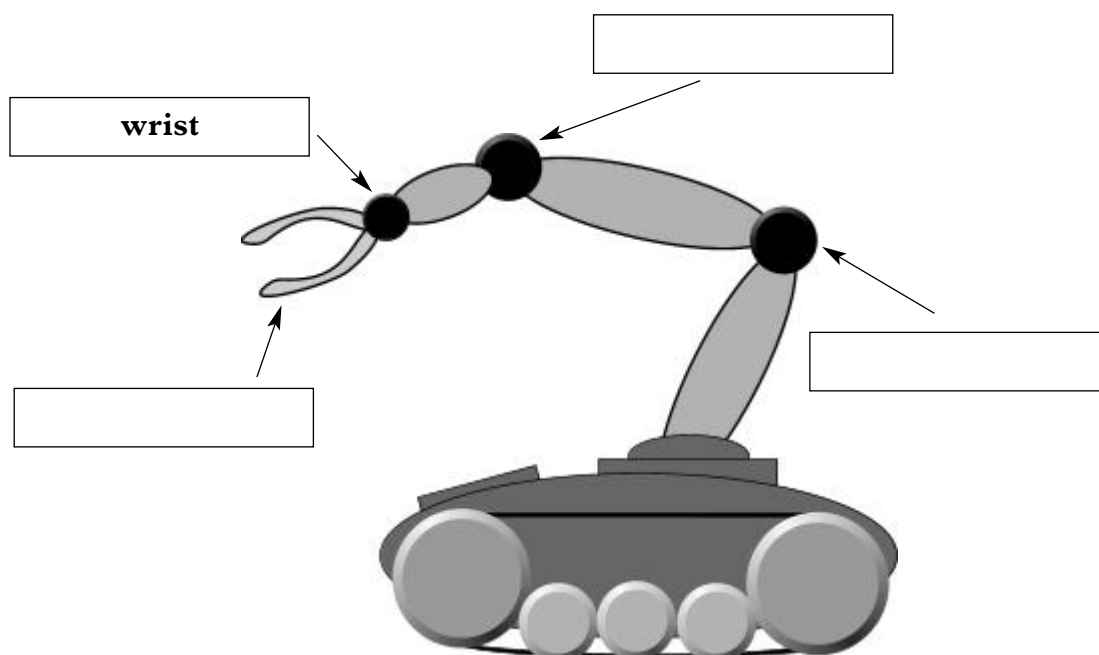
(a) State **one** reason why the army use robots instead of humans.

(b) (i) State how robots are given their instructions.

(ii) Explain how robots can be made to carry out a different task.

(c) The army robot looks like this.

(i) Label the parts of the robot.



KU	PS
1 0	
	2 1 0
2 1 0	

6. (c) (continued)

- (ii) Is this a *stationary* or a *mobile* robot?

Tick (✓) **one** box only.

stationary

☐

mobile

☐

- (d) Use **two** of the following words to complete the sentences.

feedback *sensors* *speed* *motors*

- (i) Robots detect their surroundings by using _____.

- (ii) Information sent from the robot to the computer is called

_____.

- (e) When the robots are made a system called *CAD/CAM* is used.

What do CAD and CAM stand for?

Fill in the missing words.

- (i) Computer Aided D_____

- (ii) Computer Aided M_____

[Turn over for Question 7 on *Page fourteen*]

7. (a) Caitlin's computer is connected to the *World Wide Web (WWW)*.

(i) Which type of *network* is this?

Tick (✓) **one** box only.

Local Area Network (LAN) ☐ Wide Area Network (WAN) ☐

1
0

(ii) What does Caitlin's computer need to view a Web page on the WWW?

Tick (✓) **two** boxes only.

modem	<input type="checkbox"/>	browser	<input type="checkbox"/>
printer	<input type="checkbox"/>	scanner	<input type="checkbox"/>

2
1
0

(b) The computer system has an *integrated package*.

(i) What is an integrated package?

1
0

(ii) Integrated packages have a common *HCI*.

What does HCI stand for?

Fill in the missing words.

H _____ Computer I _____

2
1
0

[END OF QUESTION PAPER]

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