

FOR OFFICIAL USE

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0560/401



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KU PS TOTAL

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NATIONAL
QUALIFICATIONS
2009

WEDNESDAY, 13 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.

Use **blue** or **black ink**.

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.



KU	PS
1	
	1
	1
	1
2	

1. Anya is the treasurer for an enterprise group. Anya uses an application package to keep details of weekly sales.

The details are entered and the computer works out the totals in Column D.

	A	B	C	D
1	Enterprise Group			
2	Item	Selling Price	No. Sold	Total
3	Black Pens	£0.15	15	£2.25
4	Blue Pens	£0.15	20	£3.00
5	Rubbers	£0.10	10	£1.00
6	Sharpeners	£0.15	5	£0.75
7			Total	£7.00

- (a) State the type of *application package* being used.

- (b) (i) Name **one** cell that contains *text*. _____

(ii) Name **one** cell that contains a *value*. _____

(iii) Name **one** cell that contains a *formula*. _____

- (c) The computer package Anya is using is part of an *integrated package*.

Give **one** advantage and **one** disadvantage of using an integrated package instead of separate packages.

Advantage _____

Disadvantage _____

KU	PS
	1
	1
	2
3	

1. (continued)

- (d) (i) Cell D7 contains a formula.

This formula could be written as =D3+D4+D5+D6.

Rewrite this formula in another form.

- (ii) There is also a formula in cell D4.

Choose the correct formula from the list below.

Tick (✓) **one** box only.

=B4 + C4

=B4 - C4

=B4 * C4

=B4 / C4

- (e) Anya now wants to sell pencils. She has to add this information to the table.

The items are already in alphabetical order.

Describe how Anya could **add** Pencils to her table.

- (f) This package uses a *WIMP operating system*.

What does “WIMP” stand for?

The first word has already been completed for you.

W WINDOW

I _____

M _____

P _____

[Turn over

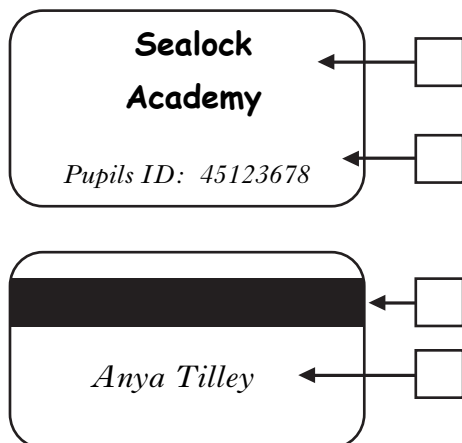
KU	PS
1	2

2. Sealock Academy uses swipe cards for pupils to purchase their lunch in the dining hall.

(a) The two pictures below show either side of the swipe card.

Which of these shows a magnetic stripe?

Tick (✓) the appropriate box.



(b) In the dining hall, some items have a *bar code* which is scanned at the check out.

Which **two** of the following pieces of information are **NOT** stored on the bar code?

Tick (✓) **two** boxes only.

Price

Sell by date

Product code

Country code

KU	PS
1	
	2
	4

2. (continued)

(c) The school prefers to use magnetic stripe cards instead of cash.

State **one** reason for this.

(d) Bairns Catering supply food to a number of schools throughout Scotland.

Which **two** of the following are reasons for Bairns Catering to use a *commercial data processing system*?

Tick (✓) **two** boxes only.

Lots of data can be processed

Repetitive tasks are handled slowly

Data can be processed quickly

Data cannot be shared

(e) Bairns Catering store information about their workers on computer.

Use the words below to describe what the Company must do with the information they hold on their workers.

unauthorised errors accurate allowed

Bairns Catering must make sure that data is _____ and kept up to date and that there is no _____ access to the data.

Bairns Catering workers are _____ to see the data held

about them and have any _____ in the data corrected.

[Turn over

KU	PS
1	
1	
1	

3. (continued)

(e) Garry keeps a *copy* of his database. What is the copy called?

(f) Garry's friend wants a copy of the database so he can decide what DVDs to borrow.

Garry decides to send him a copy of the database by e-mail.

State **one** item of hardware that Garry's computer system requires to be able to send the database electronically.

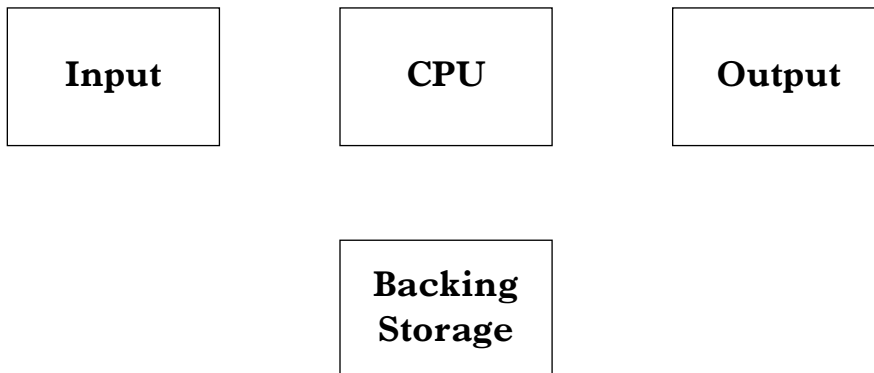
(g) What does the "e" in "e-mail" stand for?

[Turn over

KU	PS
	3
	2
	4
	1
	1

4. (a) Look at the block diagram below.

Draw the arrows to show the flow of data in a computer system.



(b) What do the letters *CPU* stand for?

Fill in the spaces below.

C _____ P _____ Unit

(c) Put the following terms in order starting with the **smallest**.

Kilobyte *Byte* *Gigabyte* *Megabyte* *Terabyte*

1 _____

2 _____

3 _____

4 Gigabyte

5 _____

(d) (i) How many *bits* are in a *byte*? _____

(ii) How many *bytes* are in a *kilobyte*? _____

KU	PS
2	
1	
	2
	3

4. (continued)

(e) What does the term *RAM* stand for?

Fill in the spaces below.

R _____ A _____ Memory

(f) Computer memory is made up of *RAM* and *ROM*.

State which one loses data when the computer is switched off.

(g) Which **two** sentences below correctly describe features of a *DVD-ROM*?

Tick (✓) **two** boxes only.

A DVD-ROM:

(i) stands for Digital Versatile Disk-Read Only Memory

(ii) has less storage space than a CD-ROM

(iii) can store more multimedia material than a CD-ROM

(iv) does not need a laser to read the data

(h) A computer system is made up of input devices, backing storage and output devices.

Use the words below to complete the following table with suitable input devices, backing storage and output devices.

joystick monitor hard drive mouse plotter cd-rom

Use each word only **once**.

	Input Devices	Backing Storage	Output Devices
1	keyboard	floppy disk	printer
2			
3			

[Turn over

KU	PS
2	3

5. A factory recently introduced robots to the production line.

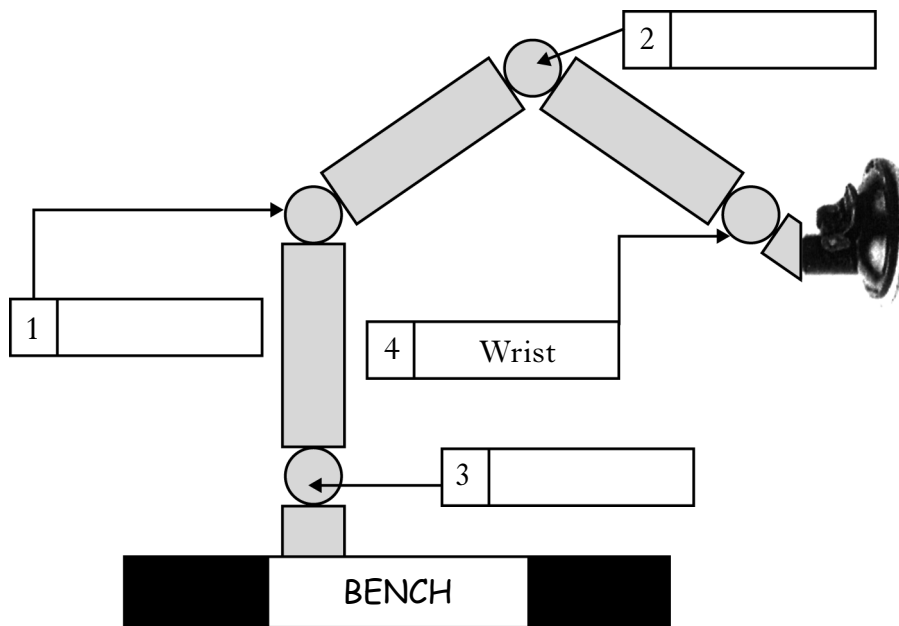
(a) State **two** reasons why the factory might have introduced robots.

1 _____

 2 _____

(b) One of the factory's robots looks like the robot below.

Label the parts of the robot numbered 1, 2 and 3.



KU	PS
	2
1	
1	

5. (continued)

- (c) The tool on the robot's arm can be changed depending on the task the robot has to complete.

State **two** different tools that can be attached to the robot's arm.

1 _____

2 _____

- (d) The robot shown is a *stationary* robot.

Name another type of robot.

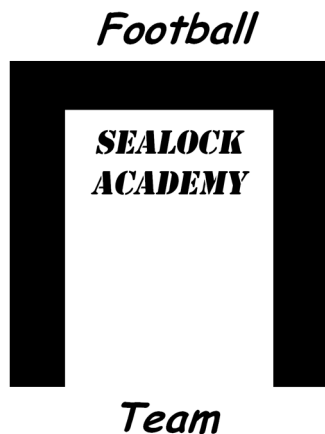
- (e) How are robots given their instructions?

[Turn over

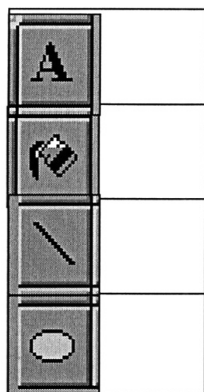
KU	PS
	2
	2

6. (continued)

- (c) The Principal Teacher asked a pupil to create a logo for the football team. The logo is shown below.



Tick (✓) **two** of the graphic tools the pupil used to create the logo.



- (d) The word processing and graphics programs have a common *HCI*.

What does “HCI” stand for?

Fill in the spaces below.

H _____ Computer I _____

[Turn over

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