KU   PS   TOTAL

F

NATIONAL QUALIFICATIONS 2013

COMPUTING STUDIES
STANDARD GRADE
Foundation Level

FRIDAY, 26 APRIL
9.00 AM – 10.00 AM

0560/27/01

Fill in these boxes and read what is printed below.

Full name of centre   Town

Forename(s)   Surname   Number of seat

Date of birth
    Day   Month   Year   Scottish candidate number

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.

SQA

1. Euan is a ranger at Leecraigs Country Park. Euan produces leaflets using separate stand alone graphics and word processing packages.

(*a*) Give **one** advantage and **one** disadvantage of stand alone packages.
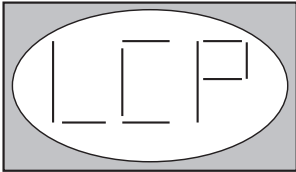
Advantage: _____

_____

Disadvantage: _____

_____

2

(*b*) Both packages have a similar HCI

State what HCI stands for

H _____

C _____

I _____

3

(*c*)

Euan has designed a simple park logo to be added to the leaflets front page.

State **two** graphic tools used to create this logo.

1 _____

2 _____

2

(*d*) Euan uses a ready made blank document with placeholders for text and graphics.

State the name of this type of document.

_____

1

1. (continued)

(*e*) Euan wants to put his name at the bottom of the leaflet.

State the feature that will let him do this.

_____

(*f*) Euan wants to make some changes to the leaflet

Enter the numbers 1, 2, 3 and 5 in the table below to show the steps he must take to make the changes.

Step **4** has already been done for you.

Step	Order
Print leaflet	
Edit leaflet	
Load program	
Save leaflet	**4**
Open the leaflet	

[Turn over

KU PS

1

4

2. The DVLA uses a database to store details of every vehicle which is registered in the United Kingdom. An example of some of the data held on each vehicle is shown below:

DVLA Database			
Registration:	TU61 XYZ	**Make:**	Volvo
Owner:	Pedro Sanchez	**Model:**	XC60
Address:	2 Main Road	**Colour:**	White
Town:	Anytown	**Engine Size (cc):**	2000
Postcode:	AT9 9XP	**Engine Number:**	R786998877

(*a*) State how many fields are shown in the record above. _____   **1**

(*b*) State a field which will only contain:

   (i) Numbers

   _____   **1**

   (ii) Text

   _____   **1**

(*c*) The owner of the above vehicle sells his car to Omar Khan.

   State **two** fields that will need to be amended.

   1 _____

   2 _____   **2**

2. (continued)

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

(i) The DVLA wants a list of car makes in alphabetical order.

The DVLA should _____ on the Make field.

1

(ii) The DVLA wants a list of all white cars.

The DVLA should _____ on the Colour field.

1

(iii) The DVLA wants a list of all cars with an engine size of 2000 cc.

The DVLA should _____ on the Engine Size field.

1

(*e*) State **two** advantages of using a computerised database instead of a paper based system.

1 _____

_____

2 _____

_____

2

[Turn over

3. Mario's Sandwich Bar offers a delivery service to local businesses. The table below shows an example of an order for delivery.

	A	B	C	D
1	Item	Cost	Number Ordered	Total
2	Cheese & Ham Sandwich	£1.20	4	£4.80
3	Cheese & Tomato Panini	£1.60	2	£3.20
4	Can of Cola	£0.40	5	£2.00
5	Cheese & Onion Crisps	£0.70	2	£1.40
6	Prawn Marie Sandwich	£1.80	1	£1.80
7			Delivery	£2.50
8			Grand Total	£15.70

(*a*) Name the *application package* used above for the orders.

_____

(*b*) Use the following words to complete the sentences below. Use each word **once**.

row   *column*

(i) The Number Ordered is displayed in a _____ .

(ii) The information for each item is displayed in a _____ .

(*c*) Use the following words to complete the sentences below. Use each word **once**.

text   *value*   *formula*

(i) Cell C4 contains _____ .

(ii) Cell D8 contains _____ .

(iii) Cell A1 contains _____ .

3. (continued)

(*d*) The way the information is displayed has been changed.

▲	A	B	C	D
1	Item	Cost	Number Ordered	Total
2	Cheese & Ham Sandwich	£1.20	4	£4.80
3	Cheese & Tomato Panini	£1.60	2	£3.20
4	Can of Cola	£0.40	5	£2.00
5	Cheese & Onion Crisps	£0.70	2	£1.40
6	Prawn Marie Sandwich	£1.80	1	£1.80
7			*Delivery*	£2.50
8			**Grand Total**	£15.70

Complete the following sentences to show what changes have been made.

(i) The heading "Item" is now _____ . **1**

(ii) The word "Delivery" is now in _____ . **1**

(iii) The words "Grand Total" are now in _____ . **1**

(*e*) Cell **D8** contains a formula, which calculates the total.

Which of the following is the correct formula?

Tick (✓) **one** box only.

= D2 * D7	
= D2 + D3 + D4 + D5 + D6	
= SUM (D2:D7)	
= D2 / D7	

1

[Turn over

4. The MacNeill family regularly shop on the Internet.

(*a*) The MacNeill's have five computers in the house which are all linked to a *network*.

(i) Tick (✓) **one** box to show the type of network being described.

Local Area Network ☐   Wide Area Network ☐

(ii) State **two** advantages of using a network.

_____

_____

(*b*) The MacNeill family use a variety of types of computers.

Use the following words to complete the sentences below.

palmtop   *desktop*   *laptop*

Use each word **once**.

(i) When out shopping Mr MacNeill uses a _____ computer that has a touch sensitive screen and can fit in a pocket.

(ii) James uses a _____ out in the garden.

(iii) Mrs MacNeill uses a _____ computer in the home office.

(*c*) State **two** reasons why the MacNeill family may choose to shop on the Internet.

1 _____

_____

2 _____

_____

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4.   (continued)

(*d*) Companies who trade on the Internet take hundreds of orders everyday. *Mainframe* computers are used to process the orders.

State **two** reasons why mainframe computers are used by these companies.

1 _____

_____

2 _____

_____

(*e*) State the term given to buying and selling goods on the Internet.

_____

(*f*) When companies process orders the *data processing cycle* is used.

The five stages of the data processing cycle are shown below.

data processing and storage   *data output*   *data preparation*

data collection   ~~*data input*~~

Put these stages into the correct order.

Number **3** has been completed for you.

Order	Stages
1	
2	
3	*data input*
4	
5	

[Turn over

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4. (continued)

(*g*) Companies use laser printers to print their invoices.

State **two** reasons why companies use laser printers rather than inkjet printers.

1 _____

_____

2 _____

_____

2

KU	PS

5. Robots are used to build computer system base units.

(*a*) A robot arm is used to solder parts of the motherboard.

Its job is going to change. It is now going to be used to insert hard drives into the base unit.

State **two** things that must be done to allow this change to take place.

1 _____

_____

2 _____

_____

(*b*) The base units move along a conveyor belt during the assembly process.

How does the robot know when a base unit is in the correct position?

Tick (✓) **one** box only.

It is controlled by a palmtop computer.	
It is fitted with sensors.	
It uses a high level language	

(*c*) State **two** reasons why robots are used instead of humans in the computer factory.
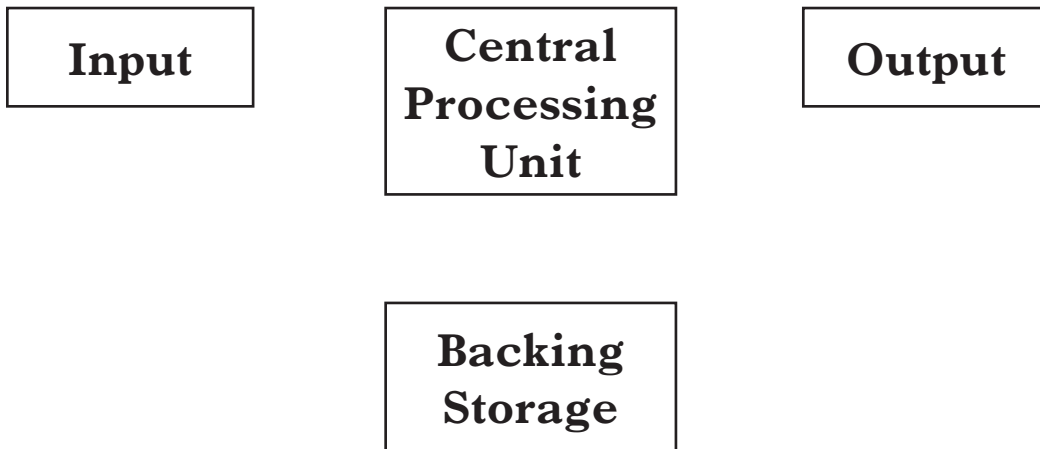
1 _____

_____

2 _____

_____

(*d*) Some of the workers at the computer factory have been *retrained*.

State what is meant by retrained.

_____

_____

2 (PS)

1 (PS)

2 (KU)

1 (KU)

6. (*a*) Complete the block diagram below by drawing arrows to show the flow of data in a computer system.

| Input |

| Central Processing Unit |

| Output |

| Backing Storage |

(*b*) Many computers use a GUI operating system.

State what "GUI" stands for.

G _____ U _____ I _____

(*c*) Computers usually have a *hard disk* for backing storage.

Tick **two** reasons why a hard disk is used for backing storage.

Tick (✓) **two** boxes only.

A hard disk has direct/random access	
A hard disk is easily damaged	
A hard disk can store large quantities of data	
A hard disk is slow to access	

*0 5 6 0 2 7 0 1 1 2 *

6. **(continued)**

(*d*) State what the term RAM stands for.

_____

(*e*) When a computer starts up the operating system is loaded into the computer's memory.

State whether the operating system is loaded into RAM or ROM.

_____

(*f*) Put the following terms in order starting with the smallest. Number **3** has been completed for you.

   byte   *megabyte*   *gigabyte*   *bit*   *kilobyte*

   1 _____

   2 _____

   3 *kilobyte* _____

   4 _____

   5 _____

[E*ND OF QUESTION PAPER*]

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ADDITIONAL SPACE FOR ANSWERS

KU	PS

ADDITIONAL SPACE FOR ANSWERS

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