

FOR OFFICIAL USE

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NATIONAL QUALIFICATIONS 2013

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KU PS TOTAL

COMPUTING STUDIES
STANDARD GRADE
General Level



* 0 5 6 0 2 9 0 1 *

FRIDAY, 26 APRIL
10.20 AM – 11.35 AM

0560/29/01

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

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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.



* 0 5 6 0 2 9 0 1 0 1 *

1. Jason runs a small bookshop and records the sales using a spreadsheet. Part of it is shown below.

	A	B	C	D	E
1	Weekly sales figures				
2	Title	Author	Number Sold	Price	Income
3	A Dictionary	Chambon	5	£15.00	£75.00
4	One Day	Diana Nichols	25	£3.50	£87.50
5	Raoul, My Story	Raoul Medil	8	£4.99	£39.92
6	Without a Sign	Neris Redoubt	14	£4.99	£69.86
7					
8		Weekly Sales	52	Total Income	£272.28
9		Best Seller	25		

- (a) (i) The formula entered in cell E8 was $E3+E4+E5+E6$. Use a function to write this in a different format.

_____ (_____ : _____)

2

- (ii) A formula is entered in cell E3.
State the formula.

2

- (b) The formula in cell E3 has been *replicated* down the column.
State what is meant by replication.

1

- (c) State **two** possible cell attributes that have been applied to cell C2.

1 _____

2 _____

2



1. (continued)

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	2
	1
	2

(d) Jason wants to add a new book called, "Story of my Life", into his spreadsheet.

Explain how Jason could place this in the correct alphabetic order of **title**.

2

(e) When Jason is finished updating the figures in his spreadsheet, he decides to produce a *bar chart* showing the figures for the **Number Sold**.

Explain why he has produced a bar chart.

1

(f) The spreadsheet program that Jason is using is part of an *integrated package*.

Describe **two** possible benefits to Jason of using an integrated package.

1 _____

2 _____

2

[Turn over



2. The local boatyard keeps a list of the boats it has for sale on a database. A sample of the information is shown below.

Make	Stormcat
Model	Storm Angler
Year Built	2009
Length (m)	5.2
Width (m)	1.8
Colour	Red
Price (£)	3,600

- (a) A customer is looking for a boat made by Hillyard that costs less than £5,000.

Describe how the database could be searched to display suitable boats.

3

- (b) A customer is interested in old boats.

Describe how the data would be ordered to display this.

3

- (c) The boatyard has purchased a new boat.

State what has to be done to add this data into the database.

1



2. (continued)

(d) Databases can contain images.

State a suitable field type that can contain images.

1

(e) The company has expanded and now has three boatyards throughout Scotland.

State what has to be done to the database to show where each boat is located.

1

(f) As data is entered into the database it is stored in RAM rather than ROM.

Explain why RAM is used instead of ROM.

1

[Turn over



3. Corinne is a journalist who works in Scotland for an online newspaper.

(a) Corinne mainly uses a laptop computer.

State **one** reason why she would find this more useful than using a desktop computer.

1

(b) She mistyped one of her stories, entering the word “audio” when it should have been “video” throughout the story.

(i) Name the feature that would allow her to make this change in one operation.

1

(ii) Explain how she would make the changes described above.

2

(c) Corinne makes use of a *spelling check*.

State **two** limitations of spelling checks.

1 _____

2 _____

2

(d) When starting a new page of her newspaper, Corinne makes use of a *template*.

State **two** reasons why templates are used.

1 _____

2 _____

2



3. (continued)

DO NOT
WRITE
IN THIS
MARGIN

(e) Some of the stories she writes make use of *hyperlinks*.
State the purpose of a hyperlink.

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1

(f) When new customers subscribe to the site they are given a user ID.
Part of this user ID is a *check digit*.
State the purpose of a check digit.

1

(g) Customers can only look at their own personal information held by
the newspaper.
State **one** group of people who are allowed to look at anybody's
information held on a computer system.

1

(h) The newspaper sometimes sells lists of its customers details that have
subscribed to the website.

(i) State **one** benefit for the newspaper of selling these customer
lists.

1

(ii) State **one** benefit for the company that buys these customer lists.

1

(iii) Some subscribers do not want to be on these lists.

Give **one** reason why they may **not** want to be on these customer
lists.

1



4. John is a new Internet banking customer.

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(a) The bank provides *online help* and *online tutorials*.

(i) Describe what is meant by online help.

1

(ii) Describe what is meant by online tutorials.

1

(b) To access his account he has to enter a password.

When he enters his password it appears as *****

Give a reason for this.

1

(c) John can pay his bills using *EFT*.

(i) State what EFT stands for.

E_____ F_____ Transfer

2

(ii) State **two** reasons why **shops** encourage customers to use EFT.

1 _____

2 _____

2

(d) *Encryption* is used when data is transferred between John's computer and the bank's computers.

State what is meant by the term encryption.

1



4. (continued)

(e) State **one** running cost that John will have to pay for Internet banking.

1

(f) Give **one** reason why banks are encouraging customers to use Internet banking.

1

[Turn over



5. Part of an advert for a new computer system is shown below.

<p>The Peach Computer</p> <ul style="list-style-type: none"> • The new computer brings a new era in <i>Graphical User Interfaces</i> • The latest <i>TFT</i> technology to enhance your experience • Large main memory • <i>Wireless</i> connection to the Internet possible

(a) What is meant by a *Graphical User Interface*?

1

(b) The computer system has a *TFT* monitor.

(i) State what TFT stands for.

T_____ Film T_____

2

(ii) State **one** reason why the computer system has a TFT monitor.

1

(c) The computer system is advertised as having a large amount of *main memory*.

Select the amount of memory the computer is most likely to have.

Tick (✓) **one** box only.

	Tick
4 Gigabyte of RAM	<input type="checkbox"/>
4 Kilobyte of RAM	<input type="checkbox"/>
4 Terabyte of RAM	<input type="checkbox"/>

1



5. (continued)

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(d) The computer makes use of a wireless connection to the Internet.
State **one** advantage and **one** disadvantage of a wireless connection.

Advantage _____

Disadvantage _____

2

(e) The computer can make use of either CD-RWs or DVD-Rs.
State **one** similarity and **one** difference between them.

Similarity _____

Difference _____

2

(f) Programmers use a *high level language* to write programs for the computer.

State **two** common features of high level languages.

1 _____

2 _____

2

[Turn over



6. Ann is creating a website on her family tree.

- (a) Ann decides to use the Internet to discover information on her family. Which **one** of the following would be most useful for this task?
Tick (✓) **one** box only.

	Tick
Browser	
Search Engine	
Expert System	

- (b) Ann's grandmother gives her an old photograph album. State how Ann could transfer these photographs to her computer.

- (c) Ann has altered some of the pictures that she has transferred to her computer. Here is an example.



Picture 1



Picture 2

State **two** alterations Ann has made to **picture 1** to result in **picture 2**.

1 _____

2 _____

KU PS

1

1

2



6. (continued)

- (d) Visitors to Ann’s website can communicate with her either by using *text messaging* or by *e-mail*.

State **one** advantage and **one** disadvantage of communicating by text messaging.

Advantage _____

Disadvantage _____

- (e) State an item of hardware that Ann’s computer needs to connect to the Internet.

- (f) Ann’s website is only text based. She decides to add audio and video to her website.

State why she would do this.

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	2
	1
	1

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



7. Best-books are updating their warehouse and are introducing computer-controlled robotic trucks.

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(a) After the new design of the warehouse was completed, a final check was done on the layout using another type of program.

State the type of program that could be used to check the plan to make sure the robots can move freely and are not obstructed.

1

(b) The company can use either *light guidance systems* or *magnetic guidance systems* to guide the robot trucks around the factory.

Circle **one** of these and describe how it operates.

light guidance magnetic guidance

Description _____

2

(c) The robot trucks work where there are humans present.

State **two** *safety precautions* that may be used to protect the human workers.

1 _____

2 _____

2

(d) When the robot trucks pick up the books, *feedback* is used to ensure that the books are not damaged.

Explain what is meant by feedback.

2

[END OF QUESTION PAPER]



ADDITIONAL SPACE FOR ANSWERS

DO NOT
WRITE
IN THIS
MARGIN

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* 0 5 6 0 2 9 0 1 1 5 *

ADDITIONAL SPACE FOR ANSWERS

DO NOT
WRITE
IN THIS
MARGIN

KU	PS



* 0 5 6 0 2 9 0 1 1 6 *