

FOR OFFICIAL USE

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0560/403



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KU PS TOTAL

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NATIONAL
QUALIFICATIONS
2010

MONDAY, 10 MAY
1.00 PM – 2.45 PM

COMPUTING
STUDIES
STANDARD GRADE
Credit 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

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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.



1. The *spreadsheet* below shows an order placed with the Delicious Delights Cake Company.

	A	B	C	D
1	Delicious Delights Cake Company			
2				
3	Invoice Number	8767		
4				
5	Item	Number	Price per cake	Cost
6				
7	Fairy Cakes	36	£0.35	£12.60
8	Tiffin	72	£0.45	£32.40
9	Pineapple Cakes	50	£0.60	£30.00
10	Date Slices	40	£0.75	£30.00
11	Flapjacks	80	£0.50	£40.00
12	Custard Creams	40	£0.60	£24.00
13				
14			Total Cost	£169.00
15			Discount	£16.90
16			Final Cost	£152.10

- (a) The *cell protection* feature of the spreadsheet package is used frequently.

- (i) State what is meant by “cell protection”.

- (ii) Name **one** cell in the above spreadsheet it would be sensible to protect.

- (b) The *formula* to calculate the cost of Fairy Cakes is in cell D7.

State the **range** of cells this formula has been replicated into.

KU PS

1

1

1

(c) State the type of referencing used when the formula in D7 was replicated. State **one** reason for your answer.

Reason _____

If the Total Cost of the order is greater than £100 then a discount of 10% is given. If not, they do not get a discount.

$$= \text{IF}(\text{_____, _____, _____})$$

[Turn over

-

- State **two** ways that Hannah can ensure her report is only two pages long.

- (i) State what is meant by the term “toolbar”.

KU	PS
1	2
2	1

Page five

-

(c) Bartek has a secretary with poor eyesight. Describe **two** ways the *HCI* can be customised to make it easier for the secretary to use a computer.

(i) Apart from eye strain, state **one** other health issue that Bartek might be concerned about.

(ii) State what Bartek could provide to prevent the health issue you have chosen in part (i).

Page seven

4. Monique has bought a new *laptop* to take with her to university in Dundee.



- (a) (i) Name **one** input device, other than a *keyboard*, that is built into the laptop.

1

- (ii) The laptop has a *TFT* screen. State what the initials TFT stand for.

1

- (iii) The laptop can read CD-ROMs. These have a storage capacity of 750 *megabytes*.

Calculate how many *bits* there are in 750 megabytes. (**Show all working.**)

3

- (b) Monique checked that her laptop also contained a *sound card*.

State what feature of the sound card would let her listen to music using audio CDs.

1

(c) Monique plans to use her laptop for doing research on the *Internet*.

-

- State the type of *search* she will use.

-
-
-

- She plans to write one basic letter with placeholders for personal details.

-

-

[0560/403]

KU	PS
1	1
1	1
2	2
2	

5. An automated system has been installed in a bottle manufacturing plant. Each *robot* on the production line is linked to a computer.



- (a) (i) Name the type of language used when writing programs for automated systems.

- (ii) Explain why this type of language is used.

- (b) The software for the robots on the production line can be held either on a disk or in ROM.

State **one** advantage of disk based software.

- (c) Some of the robots on the production lines can be considered as **intelligent**.

Describe **two** features a robot must have to be considered intelligent.

1 _____

2 _____

- (d) The bottle manufacturing plant uses *mobile robots* to transfer heavy materials around the factory.

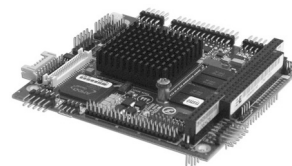
Humans work in the same area as the robots. State **two** possible *safety precautions* which should be in place.

1 _____

2 _____

6. (a) The *processor* is made up of three components.

Fill in the blanks in the table below.



Component	Description
<i>Control Unit</i>	
	Carries out calculations and makes simple comparisons
<i>Registers</i>	

- (b) Describe how the processor distinguishes between memory locations.

- (c) State how text is **represented** in computer systems.

All computers require an *operating system*.

- (d) State **two** functions of an operating system.

1

2

KU PS

3

2

1

2

[Turn over

7. Seonag has created a website to advertise her holiday cottage on a Scottish island.



- (a) (i) Seonag used web page creation software to produce her website.

State the language that Seonag used to create her website.

1

- (ii) State the type of software needed to view her website.

1

- (b) Most web page creation packages make use of *wizards* and *templates*.

- (i) Explain why using a wizard is helpful to a beginner.

2

- (ii) State what is meant by the term “template”.

2

Her website allows users to connect with other websites.

- (c) State what Seonag has done to allow this to happen.

1

7. (continued)

(d) Seonag also added a *table* showing pictures and details of local tourist attractions.

- (i) State **one** advantage of using a table for this purpose.

1

The table included *hotspots*.

- (ii) State how anyone browsing the website will know where the hotspots are on the page.

1**[Turn over**

8. BookBliss is a mail order company dealing in second hand books.

Interactive processing is used when a customer orders a book.



- (a) (i) State what is meant by the term “interactive processing”.

1

- (ii) State **one** advantage to the customer and **one** advantage to BookBliss of interactive processing.

Customer

BookBliss

2

- (b) State what *backing storage medium* should be used to store the company’s stock list. Justify your choice.

Backing Storage Medium

Justification

2

- (c) When not dealing with its main job of serving customers, the computer system processes the staff payroll.

State the name given to this type of task.

1

8. (continued)

- (d) Each employee in BookBliss has an employee number. Part of this number is a *check digit*.

Explain how a check digit is used to detect errors.

2

- (e) Bookbliss has its own small computer department. They employ *programmers*, an *engineer* and a *network manager*.

Choose **two** of the jobs mentioned above and give a description of what would be involved.

(i) Name of Job _____

Job Description _____

1

(ii) Name of Job _____

Job Description _____

1

- (f) BookBliss has been approached by another bookseller asking to buy its customer list. BookBliss refuses to do this claiming it is illegal.

State which law would be broken.

1

[END OF QUESTION PAPER]

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