

FOR OFFICIAL USE

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0560/402



KU	PS	TOTAL

NATIONAL
QUALIFICATIONS
2009

WEDNESDAY, 13 MAY
10.20AM – 11.35AM

COMPUTING STUDIES
STANDARD GRADE
General 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.



KU	PS
	1
	2
2	
	1
	1

1. DC Electronics is developing robots for use in the new UK space program.

The secretary is about to send out a letter to all of the workers.

(a) On looking over the letter the secretary notices that “spice” has been used instead of “space” throughout.

(i) State the feature of a word processing package, which can be used to make this change in one operation.

(ii) Describe how you would use this feature to correct the spelling of “spice”.

(b) Before printing, the secretary did a *spelling check* of the letter. It highlighted “RobotRanger” each time as wrongly spelled.

(i) Explain how a spelling check feature works.

(ii) State how you would stop this happening again.

(c) After correcting the spelling, there are still some mistakes.

State the feature that would pick up the error shown below.

“The first trial of the RobotRanger are the 12th of June”.

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1. (continued)

(d) When writing the letter, the secretary makes use of *standard paragraphs*.

State **what** a standard paragraph is.

(e) The company decides to alter the letter and produce a newsletter using a *desk top publishing* package instead.

Describe how they can do this **without** re-typing the text of the letter.

(f) A picture of the robot designers, shown below, is to be put into the newsletter. The photograph is too large to fit.



State what must be done to make it fit.

(g) The secretary has used *tables* **before** but has forgotten how to use them.

She could use *on-line help* or an *on-line tutorial* for assistance.

(i) State which one would be more suitable.

(ii) Explain your choice for the above answer.

2. Anwar Animations is a firm that writes games programs using a range of different computers such as *palmtops* and *laptops*.

- (a) State **one** disadvantage of using palmtop computers for writing programs.

1

- (b) Palmtop computers use a special type of screen for input.

Name this type of screen.

1

- (c) When programs are edited, the code is stored in *main memory*.

State the type of main memory used.

1

- (d) One of the files created when writing the program needs to be used on another computer. The file size is 850 megabytes.

What type of backing storage is required to allow them to move it to another computer?

1

- (e) The program is written in a *high level language* but the computer only understands *machine code*.

What needs to happen to the program to allow it to be used on a computer?

1

2. (continued)

(f) Anwar Animations keeps details of its workers on computer.

State **two** rights the workers have to this information.

1 _____

2 _____

2

(g) The company uses a *wireless network*.

State **two** reasons for using wireless networks

1 _____

2 _____

2

[Turn over

3. Northern Oil stores the parts and suppliers it needs to build oil lines. Part of the information is shown below.

Company Name	Jones Electrics
Address 1	12 High Street
Address 2	Cardonald
Town	Glasgow
Invoice Number	5149542
Order Value	£34,234
Date of Order	25th April 2009

(a) Complete the following sentences using the words below.

file *record* *field*

The example shown above is a _____ .

“Invoice Number” is a _____ .

When you save the _____ you are saving all of the information about the parts and suppliers.

3

(b) The manager wants a paper copy of **all** orders from Glasgow.

Explain how they could do this.

3

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	3
	1
	2
	2

3. (continued)

- (c) Northern Oil wants to put its list of parts and suppliers in order of invoice number, largest number first.

Explain how this is done.

- (d) The company wants to store the details of when the order was delivered.

Explain what alterations are needed to allow this.

- (e) State **two** *running costs* the company may have when using computers and working with the database.

1 _____

2 _____

- (f) Much of the day-to-day office work can be done from home using fast Internet links and e-mail.

State two **disadvantages** of working from home rather than working in the office.

1 _____

2 _____

[Turn over

KU	PS
1	
	1
1	
	2

4. Look Web is a company that produces websites. They also produce video clips and photos to suit the web pages.

(a) On a web page you can click on *hyperlinks*.

(i) State the purpose of hyperlinks.

(ii) State **one** way of identifying hyperlinks on a web page.

(b) Look Web and its customers keep in contact by using *electronic mail*.

(i) State **one** advantage, other than cost, of communicating using electronic mail instead of normal post.

(ii) Look Web sent an e-mail with 12 separate attachments. The e-mail was 18 megabytes in size and used capitals throughout.

This e-mail has broken **two** rules of *netiquette*.

What are they?

1

2

4. (continued)

- (c) Look Web uses a *search engine* to help in finding information when designing their web pages.

One of their searches was for Glasgow Cross in 1920.

Put a tick (✓) in the box that will give the **best** results.

Glasgow Cross in 1920

Glasgow Cross and 1920

“Glasgow Cross” + 1920

- (d) The designer used *HTML* to make the website.

What does HTML stand for?

H _____ Text M _____ Language

- (e) When designing the web pages, Look Web can also add video clips to the pages.

State **one** advantage of adding video clips to a web page.

[Turn over

5. Able Art Printing company use spreadsheets as part of its business. A sample is shown below.

	A	B	C	D
1	Able Art Pri			
2				
3	Part No.	Number Ordered	Item Cost	Order Cost
4	AB123	60	£1.00	£60.00
5	CD621	32	£10.50	£336.00
6	HX810	2	£20.05	£40.10
7	GD657	38	3.20	£121.60
8			Total	£557.70
9				
10			Average	£139.43
11				

- (a) The name of the company, Able Art Printing, does not fit in the column. State what must be done to the column to make the name fit.

1

- (b) What *cell formatting* has been used in cell B3 so that both words appear?

1

- (c) A *formula* is used in cell D8.

Complete the formula

= _____ (_____ : _____)

2

- (d) A formula is also used in cell D10.

Complete the formula

= _____ (_____ : _____)

2

- (e) The formula for cells D4 to D7 was entered in D4. It was then *replicated* down the column.

State what is **meant** by replicated.

1

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5. (continued)

(f) State how the *format* of cell C7 should be changed so that it looks the same as cell C6.

(g) The security of the data is very important.

State **two** methods that could be used to protect data.

1 _____

2 _____

(h) The company is also worried that its data may be lost.

State what can be done to make sure this data is not lost.

[Turn over

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2	
2	
2	
1	

6. SpaceRanger robots are designed to work on Mars.

(a) *Virtual Reality* was used during the design process. Explain what virtual reality is.

(b) State **two** reasons why the space program is using robots instead of humans.

1

2

(c) An engineering firm building the SpaceRanger uses *mobile robots* to transport parts around the factory.

(i) State **two** safety features that may be required in the factory.

1

2

(ii) Mobile robots use *real-time processing* when they detect an object in their path.

Explain why real-time processing is used.

6. (continued)

(d) The finished robots come with a range of sensors.

State **two** types of sensor.

1 _____

2 _____

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1	
1	
	1
2	

7. Jennifer is an artist. She has decided to sell her work in her own shop.

(a) People buying goods in her shop can use their credit cards.

Payment is made using *EFTPOS*.

What do the letters POS stand for?

P _____ of S _____

(b) (i) The items sold in the shop have *bar codes* on them.

State **one** advantage of using bar codes.

(ii) Bar codes have *check digits*.

State the purpose of a check digit.

(c) The shop uses *interactive processing* when items are sold.

What is meant by interactive processing?

(d) The shop uses a database package to store the details of the goods sold in the shop.

At the end of the day, a new file of all the items sold is created.

Use these words to fill in the blanks.

database package

database file

The _____ is the program file.

The _____ is the complete set of data.

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