Cambridge IGCSE

Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME	

CENTRE NUMBER							CANDIDATE NUMBER				

INFORMATION AND COMMUNICATION TECHNOLOGY   **0417/03**

Paper 3 Data Analysis and Website Authoring   **October/November 2018**

2 hours 30 minutes

Additional Materials: Candidate Source Files

READ THESE INSTRUCTIONS FIRST

Write your name, Centre number and candidate number in the spaces at the top of this page.
Write in dark blue or black pen.
Do not use staples, paper clips, glue or correction fluid.
DO **NOT** WRITE IN ANY BARCODES.
You must **not** have access to either the internet or any email system during this examination.

Carry out **all** instructions in each step. You can track your progress through the examination by crossing out each question number.
Enter your **name**, **Centre number** and **candidate number** on every printout before it is sent to the printer.
Printouts with handwritten candidate details on will **not** be marked.
At the end of the examination, put this **Question Paper** and **all your printouts** into the Assessment Record Folder.
If you have produced rough copies of printouts, put a neat cross through each one to indicate that it is **not** the copy to be marked.

Any businesses described in this paper are entirely fictitious.

The number of marks is given in brackets [ ] at the end of each question or part question.

Write today's date in the box below.

This syllabus is approved for use in England, Wales and Northern Ireland as a Cambridge International Level 1/Level 2 Certificate.

This document consists of **7** printed pages and **1** blank page.

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[Turn over

2

Task 1 – Evidence Document

- Open the file **n183evidence.rtf**
- Make sure your name, Centre number and candidate number will appear on every page of your Evidence Document by placing these details in the header.
- Save this as a word processed document in your work area with the filename **n183evidence** followed by your candidate number, for example, **n183evidence9999**

You will need to place screenshots and answers to questions in this Evidence Document.

Task 2 – Web Page

You will develop a web page for the construction department of Sheila's Steel Sheds.

Efficient markup and stylesheets must be used. All colour codes must be in hexadecimal.

- Create a new folder called **Sheds**

- Locate the following files and store them in your *Sheds* folder.

  n183construct.png
  n183tablestyle.css
  ssslogo.jpg

1 *The table styles required by the company are:*

> *All internal and external gridlines for the table must be a single border 4 pixels wide which can be seen on the web page. The gridlines should be defined as:*
>
> | Table gridlines | Colour components – in hexadecimal | | |
> |---|---|---|---|
> | | *Blue* | *Green* | *Red* |
> | *External lines* | *0* | *0* | *Full red* |
> | *Internal lines* | *33* | *57* | *ff* |
>
> All text should be centre aligned within the table both horizontally and vertically.

- John, a trainee has created a stylesheet **n183tablestyle.css** for these table styles. Examine the stylesheet and evaluate in your own words the syntax and efficiency of the stylesheet.

> **EVIDENCE 1**
>
> Type your evaluation in your own words into your Evidence Document using no more than 100 words.

[4]

2 • Edit the trainee's stylesheet so that it matches the table styles required by the company.

   • Add css to your stylesheet to:

      ○ automatically place all tables in the centre of the window

      ○ set the style h1 to a white font.

   • Add your name, Centre number and candidate number to the end of this stylesheet as a comment.

   • Save your stylesheet as **table** followed by your candidate number, for example, **table9999.css**

[7]

EVIDENCE 2

Take a copy of your stylesheet and place this in your Evidence Document.

---

3 • Identify the name of the correct web development layer to complete each of the following statements:

   (a) The cascading stylesheets are part of the _____ layer in website development.
   (b) Hyperlinks are an action in a web page and they are part of the _____ layer.
   (c) The text and images of a web page are added to a web page in the _____ layer.
   (d) An action like 'hover over' or 'on click' would be found in the _____ layer.

[4]

EVIDENCE 3

Type the name of each web development layer into your Evidence Document.

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4 • Create a web page called **sheds.htm**

This web page must work in all browsers and will have a table structure as shown below:

A 810×130	
B 600×600	C 210×150
	D 210×150
	E 210×150
	F 210×150
G 810×80	

• Each table cell is identified with a letter and all dimensions are in pixels. The letters and dimensions shown in the table must **not** appear on your final web page.

[8]

5 • The image **ssslogo.jpg** has been created but has white corners. Edit the image to remove these corners. Save the image with a new file format as **ssslogo.png**

• Place in cell A the image *ssslogo.png*

[3]

6 • Place in cell B the image **n183construct.png**

• Resize this image in your markup so that it is 600 pixels square.

[2]

7 • Place the text:

  ○ **Specialist Steel Sheds** in cell C

  ○ **Aluminium Sheds** in cell D

  ○ **Gallery** in cell E

  ○ **About Us** in cell F

  ○ **Web page created by**: followed by your name, Centre number and candidate number in cell G

 • Set all this text as style h1.   [3]

8 • Attach the stylesheet that you saved in step 2 to your web page.

 • Save the web page in your *Sheds* folder.   [1]

9 • Display the web page in your browser. If necessary, resize it so that:

  ○ all of the web page can be seen

  ○ all of the text can be easily read

  ○ the address bar is visible.

 • Take a single screenshot of the browser window and place this in your Evidence Document.
                                                                                                                              [1]

EVIDENCE 4

Place the single screenshot of the browser window in your Evidence Document.

EVIDENCE 5

Take a copy of the HTML source and place this in your Evidence Document.

[Total: 33]

Task 3 – Spreadsheet

You are going to prepare a spreadsheet to calculate the storage capacity and sales price for each type of shed.

Use the most efficient methods to solve each task.

Display all:

- *currency values in dollars to 2 decimal places*
- *lengths to 1 decimal place (any length, width or height)*
- *areas to 2 decimal places*
- *capacities to 3 decimal places.*

10 • Using a suitable software package, load the file **n183shed.csv**

   • Add your name, Centre number and candidate number in the header or footer of the spreadsheet.

   • Save this file as a spreadsheet called **shed_** followed by your candidate number, for example, **shed_9999**

   • Insert 5 new rows at the top of the spreadsheet.

[1]

11 • Add these labels and format the cells to look like this:

	A	B	C	D	E	F	G	H	I	J	K
1					**Sheila's Steel Sheds**						
2											
3	*Cost of steel per square metre*	*Cost factor*									
4	$1.54	2.6									
5											
6	*Style*	*Length*	*Width*	*Wall height*	*Apex height*	*Floor area*	*Cubic capacity*	*Roof area*	*Surface area*	*Cost of materials*	*Sales price*

[6]

12 • Enter a formula in cell F7 to calculate the floor area of the shed in square metres. The floor area is the *Length* multiplied by the *Width* of the shed. [1]

13 • Enter a formula in cell G7 to calculate the cubic capacity of the shed in cubic metres.

The cubic capacity is: $\dfrac{Apex\ height + Wall\ height}{2} \times Floor\ area$ [4]

14 • Enter a formula in cell H7 to calculate the roof area of the shed.

$$Roof\ area = 2 \times Length \times \sqrt{\left(\frac{Width}{2}\right)^2 + \left(Apex\ height - Wall\ height\right)^2}$$ [10]

15 • Enter a formula in cell I7 to calculate the surface area of the shed.

$Surface\ area = 2 \times Wall\ height \times (Length + Width) + Width \times (Apex\ height + Wall\ height) + Roof\ area$

[6]

16 • Enter a formula in cell J7 to calculate the cost of materials to make the shed.

Cost of materials = Surface area × Cost of steel per square metre [2]

17 • Enter a formula in cell K7 to calculate the sales price of the shed.

This is the *Cost of materials* multiplied by the *Cost factor* rounded up to the nearest $10 [4]

18 • Enter a formula in cell L7 to display the text **Extra Large** if the cubic capacity of the shed is greater than 14 metres^3 and the floor area is greater than 7 metres^2, or if not leave the cell blank. [5]

19 • Replicate the formulae entered in steps 12 to 18 for each style of shed. [1]

20 • Apply appropriate formatting to all cells in rows 7 to 19. [4]

21 • Save and print the spreadsheet showing the formulae. Make sure:
   ◦ it is in landscape orientation
   ◦ row and column headings are displayed
   ◦ the contents of all cells are fully visible.

[2]

PRINTOUT 1

Make sure that you have entered your **name**, **Centre number** and **candidate number** on your spreadsheet showing the formulae.

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22 • Print the spreadsheet showing the values. Make sure the:
   ◦ printout fits on a single page
   ◦ contents of all cells are fully visible.

[1]

PRINTOUT 2

Make sure that you have entered your **name**, **Centre number** and **candidate number** on your spreadsheet showing the values.

• Save and print your Evidence Document.

PRINTOUT 3

Make sure that you have entered your **name**, **Centre number** and **candidate number** on your Evidence Document.

[Total: 47]

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