



Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/03

Paper 3 Data Analysis and Website Authoring

October/November 2020

2 hours 30 minutes

You will need: Candidate source files (listed on page 2)

INSTRUCTIONS

- Carry out **all** instructions in each step.
- Enter your name, centre number and candidate number on every printout before it is sent to the printer.
- Printouts with handwritten candidate details will **not** be marked.
- At the end of the examination, put all your printouts into the Assessment Record Folder.
- If you have produced rough copies of printouts, put a cross through each one to indicate that it is not the copy to be marked.
- You must **not** have access to either the internet or any email system during this examination.

INFORMATION

- The total mark for this paper is 80.
- The number of marks for each question or part question is shown in brackets [].

This document has **8** pages. Blank pages are indicated.

You have been supplied with the following source files:

n20bg.jpg
n20contact.htm
n20contact.jpg
n20daisy.jpg
n20logo.jpg
n20owg.css
n20text.txt
n20vista.jpg
n20wall.jpg
n20yearend.csv

Task 1 – Evidence Document

Create a new word-processed document.

Make sure your name, centre number and candidate number will appear on every page of this document.

Save this Evidence Document in your work area as **n20evidence_** followed by your centre number_ candidate number. For example, n20evidence_ZZ999_9999

You will need your Evidence Document during the examination to place screenshots when required.

Task 2 – Web Page

You are going to create a web page and stylesheet for Olde Worlde Gardens. The web page and stylesheet must work in any browser. All colour codes must be in hexadecimal. Make sure that your stylesheet contains no HTML.

1 Create a new folder called **owg**

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

n20bg.jpg
n20contact.htm
n20contact.jpg
n20daisy.jpg
n20logo.jpg
n20owg.css
n20text.txt
n20vista.jpg
n20wall.jpg

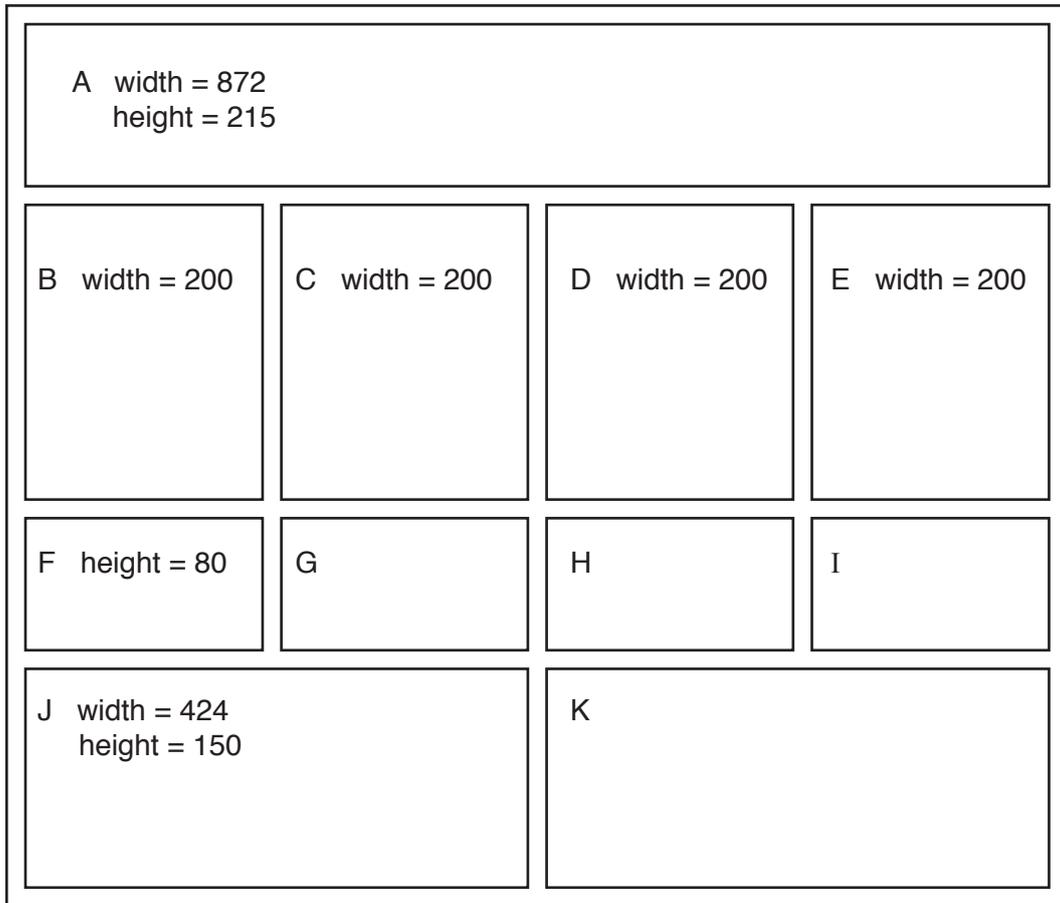
Display the contents of your **owg** folder showing the folder name, all file names, extensions, image dimensions and file sizes. [1]

EVIDENCE 1

Take a screenshot of your **owg** folder and place this in your Evidence Document. Make sure that the folder name, all file names, extensions, image dimensions and file sizes are clearly visible.

2 Create a web page called **owg.htm**

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



Each table cell is identified with a letter. Only essential dimensions are shown. These are in pixels.

The cell contents shown in the diagram must **not** appear on your final web page. Cell widths allow for border spacing which will be set when your stylesheet is attached in step 12.

Table borders must **not** appear on the final web page.

[12]

3 Set the title of the web page to **Olde Worlde Gardens Homepage**

[1]

4 Place in cell A the image **n20logo.jpg**

Resize this image in the HTML to be 872 pixels wide by 215 pixels high.

[2]

5 Place in cell:

- F the text **Flowers**
- G the text **Landscaping**
- H the text **Walled gardens**
- I the text **Contact us**

Set this text to style h2.

[3]

- 6 Place in cells B, C, D and E the most appropriate image from those provided, to match the text placed in step 5. The aspect ratio of each chosen image must match the placeholder.

Where necessary, in the HTML, make sure that each image is displayed as **200** pixels wide whilst maintaining the aspect ratio.

[3]

- 7 Place in cell J the contents of the file **n20text.txt**

Set this text to paragraph style.

[2]

- 8 Enter in cell K the text:

Web page last updated by:

On a new line below this, place your name, centre number and candidate number.

Set all the text in cell K to style h3.

[3]

- 9 Add appropriate alternate text to all images.

[1]

- 10 Set the name of the default target window to **_self**

[1]

- 11 Create hyperlinks from the text *Contact us* and from the image *n20contact.jpg* to open the web page **n20contact.htm** in a new browser window called **_blank**

[4]

- 12 Attach the stylesheet **n20owg.css** to this web page.

Save your web page.

[1]

- 13 Open the stylesheet **n20owg.css** in a suitable software package. The stylesheet needs to be updated to **add** the following specifications:

Set the background for the web page so that it has a colour with a:

- blue component of **a4**
- red component of **ab**
- green component of **c5**

Set the background for the web page so that the image **n20bg.jpg** is placed in only the top right corner of the window.

Set the font for styles h1, h2, h3 and for the paragraph style to select **Arial** if this font is available, if not to select **Helvetica Neue**, if neither of these fonts are available to select the browser's default sans-serif font.

Set the paragraph style to 12 point fully justified text.

Add your name, centre number and candidate number as a comment at the start of the stylesheet.

Save this stylesheet in your *owg* folder.

Take a screenshot of the contents of your stylesheet.

[13]

EVIDENCE 2

Place this screenshot in your Evidence Document. Make sure the filename and all contents are clearly visible.

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

- all the page width can be seen
- all text can be easily read
- the address bar is visible
- the background image is clearly visible.

EVIDENCE 3

Place in your Evidence Document screenshot(s) showing the web page in your browser. Make sure that both the table and background elements are visible.

Display the HTML source in your editor.

EVIDENCE 4

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

[Total: 47]

Task 3 – Data Analysis

You are going to perform some calculations using the income and expenditure of this company over a twelve month period. All currency values must be in dollars to 2 decimal places.

- 14 Open and examine the file **n20yearend.csv** in a spreadsheet package.

Place the text **Edited by** followed by a space, your name, centre number and candidate number, then a space followed by **on** followed by a space and today's automated date, right aligned in the header.

Save this as a spreadsheet with the file name:

n20year_centre number_**_**candidate number

For example, n20year_ZZ999_9999

[3]

- 15 Insert two new rows at the top of the spreadsheet. Merge cells A1 to M1. In this merged cell place the text

Olde Worlde Gardens income and expenditure

Format the spreadsheet to look like this:

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Olde Worlde Gardens income and expenditure												
2													
3		Income					Expenditure				Profit/Loss		
4		Plant sales	Landscaping	Walled gardens	Total	Wages	Materials	Premises	Total	Figure	Indicator		
5	January	318.53	7752.55	5858		1430	6805.27	320					
6	February	692.96	5640.94	3901.25		1430	4771.09	320					
7	March	657.47	1844.33	0		1430	922.16	320					
8	April	548.52	3590.35	4831		1430	4210.67	350					
9	May	864.9	1844.95	4211.25		1430	3028.1	350					
10	June	1080.27	5578.09	0		1430	2789.04	350					
11	July	1276.26	12540.1	1939.04		1430	7239.57	350					
12	August	1042.65	12687.15	1402.18		1430	7044.66	350					
13	September	895.23	11340.96	0		1520	5670.48	350					
14	October	944.35	11051.36	0		1520	5525.68	350					
15	November	804.07	0	1168.98		1520	584.49	350					
16	December	384.37	891.55	0		1520	566.3	350					

Format the merged cell A1:M1 to contain white 24 point text on a dark blue background.

Format only the merged cells in row 3 to contain black text 18 points high and have a light grey background.

[13]

- 16 In cell E5 use a function to calculate the total income for January. [1]

- 17 In cell J5 use a function to calculate the total expenditure for January. [1]

- 18 In cell L5 calculate the profit for January.

$Profit = Income - Expenditure$

[1]

- 19 In cell M5 display the text **Profit** if the profit for this month is greater than or equal to zero. If the profit is less than zero display the text **Loss**

Format this cell to have black text on a red background if the cell displays the text *Loss*

Format this cell to have white text on a black background if the cell displays the text *Profit*

[9]

EVIDENCE 5

Place in your Evidence Document a screenshot that shows how you applied the formatting to cell M5.

- 20 Replicate the formulae and formatting entered in steps 16 to 19 for all months. [1]

- 21 Format all currency values to dollars with 2 decimal places. [1]

- 22 Save your spreadsheet

Print your spreadsheet showing the formulae. Make sure:

- it is in landscape orientation
- the row and column headings are displayed
- the contents of all cells are fully visible and can be easily read.

[2]

PRINTOUT 1

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

- 23 Print your spreadsheet showing the values. Make sure the:

- printout fits on a single page
- row and column headings are not displayed
- contents of all cells are fully visible and can be easily read.

[1]

PRINTOUT 2

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

[Total: 33]

Task 4 – Printing the Evidence Document

24 You now need to print your Evidence Document.

PRINTOUT 3

Make sure that your **name**, **centre number** and **candidate number** appear on every page of your Evidence Document.

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