Cambridge IGCSE

Cambridge Assessment International Education
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME	

CENTRE NUMBER		CANDIDATE NUMBER	
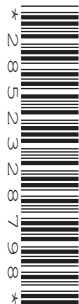
INFORMATION AND COMMUNICATION TECHNOLOGY   **0417/03**

Paper 3 Data Analysis and Website Authoring   **October/November 2019**

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.

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Task 1 – Evidence Document

- Open the file **n19evidence.rtf**

- Enter your name, centre number and candidate number so they will appear on every page of this document.

- Save this as a word processed document in your work area with the file name **n19evidence** followed by your candidate number, for example, n19evidence9999

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

Task 2 – Spreadsheet

You are going to prepare an invoice using a spreadsheet for Super-Disk-Sales. This company makes and sells storage devices. All prices are in Euros which must be displayed to 2 decimal places.

- Open and examine the files **Invoice.csv** and **SSD.csv** in a spreadsheet package.

1 • Using the file *Invoice.csv*

- Merge cells A1 to G1

- Merge cells A9 to G9

- Format both merged cells to have white, centre aligned, 36 point sans-serif font on a black background.

- Format the top of the spreadsheet to look like this:

	A	B	C	D	E	F	G	H	I	J
1	Super-Disk-Sales								Less than	Discount rate
2										
3	To:								10	0%
4									20	5%
5									50	10%
6										20%
7										
8										
9	Invoice									
10										
11	Product code	Number of items	Make	Model	Capacity	Unit price	Price			
12										

- At the bottom of the spreadsheet, format only the cells which contain text, to be bold and look like this:

	A	B	C	D	E	F
24	Total items					Price before discount
25				Discount rate		Discount
26						Total

- Save this as a spreadsheet with the file name **Invoice_** followed by your centre number_candidate number, for example, Invoice_ZZ999_9999

[9]

2 • Place the text:

Invoice date: followed by an automated date left aligned in the header.

- Place your name, centre number and candidate number, right aligned in the footer.

[2]

3 • Place functions in cells C12 to F12 to lookup the make, model, capacity and unit price of this item; using the product code for the lookup value and the external file *SSD.csv* for the array.

- Make sure that if no data is entered in the product code column then nothing is displayed in each of these cells.

- Replicate these functions for rows 13 to 23

[15]

4 • Place in cell G12 a formula to multiply the *Number of items* by the *Unit price*

- Make sure that if no data is entered in the number of items column then nothing is displayed in this cell.

- Replicate this formula for rows 13 to 23

[2]

5 • Place in cell B24 a function to calculate the total number of items ordered. [2]

6 • Place in cell G24 a function to calculate the total of the *Price* column. [1]

7 • Place in cell E25 nested IF functions to display the discount rate percentage referring to the data in columns I and J, depending upon the total number of items ordered. Note that the discount rate in cell J6 is used if the total number of items ordered does not meet the criteria of cells I3 to I5. [4]

8 • Place in cell G25 a formula to calculate the discount amount which is the *Discount rate* multiplied by the *Price before discount* [1]

9 • Place in cell G26 a formula to calculate the total which is the *Price before discount* minus the *Discount* [1]

10 • Apply appropriate formatting to all cells containing numeric values in rows 12 to 26 [1]

11 • Save your spreadsheet. Print the entire spreadsheet showing the values. Please note you will not yet have entered data into this invoice.

Make sure the:

○ printout fits on a single page
○ contents of all cells are fully visible with no split words
○ gridlines are displayed
○ row and column headings are displayed.

[2]

PRINTOUT 1
Make sure that you have entered your **name**, **centre number** and **candidate number** on your spreadsheet showing the values.

---

12 • 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.

[1]

PRINTOUT 2
Make sure that you have entered your **name**, **centre number** and **candidate number** on your spreadsheet showing the formulae.

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13 Before this invoice will be used it needs to be tested. Test 1 will use normal data including item SSD1

- In your Evidence Document edit the Evidence 1 table to look like this:

Test number	Test type	Item of test data	Cell	Why selected	Expected outcome in G12
Test 1	Normal	SSD1		First product in the data source	

- Examine the formula in cell G12 and use this to complete the table identifying:

  - the cell reference where *SSD1* will be entered
  - another appropriate item of test data that will be used with *SSD1* to complete Test 1
  - the cell reference where this item of test data will be entered
  - why you selected this item of test data
  - the expected outcome from Test 1 that will be seen in cell G12.

[5]

EVIDENCE 1
Edit and complete the table in your Evidence Document.

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14 • Enter the address as shown and format it like this:

	A	B	C	D
1	Super-Disk			
3	To:	Tawara Technology Solutions		
4		32 Acacia Avenue		
5		Tawara		
6		45673		

- Enter the items into the invoice like this:

	A	B
11	Product code	Number of items
12	SSD8	10
13	SSD34	1

[2]

15 • Print only cells A1 to G26 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 with no split words.

[1]

PRINTOUT 3

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

[Total: 49]

Task 3 – Evidence Document

16 A table within a web page is designed to look like this:

- Examine the files **Q16** and **HDD1** which were created by a trainee in their attempt to produce this web page.

  This is a copy of the HTML for the table:

```
<table border=1>
  <tr colspan=3>
    <td>Super-Disk-Sales</h1></td>
  </tr>
  <tr>
    <td>HDD</td>
    <td>SSD</td>
    <td>Optical media</td>
  </tr>
  <tr colspan=3>
    <td><img src="HDD1.mp4" alt="Hard drive image></td>
  </tr>
</table>
```

- Analyse this HTML and suggest amendments. Identify where each of these amendments should be placed. Do **not** include CSS.   [4]

EVIDENCE 2

Place your answer in your Evidence Document.

[Total: 4]

Task 4 – Web Page

*A trainee has started to create a stylesheet for Super-Disk-Sales. The stylesheet is not finished and contains a number of errors. You are going to edit the stylesheet. All colour codes must be in hexadecimal. Make sure that you use the most efficient methods. Heading styles h4, h5 and h6 will **not** be used so do **not** need defining. Make sure that your stylesheet contains no HTML.*

17 • Open the stylesheet **193style.css**

The specifications for this stylesheet are:

table	position	Centre aligned within the browser window
	size	1200 pixels wide
	borders	Not collapsed
		Visible
		Width 2 pixels
		Solid
		Border colour 808000
table data	cell padding	Top 8 pixels
		Left and right 20 pixels
		Bottom 6 pixels
	borders	Visible
		Width 2 pixels
		Solid
		Border colour 808000
All heading styles	Colour:	Blue 00, Red ff, Green ff
	Font:	**Times New Roman**, but if not available then **Times**, or if these fonts are not available, the browser's default serif font
h1		48 points high
		Alignment right
h2		24 points high
h3		18 points high
		Bold

• Correct and complete this stylesheet using the information above.

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

• Save this stylesheet. Use the file name **193style** followed by your candidate number, for example, 193style9999.css

[25]

> **EVIDENCE 3**
>
> Take a screenshot showing the content of your stylesheet and place this in your Evidence Document. Make sure that the contents are easy to read and the file name is clearly visible.

18 • Open the web page **n19webpage.htm** in your web authoring package.

• Replace the text *A Candidate, ZZ999, 9999* with your name, centre number and candidate number.

• Attach the stylesheet **SSDstyle1.css** to this web page.

• Attach the stylesheet you created in step 17 to your web page so that it has a higher priority than the stylesheet *SSDstyle1.css*

• Save the web page.

• Display the web page in your browser.

  Make sure that:

  ○ all the page can be seen
  ○ all the text can be easily read
  ○ the address bar is visible.

[2]

> **EVIDENCE 4**
>
> Take a screenshot of the web page in your browser and place this in your Evidence Document.

• Display the HTML source in your editor.

> **EVIDENCE 5**
>
> Take a copy of the HTML source and place this in your Evidence Document.

[Total: 27]

• Save and print your Evidence Document.

> **PRINTOUT 4**
>
> Make sure that you have entered your **name**, **centre number** and **candidate number** on your Evidence Document.

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BLANK PAGE

12

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