



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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INFORMATION AND COMMUNICATION TECHNOLOGY

0417/03

Paper 3 Data Analysis and Website Authoring

October/November 2017

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.

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

This document consists of **8** printed pages.

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Task 1 – Evidence Document

- Open the file **173evidence.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 file name **173evidence** followed by your candidate number, for example, **173evidence9999**

You will need your Evidence Document during the examination to enter answers to questions and to place your screenshots in when required.

Task 2 – Spreadsheet

You work for the Cozumel Tourist Board who use a spreadsheet to analyse data about cruise ship passengers in the Caribbean. Use the most efficient methods in your work.

- Open and examine the files **173cruise.csv** and **173location.csv** in a spreadsheet package.
 - Save the file *173cruise* as a spreadsheet with the file name **cruise_** and your candidate number, for example, **cruise_9999**
 - In your cruise spreadsheet, place the text **Cruise ship analysis** left aligned in the header of the page. Place your name, Centre number and candidate number, right aligned in the header of the page.
 - Place the text **Last edited on** followed by today's date (automated), the text **at** and then the time (automated), centre aligned in the footer of the page.

[3]
- Merge cells E2 to F2.
 - Format this merged cell and cell G2, so that the text is centre aligned in a black, 16 point, sans-serif font.

[2]
- Merge cells A1 to H1.
 - Format this merged cell so that:
 - the text is right aligned with a red, 20 point, sans-serif font
 - it has a pale blue background colour.

[3]
- In cell B4 enter a function to look up the name of the cruise ship's destination from the content of the file *173location.csv*

[6]
- In cell F4 enter a formula to calculate the average number of visitors a month for this destination, rounded down to the nearest visitor.

[3]
- In cell H4 enter a formula to calculate the percentage change in the number of visitors between 2014 and 2015.

[3]

3

- 7 • Replicate the formulae entered in steps 4 to 6 for each destination. [1]
- 8 • Apply appropriate formatting to your spreadsheet. [3]
- 9 • Save your spreadsheet.
• Print the 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.

[2]

PRINTOUT 1

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

- 10 • Print all of the spreadsheet showing the values. Make sure:
- it fits on a single portrait page
 - the row and column headings are not 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 values.

- 11 • New data has just arrived for Barbados in March and the British Virgin Islands in April. Edit the data in the spreadsheet to show these changes:

<i>Destination</i>	<i>Month</i>	<i>Extra visitors</i>
Barbados	March 2015	70,041
British Virgin Islands	April 2015	68,457

- Print all of the spreadsheet showing the values. Make sure:
- it fits on a single portrait page
- the row and column headings are not displayed
- the contents of all cells are fully visible.

[3]

PRINTOUT 3

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

4

- 12 • In cell E24 enter a function to calculate the total number of visitors to all destinations in 2015. [1]
- 13 • In cell E25 enter a function to calculate the average number of visitors to all destinations in 2015. [1]
- 14 • In cell E26 enter a function to calculate the number of visitors to the most popular cruise destination in 2015. [1]
- 15 • In cell I4 use a formula to copy the value held in B4.
• Replicate the formula for each destination.
• In cell E27 enter a function to return the name of the most popular cruise destination in 2015. [4]
- 16 • Place appropriate labels in cells D24 to D27. [2]
- 17 • Save your spreadsheet.
• Print only cells D24 to E27 inclusive showing the formulae. Make sure:
○ the row and column headings are displayed
○ the contents of these cells are fully visible.

PRINTOUT 4

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

- Print only cells I4 to I22 inclusive showing the formulae. Make sure:
○ the row and column headings are displayed
○ the contents of these cells are fully visible.

PRINTOUT 5

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

[1]

- 18 • Print all of the spreadsheet showing the values. Make sure:
○ it fits on a single page
○ the contents of all cells are fully visible.

[1]

PRINTOUT 6

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

5

- 19 • Extract only the data gathered for 3 months.
- Sort this data into descending order of percentage change.
 - Print only this extract showing the values. Make sure the:
 - printout fits on a single page
 - contents of all extracted cells are fully visible.

[2]

PRINTOUT 7

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

[Total: 43]

Task 3 – Web Page

- 20** • A new website is being developed. At the design stage you create a test plan. In your own words, identify two factors that need to be considered when designing an effective test plan. [2]

EVIDENCE 1

In your own words type two answers into your Evidence Document.

- 21** • Identify two methods of testing a web page. [2]

EVIDENCE 2

In your own words type two answers into your Evidence Document.

You work for Hothouse Design and you will assist trainee web programmers in developing a web page to advertise the island of Cozumel. The web page and stylesheet must work in any browser and use the most efficient methods. All colour codes are in hexadecimal.

- 22** • Create a new folder called **html_173**
• Locate the following files and store them in your **html_173** folder.

173a.jpg

173b.jpg

173bg.jpg

173c.jpg

173cozumel.htm

173d.jpg

173e.jpg

173f.jpg

173g.jpg

173h.jpg

173st.css

[1]

EVIDENCE 3

Take a screenshot showing the contents of your *html_173* folder and place this in your Evidence Document. Make sure that the folder name, image dimensions, all file names, extensions and sizes are clearly visible.

- 23** • Open the webpage **173cozumel.htm** in your editor and in a web browser.
• Carefully examine the web page and the images **173a.jpg** to **173h.jpg**
• Select the most appropriate image from **173a.jpg** to **173h.jpg** and place this in the table.
• Add appropriate alternate text to this image.

[2]

- 24 • Evaluate in your own words your choice of image in step 23. [4]

EVIDENCE 4

In your own words type your evaluation into your Evidence Document using no more than 100 words.

- 25 • Replace the text *Place your candidate details here* with your name, Centre number and candidate number.
• Place a non-breaking space between the colon and your candidate details. [2]

- 26 • Add a title to the head section of your web page which displays
CTB homepage [1]

- 27 • Place a bookmark before the table at the top of the page.
• Using the text in the lower cell of the table:
○ create a hyperlink from the text *Click on this link* to return the user to the bookmark
○ create a hyperlink from the text *CTB* to open the web page
<http://www.hothouse-design.co.uk/CTB>
○ create a hyperlink from the text *email our design team* to send an email to
webdesign@hothouse-design.co.uk with the subject line **My question** [9]

- 28 • Attach the file **173st.css** as an external stylesheet to your web page. [3]

- 29 • Open the stylesheet **173st.css** in a suitable software package.
• Add your name, Centre number and candidate number as a comment to the top of the stylesheet.
• The web page and stylesheet must work in any browser and use the most efficient method. All colour codes are in hexadecimal. Edit the stylesheet. Make sure your stylesheet contains no HTML. The stylesheet must meet these specifications:

Heading style 1

Font: **Arial**, but if not available then **Calibri**, or if these fonts are not available, the browser's default sans-serif font.

Colour: Red ff, no blue or green.

Centre align the text.

Paragraph style

Fully justified text.

Web page background

Set the image **173bg.jpg** so that it is tiled (repeated) and overrides the browser's default settings.

Table

No visible borders.

Cell padding 10 pixels.

Background colour for the table **ONLY** with blue dd, green bb, red 99.

8

- Save the stylesheet in your *html_173* folder.

[11]

EVIDENCE 5

Take a screenshot showing the content of your stylesheet. Place this in your Evidence Document. Make sure that the file name is clearly visible.

- Refresh your browser.

EVIDENCE 6

Display the web page in your browser. Take screenshot evidence of the web page and place this in your Evidence Document.

EVIDENCE 7

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

- 30 • Save and print your Evidence Document.

PRINTOUT 8

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

[Total: 37]

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