



**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**

**0417/31**

Paper 3 Data Analysis and Website Authoring

**February/March 2017**

**2 hours 30 minutes**

Additional Materials: Candidate Source Files are required.

**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.

Do not use the internet or email.

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 them 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.

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 7 printed pages and 1 blank page.

**Task 1 – Evidence Document 1**

- Open the file **m17evidence.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 **m17evidence** followed by your candidate number, for example, **m17evidence9999**

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

**Task 2 – Web Page**

*You work for Hothouse Design and will develop web pages for the Goa Elephant Sanctuary.*

*Many of the people who will view the web page have very slow internet connection, so efficient markup must be used.*

- Create a new folder called **m17\_html**
- Locate the following files and store them in your **m17\_html** folder.

**m17bg1.jpg  
m17bg2.jpg  
m17img1.jpg  
m17img2.jpg  
m17img3.jpg  
m17img4.jpg  
m17img5.jpg  
m17img6.jpg  
m17img7.jpg  
m17img8.jpg  
m17logo.jpg  
m17ss.css**

- 1 • Create a web page called **m17ges.htm**

This web page must work in all browsers and will have a table structure as shown below. Each table cell is identified with a letter and all dimensions are in pixels:

A 900 × 200			
B 900 × 120			
C 225 × 225	D 225 × 225	E 225 × 225	F 225 × 225
G 225 × 100	H 225 × 100	I 225 × 100	J 225 × 100
K 900 × 60			

Table borders, letters and dimensions shown in the table must **not** appear on your final web page. [10]

- 2 • Place in cell A the image **m17logo.jpg** [1]
- 3 • Enter in cell B the text  
**A leader in conservation and development.**  
**Watch, eat, ride, enjoy, donate, conserve...**  
• Set this text as style h1. [2]
- 4 • Using the most appropriate image from **m17img1.jpg** to **m17img8.jpg**, place in cell:  
  - C the image of a meal being cooked
  - D the image of an elephant ride
  - E the image of a jungle
  - F the image of an envelope. [2]
- 5 • Make sure appropriate text is displayed if **any** image is not available. [1]

- 6 • In cell:
- G enter the text **Local cooking**
  - H enter the text **Elephant rides**
  - I enter the text **Remote jungle location**
  - J enter the text **Contact us**
- Set all this text as style h2. [2]
- 7 • Place in cell K the text  
**Page created for Hothouse Design by** followed by your name, Centre number and candidate number.
- Set this text as style h3. [2]
- 8 • Centre align the table in the browser. [1]
- 9 • Create a hyperlink from the image of the envelope to send an email message to **GES@cie.org.uk** with a subject line **Book me a visit!** [5]
- 10 • Attach the stylesheet **m17ss.css** to the web page.
- Save the web page. [1]

*The stylesheet has been created but needs to be improved using the most efficient syntax. Make sure your stylesheet contains no html.*

- 11 • Open and examine the stylesheet **m17ss.css**
- Add the following to this stylesheet:

h1, h2 and h3

**Corsiva Hebrew**

if this is not available then **Candara**

if neither of these fonts are available, the browser's default sans-serif font.

Set the file **m17bg1.jpg** as the background image.

Set this image so that it is tiled (repeated) and overrides the browser's default settings.

- Add your name, Centre number and candidate number as a comment to the bottom of your stylesheet.
- Save this stylesheet in your m17\_html folder. [8]

**EVIDENCE 1**

Take a screenshot showing the content of your stylesheet. Place this in your Evidence Document.

- 12 A website is tested before it is uploaded to the internet. Hyperlinks will be tested as part of the test strategy.

- List 4 questions in your own words that could be used within the test plan to test these hyperlinks. [4]

**EVIDENCE 2**

Type your list of questions into your Evidence Document.

**EVIDENCE 3**

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

- all the page can be seen
- all 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.

**EVIDENCE 4**

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

- 13 • Open the stylesheet **m17ss.css**

- Replace the background image *m17bg1.jpg* with the image **m17bg2.jpg**
- Save this stylesheet in your m17\_html folder.

[1]

**EVIDENCE 5**

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

- all the page can be seen
- all 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.

- 14 • Evaluate in your own words the change of background image.

[4]

**EVIDENCE 6**

Type your evaluation into your Evidence Document using no more than 100 words.

- Save your Evidence Document.

[Total: 44]

### Task 3 – Spreadsheet

You are going to prepare a spreadsheet model to calculate the weekly wages of the employees. You must use the most efficient methods in your spreadsheet. All currency values are in Indian rupees to 2 decimal places.

Employees are paid to work for 50 weeks in each year and get 2 weeks' unpaid holiday. Some employees are paid weekly and some are paid a monthly salary.

- 15 • Open and examine the files **m17wages.csv** and **m17data.csv** in a spreadsheet package.  
 • Insert 2 new rows at the top of the wages file.  
 • Add text and formatting so that the wages spreadsheet looks like this:

	A	B	C	D	E	F	G
1	<b>Goa Elephant Sanctuary</b>						
2							
3	Payroll number	Forename	Surname	Pay type	Job code	Weekly wage	Monthly salary
4	GES0001	Javas	Sehgal		CR		
5	GES0002	Krishna	Mukherjee		TA		

- Save this as a spreadsheet with the filename **m17\_** and your Centre number and candidate number, e.g. m17\_ZZ999\_9999 [10]

#### EVIDENCE 7

Take a screenshot showing cells A1 to G5 of your spreadsheet, including the row and column headings. Place this in your Evidence Document.

- 16 • Place your name, Centre number and candidate number on the left in the footer.  
 • Place an automated filename which includes the file path, on the right in the footer. [2]
- 17 • In cell D4 enter a function to look up the *Pay type* from the contents of the file *m17data.csv* [5]
- 18 • In cell F4 enter a formula to calculate the weekly wage for this employee using the annual salary from the file *m17data.csv*  
 The formula must display the weekly wage only if the *Pay type* is *W*. If the *Pay type* is not *W* do not display anything in this cell. [8]
- 19 • In cell G4 enter a formula to calculate the monthly salary for this employee if the *Pay type* is *S*. If the *Pay type* is not *S* do not display anything in this cell. [5]
- 20 • Replicate the formulae from steps 17 to 19 for all employees. [1]
- 21 • Apply appropriate formatting to all cells. [1]

- 22 • Save and print the spreadsheet showing the formulae. Make sure:
- it is in landscape orientation
  - the contents of all cells are fully visible.

[1]

**PRINTOUT 1**

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

- 23 • Print the spreadsheet showing the values. Make sure the:
- printout fits on a single page wide
  - 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.

- 24 • Extract only the employees who earn less than 200 rupees a week.  
• Sort the extract into ascending order of surname.  
• Print the spreadsheet showing the values. Make sure the:
- printout fits on a single page wide
  - contents of all cells are fully visible.

[2]

**PRINTOUT 3**

Make sure that you have entered your **name**, **Centre number** and **candidate number** on this values printout.

- 25 • 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.

[Total: 36]

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