Cambridge IGCSE

Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CANDIDATE NAME	

CENTRE NUMBER						CANDIDATE NUMBER				

INFORMATION AND COMMUNICATION TECHNOLOGY   **0417/31**

Paper 3 Data Analysis and Website Authoring   **February/March 2016**

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.

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.

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

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[Turn over

Task 1 – Evidence Document 1

- Open the file **m16evidence.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 **m16evidence** followed by your candidate number. For example, m16evidence9999

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

Task 2 – Web Page

You work for Hothouse Design and will develop web pages for Cansaulim Properties in Goa.

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 **m16_html**

- Locate the following files and place them in your **m16_html** folder.

m16bg.jpg

m16img1.jpg

m16img2.jpg

m16img3.jpg

m16img4.jpg

m16img5.jpg

m16img6.jpg

m16img7.jpg

m16img8.jpg

m16logo.jpg

m16ss.css

1 • Create a web page called **m16cp.htm**

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

A	B		
300 × 1000	600 × 200		
	C 300 × 300		D 300 × 300
	E 300 × 100		F 300 × 100
	G 300 × 300		H 300 × 300
	I 300 × 100		J 300 × 100
K 900 × 80			

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

• Table borders must not appear on the final web page. [11]

2 • Place in cell A the image **m16logo.jpg** [1]

3 • Enter in cell B the text **We design, create, build, furnish, sell or rent**

• Set this text as style h1. [2]

4 • Using the most appropriate image from **m16img1.jpg** to **m16img8.jpg** place in cell:

  ○ C the image of a plot of land for sale

  ○ D the image of a builder making a wall

  ○ G the image of a beach front café

  ○ H the image of a Portuguese style house. [2]

5 • Make sure appropriate text is displayed, if an image is not available. [1]

6 • In cell:
  ○ E enter the text **Prime location building plots for sale**
  ○ F enter the text **Local construction workers**
  ○ I enter the text **Arossim beach front café for sale**
  ○ J enter the text **Portuguese colonial style house for sale**
  • Set all this text as style h2. [2]

7 • In cell K enter the text:

  Web Design by Hothouse Design: Page last edited 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.
  • Save the web page. [1]

9 • Make the text **Hothouse Design** a hyperlink to send an email message to **hothouse-design@cie.org.uk** with a subject line **Make me a website!** [5]

10 • Attach the stylesheet **m16ss.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 **m16ss.css** in a suitable software package.
  • Add the following to this stylesheet:

h1, h2 and h3	**Trebuchet** if this is not available then **Trebuchet MS** if neither of these fonts are available, the browser's default sans-serif font.
h3	a 24 point font.

  • Add your name, Centre number and candidate number as a comment to your stylesheet.
  • Save this stylesheet in your **m16_html** folder. [7]

EVIDENCE 1
Take a screenshot showing the content of your stylesheet. Place this in your Evidence Document.
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12 A website is tested before it is uploaded to the internet.

- Describe how you would develop a test plan to test the hyperlinks, as part of a test strategy.

[4]

> **EVIDENCE 2**
>
> Type your answer into your Evidence Document using no more than 100 words.

> **EVIDENCE 3**
>
> Display the web page in your browser. Take screenshot evidence of the web page in the browser and place this in your Evidence Document.

> **EVIDENCE 4**
>
> Take a copy of the HTML source and place this in your Evidence Document.

13 • Evaluate the web page you have just created. [4]

> **EVIDENCE 5**
>
> Type your evaluation into your Evidence Document using no more than 100 words.
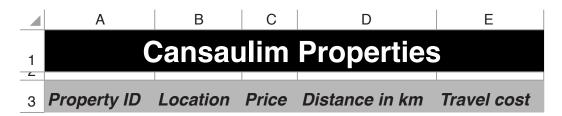
- Save your Evidence Document.

[Total: 43]

Task 3 – Spreadsheet

You are going to prepare a spreadsheet model to calculate the travel costs to view a property. All currency values are in Indian rupees to 2 decimal places.

14 • Create and format a spreadsheet that looks like this:

	A	B	C	D	E
1	**Cansaulim Properties**				
2					
3	*Property ID*	*Location*	*Price*	*Distance in km*	*Travel cost*

• Save this spreadsheet with the file name **m16_** and your Centre number and candidate number, e.g. m16_ZZ999_9999

• Place an automated file name which includes the file path on the left in the header. [11]

EVIDENCE 6
Take a screenshot showing cells A1 to E3 of your spreadsheet, including the row and column headings. Place this in your Evidence Document.

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15 • Insert **2** new columns between columns C and D. [1]

16 • Edit the spreadsheet so it looks like this:

	A	B	C	D	E	F	G
1	**Cansaulim Properties**						
2							
3	*Property ID*	*Location*	*Price*	*Area*	*Price per square metre*	*Distance in km*	*Travel cost*
4							
5							

[3]

EVIDENCE 7
Take a screenshot showing cells A1 to G5 of the spreadsheet, including row and column headings. Place this in your Evidence Document.

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17 • In cell E5 enter a formula to calculate the price per square metre which is the price divided by the area. Use a function to round this value to 0 decimal places. [3]

18 • In cell G5 enter a formula to calculate the travel cost to this property. This is 10 rupees plus:

    ○ **7.5** if the distance is less than 6

    ○ The distance multiplied by **1.5** if the distance is not less than 6

• Round the travel cost up to the next whole rupee.   [7]

19 • Complete the unfinished Test Plan in your Evidence Document:

    ○ Replace the letters A and B with suitable headings

    ○ Choose 3 pieces of test data to test the formula used in step 18

    ○ Complete the test table as you carry out the tests

    ○ Take screenshots from your tests and place these in the Test Plan.

• Make sure that the test data and results are clearly visible.   [9]

20 • Apply appropriate formatting to row 5 of the spreadsheet.   [1]

21 • Save and print the spreadsheet showing the formulae. Make sure:

    ○ it fits on a single landscape page

    ○ 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.

22 • Add the following property to your spreadsheet:

Property ID	Location	Price	Area	Distance in km
CP1007	Dona Paula, Panjim	22000000	171	28.1

• Print the spreadsheet showing the values. Make sure:

    ○ the printout fits on a single page

    ○ 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.

• 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: 37]

8

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