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CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the March 2016 series

0417 INFORMATION AND COMMUNICATION TECHNOLOGY

0417/31 Paper 3 (Practical Test B), maximum raw mark 80

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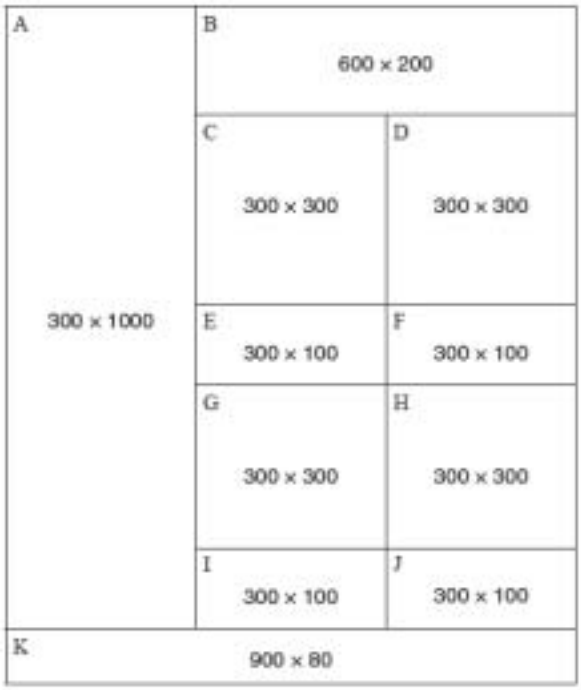
1	**Create a webpage called m16cp.htm** **This webpage must work in all browsers and will have a table structure as shown below:**  **Each table cell is identified with a letter and all dimensions are in pixels. The letters shown in the table must not appear on your final webpage.** **Table borders must not appear on the final webpage.** Displayed in the browser with no letters from QP visible 1 mark Table borders not visible 1 mark Table width (or td width last row) set to 900px 1 mark Left cell rowspan set to 5 1 mark Top right cell colspan set to 2 1 mark Top right cell 200 high 1 mark Rows 2 and 4 set to 300 high 1 mark Rows 3 and 5 set to 100 high 1 mark Row 6 colspan set to 3 1 mark Row 6 set to 80 high 1 mark 3 equal (300 pixels or 33%) cell widths 1 mark	[11]
2	**Place in cell A the image m16logo.jpg** Cansaulim Properties logo placed in top row 1 mark	[1]
3	**Enter in cell B the text We design, create, build, furnish, sell or rent** **Set this text as style h1** Text 100% correct 1 mark Text set into style h1 1 mark	[2]

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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** 4 correct insertions of image 2 marks 3 correct insertions of image 1 mark 0, 1 or 2 correct insertions of image 0 marks	[2]
5	**Make sure appropriate text is displayed, if an image is not available.** Appropriate text set for alt text attribute for all 5 images 1 mark	[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.** All 4 elements of text 100% correct 1 mark All text set into style h2 1 mark	[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.** Text 100% correct plus candidate details 1 mark Text set into style h3 1 mark	[2]
8	**Centre align the table in the browser.** **Save the web page.** Table centre aligned within browser window 1 mark	[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!** Anchor from text Hothouse-Design 1 mark Href="mailto: 1 mark hothouse-design@cie.org.uk 1 mark ?subject= 1 mark Make me a website!" 1 mark	[5]
10	**Attach the stylesheet m16ss.css to the web page.** **Save the webpage.** Stylesheet m16ss.css attached to webpage 1 mark	[1]

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

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.

h1, h2 and h3
Trebuchet 1 mark
,"Trebuchet MS" 1 mark
,sans-serif 1 mark
h3
{font-size:24pt} 1 mark
table and td
{border:0} 1 mark

Use of table,td and h1,h2,h3 for efficient syntax for border-style 1 mark
Comment added with /* name */ 1 mark [7]

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.**

Identify each element to be tested 1 mark
For each test identify Expected output 1 mark
Test plan contains Actual output 1 mark
Test plan contains remedial action 1 mark [4]

13 **Evaluate the webpage you have just created.**

Bright colours within the page attract attention 1 mark
Magenta mask on background image makes reading text difficult 1 mark
Text under image/Alt text identifies the image 1 mark
Colour schemes do not look like professional company site 1 mark
Logo does not blend with background/has poor contrast between background and text 1 mark
Image of beach front café is taken from too far away 1 mark
(Max 4 marks) [4]

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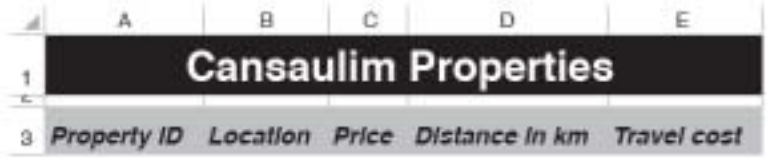
14 **Create and format a spreadsheet that looks like this:**



	A	B	C	D	E
1	Cansaulim Properties				
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 filename which includes the file path, on the left in the header.

Row 1

A1 to E1 merged	1 mark
Sans-serif centre aligned font	1 mark
White text, largest font	1 mark
Black background	1 mark

Row 2

Row height less than half row 3	1 mark

Row 3

Sans-serif left aligned font	1 mark
Black, italic text	1 mark
Light grey background	1 mark

Sheet

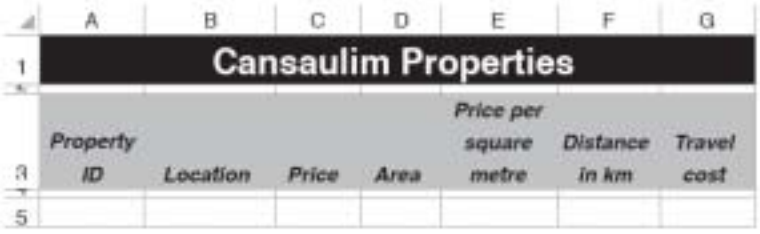
All column widths fully visible	1 mark
Row and column headings visible (this and next printout)	1 mark
Automated filename with file path placed on left in header	1 mark

[11]

15 **Insert 2 new columns between columns C and D.**

Columns inserted as specified 1 mark [1]

16 **Edit the spreadsheet so it looks like this:**



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

Row 3

Alignment changed from left to centre	1 mark
Column widths narrowed	1 mark
Text wrapped, 100% accurate, fully visible	1 mark

[3]

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.**

=ROUND()	1 mark
C5/D5	1 mark
,0	1 mark

[3]

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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.** =ROUNDUP() 1 mark 10+ 1 mark IF() 1 mark F5<6 1 mark ,7.5 1 mark ,F5*1.5 1 mark ,0 1 mark	[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.** Cell reference and formula tested correct 1 mark Headings Expected and Actual Outcome 1 mark Test data selected 6, one above and one below 1 mark Test data chosen is easy to calculate manually 1 mark Reasons for choice of test data appropriate 1 mark Expected output calculated correctly 3 marks Screen shots of actual output shown 1 marks	[9]
20	**Apply appropriate formatting to row 5 of the spreadsheet** Columns C, E and G only formatted to 2dp in rupees 1 mark	[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.** Single landscape page and contents of all cells fully visible 1 mark	[1]
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.** Printout fits on single page and contents of all cells are fully visible 1 mark	[1]

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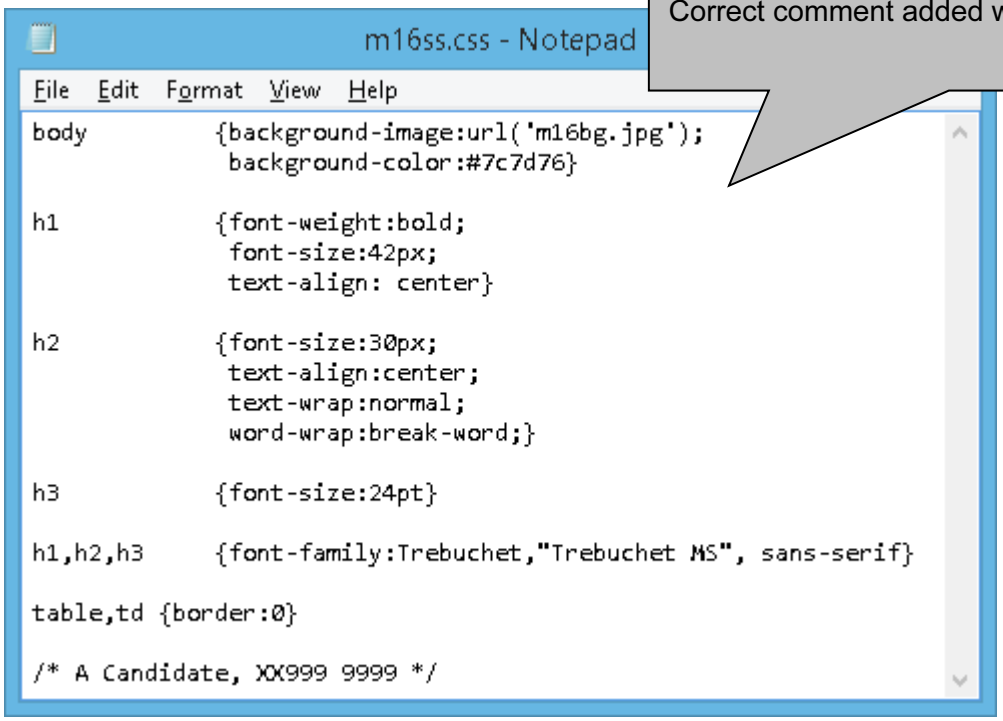
Question 11 – Evidence 1

h1,h2,h3	Trebuchet	1
	, “Trebuchet MS”	1
	, sans-serif	1
h3	font-size:24pt	1
table,td	{border:0}	1
Use of table,td and h1,h2,h3 for efficient syntax for border-style		1
Correct comment added with /* format */		1



Question 12 – Evidence 2

Identify each hyperlink to be tested	1 mark
For each test identify Expected output	1 mark
Test plan contains Actual output	1 mark
Test plan contains remedial action/retest	1 mark

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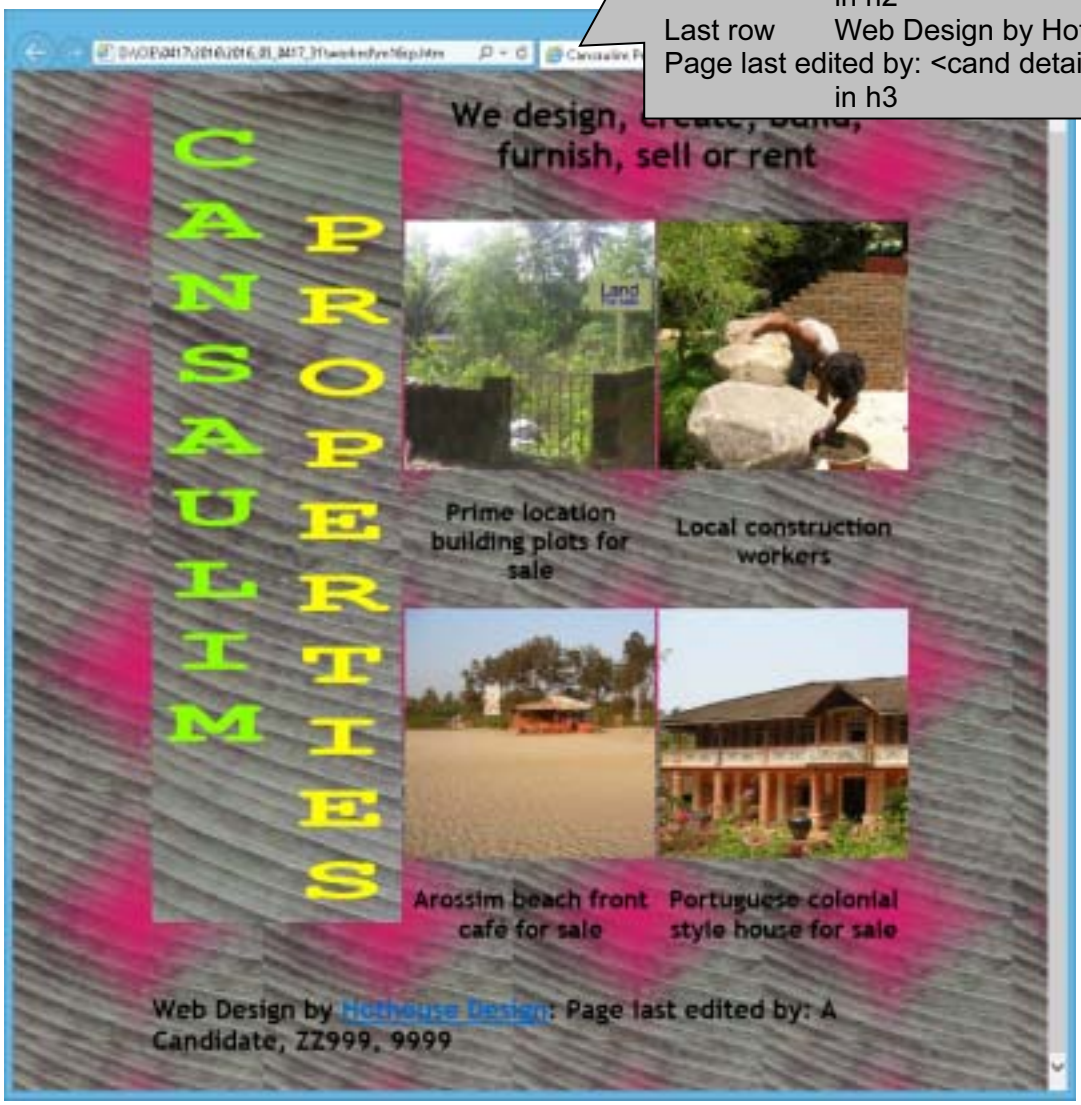
Question 12 – Evidence 3

Browser view		
In browser with no letters vis		1
Table	borders not visible	1
Left cell	Cansaulim Properties logo	1
Top row	Text 100% correct	1
	in h1	1
	Images as shown	
	4 correct for 2 marks, 3 for	1
	All 4 elements of text 100% correct	1
	in h2	1
Last row	Web Design by Hothouse Design:	
Page last edited by: <cand details>		1
	in h3	1



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Question 12 – Evidence 4

```
<!DOCTYPE html>
<html>
   <head>
      <link rel="stylesheet" type="text/css" href="m16ss.css">
      <title>Cansaulim Properties webpage</title>
   </head>
   <body>

      <table style="margin-left:auto; margin-right:auto;width:900px;">

         <tr style="height:200px;">
            <td rowspan=5 style="width:300px;"><img src="m16logo.jpg"
alt="Cansaulim Properties logo">
            </td>

            <td colspan=2 ><h1>We design, create, build, furnish, sell or
rent</h1>
            </td>
         </tr>
         <tr style="height:300px;">

            <td style="width:300px;">
               <img src="m16img1.jpg" alt="image of a plot of building
land for sale">
            </td>
            <td style="width:300px;">
               <img src="m16img6.jpg" alt="image of a builder making a
wall">
            </td>
         </tr>
         <tr style="height:100px;">
            <td>
               <h2>Prime location building plots for sale</h2>
            </td>
            <td>
               <h2>Local construction workers</h2>
            </td>
         </tr>
         <tr style="height:300px;">
            <td>
               <img src="m16img7.jpg" alt="image of a beach front cafe">
            </td>
            <td>
               <img src="m16img4.jpg" alt="image of a Portuguese house">
            </td>
         </tr>
         <tr style="height:100px;">
            <td>
               <h2>Arossim beach front café for sale</h2>
            </td>
            <td>
               <h2>Portuguese style colonial house for sale</h2>
            </td>
         </tr>
```

Stylesheet	m16ss.css attached	1
Table	centre aligned in the window	1
	Width:900px	1
Top row	height:200px	1
Left cell	rowspan=5	1
Top right	colspan=2	1
Rows 2 and 4 height:300px		1
<td>	3 equal (300 pixels or 33%) cell widths	
Rows 3 and 5 height:100px		1
Alt attribute	appropriate alt text for all 5 images	1

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Row 6	height:80px	1
	colspan=3	1

```
         <tr style="height:80px;">
            <td colspan=3><h3>Web Design by <a href="mailto:hothouse-
design@cie.org.uk?subject=Make%20me%20a%20website!">Hothouse Design</a>:
Page last edited by: A Candidate, ZZ999, 9999</h3></td>
         </tr>
      </table>
   </body>
</html>
```

Hyperlink	From **Hothouse Design** only	1
	href="mailto:	1
	hothouse-design@cie.org.uk	1
	?subject=	1
	Make me a website!"	1

Question 13 – Evidence 5
4 from:

Bright colours within the page attract attention
Magenta mask on background image makes reading text difficult
Text under image/Alt text identifies the image
Colour schemes do not look like professional company site
Logo does not blend with background/has poor contrast between background and text
Image of beach front café is taken from too far away

Max 4 marks

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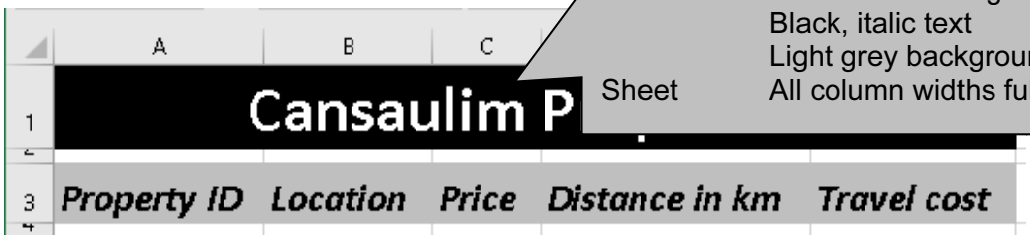
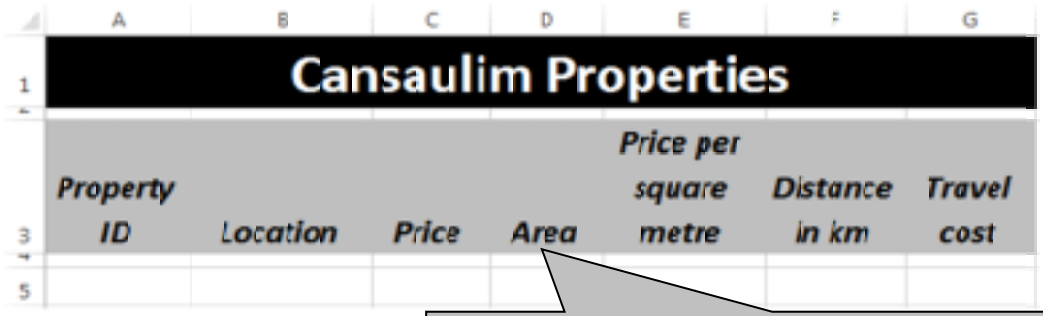
Question 14 – Evidence 6

Row 1	A1 to E1 merged	1
	Sans-serif centre aligned font	1
	White text, largest font	1
	Black background	1
Row 2	Row height less than half row 3	1
Row 3	Sans-serif left aligned font	1
	Black, italic text	1
	Light grey background	1
Sheet	All column widths fully visible	1



Question 16 – Evidence 7

Columns	2 new columns inserted after C	1
Row 3	Alignment changed from left to centre	1
	Column widths narrowed	1
	Text wrapped, 100% accurate fully visible	1



Both screen shots Row and column headings visible 1

Question 19 – Test Plan

Cell reference	G5				
Formula tested	=ROUNDUP(10+IF(F5<6,7.5,F5*1.5),0)				
Test data	Why chosen	Expected outcome	Actual Outcome	Tested formula works Y/N	Remedial action
5	Value below 6	18	Distance in km 5 / Travel cost ₹ 18.00	Y	n/a
6	Value of test =6	19	Distance in km 6 / Travel cost ₹ 19.00	Y	n/a
10	Value above 6 & easy to calculate	25	Distance in km / Travel cost	Y	n/a

Cell reference & formula tested correct 1
Headings Expected and Actual Outcome 1

Test data	selected 6, above and below	1
Test data	easy to calculate manually	1
Reasons	for choice of test data appropriate	1
Calcs correct	Expected output	3
Screen shots of actual output shown		1

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Header Auto filename and path on left 1

	A	B	C	D	E	F	G
1	Cansaulim Properties						
3	*Property ID*	*Location*	*Price*	*Area*	*Price per square metre*	*Distance in km*	*Travel cost*
5	CP1007	Dona Paula, Panjim	22000000	171	=ROUND(C5/D5,0)	28.1	=ROUNDUP(10+IF(F5<6,7.5,F5*1.5),0)

Price per square metre

=ROUND()	1
C5/D5	1
,0	1

Travel cost

=ROUNDUP()	1
10+	1
IF()	1
F5<6	1
,7.5	1
,F5*1.5	1
,0	1

Printout single landscape page and formulae fully visible 1

Cansaulim Properties

Property ID	*Location*	*Price*	*Area*	*Price per square metre*	*Distance in km*	*Travel cost*
CP1007	Dona Paula, Panjim	₹ 22,000,000.00	171	₹ 128,655.00	28.1	₹ 53.00

Format Columns C,E,G only in rupees to 2dp 1
Printout single page and fully visible 1

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