INFORMATION AND COMMUNICATION TECHNOLOGY　　　　　　**0417/03**

Paper 3　Practical Test B　　　　　　　　　　　　　　　　**October/November 2016**

MARK SCHEME

Maximum Mark: 8

Published

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

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This document consists of **17** printed pages.

No	Steps		Mark
1	**Open and examine all the supplied web pages.** **Evaluate the efficiency of the markup for these pages and explain how improvements could be made.** Valid positive or negative comment on efficiency … with a reason One method of improving the efficiency… … with an explanation Example answer: Internal styles not efficient (for these pages)… …duplication of effort to create and edit Replace internal styles with an attached stylesheet… …only have to edit the styles once	 1 mark 1 mark 1 mark 1 mark	[4]
2	**Using a suitable software package, open the web page nov163gtb.htm** **Replace the text *A Candidate, ZZ999, 9999* with your name, Centre number and candidate number.** **Replace the text *Image A* with the image 163beach.jpg** Beach image replaced text *Image A* in top cell	 1 mark	[1]
3	**Replace the text *Image B* with the image 163logo.jpg** **Resize this image to 1000 pixels high by 380 pixels wide.** **Make sure that appropriate text is displayed if this image is not available.** GTB logo replaced text *Image B* in right cell Image resized to 380px wide by 1000px high Appropriate Alt text attribute applied	 1 mark 1 mark 1 mark	[3]
4	**Using the most appropriate image from 163img1.jpg to 163img8.jpg, replace the text:** ***Image C* with the image of a chef preparing food** ***Image D* with the image of an elephant ride** ***Image E* with the image of a river boat.** Image C replaced with the image of a chef preparing food Image D replaced with the image of an elephant ride Image E replaced with the image of a river boat	 1 mark 1 mark 1 mark	[3]
5	**Make the text *Click here* a hyperlink to return to the top of the page.** Anchor with id name set above table in body section Hyperlink reference set around the correct text to this internal anchor	 1 mark 1 mark 1 mark	[3]

No	Steps	Mark
6	**Make the text *Hothouse Design* a hyperlink to send an email message to: hothouse-design@cie.org.uk with a subject line Web design enquiry** Anchor from text Hothouse Design 1 mark href="mailto: 1 mark hothouse-design@cie.org.uk 1 mark ?subject= 1 mark Web design enquiry" 1 mark	[5]
7	**Set the name for a default target window to _self** <base target="_self"> 1 mark Placed in head section outside style tags 1 mark	[2]
8	**Make the image of the elephant ride a hyperlink to the web page for the Goa Elephant Sanctuary to open in a new window called _blank** **Save the webpage.** Anchor from image 163img4.jpg 1 mark href="nov163ges.htm" 1 mark target="_blank" 1 mark	[3]
9	**You need to test the website at this point.** **Explain in your evidence document what you would test in this website before it is uploaded to the internet.** 4 from: Test <u>internal</u> links between pages Test <u>internal</u> anchor/hyperlink works Test mailto <u>opens</u> an <u>email</u> client Test mailto has correct recipient (hothouse-design@cie.org.uk) Test mailto has correct Subject line (Web design enquiry) Test alt text works for each image Test link to GES opens in a new window [Max 4]	[4]

No	Steps	Mark
10	**Open and edit the stylesheet nov163ss.css** **The specifications for this stylesheet are:** table external border colour is FFFF66 internal border colour red FF, blue CC, green 66 visible solid lines external line width 4 pixels internal gridlines 2 pixels all collapsed cell padding 10 pixels cell spacing 10 pixels table cells cell padding 10 pixels cell spacing 10 pixels unordered list square bullet points **Correct and complete the stylesheet in the most efficient way.** **Add your name, Centre number and candidate number as a comment to your stylesheet.** **Save this stylesheet in your 163_html folder.** **table and td** border-style:solid; 1 mark padding:10px; 1 mark spacing:10px 1 mark **table** border-color:#FFFF66; 1 mark border-collapse:collapse; 1 mark border-width:4px 1 mark **td** border-color:#FF66CC; 1 mark border-width:2px; 1 mark **ul** list-style-type:square 1 mark Candidate details as a comment 1 mark Use of table, td for efficient syntax for border-style 1 mark	[11]
11	**Open the web page saved in step 8 in your editing software.** **Attach the stylesheet saved in step 10 after the in-line styles.** **Save the webpage.** Stylesheet nov163ss.css attached to webpage in <head> section after in-line styles. 1 mark Browser displays attached stylesheet features 1 mark	[2]
12	**Using a suitable software package, load the file 163resort.csv** **Save this file as a spreadsheet with the file name 163_ and your Centre number and candidate number. For example, 163_ZZ999_9999** **Place an automated file name which includes the file path, on the right in the header.** Automated file name with file path placed on right in header 1 mark	[1]

No	Steps		Mark
13	**Insert 4 new rows before row 1.**		[1]
	Correctly inserted rows	1 mark	
14	**In cell A1 enter the title:** **Hothouse Design costs for the Goan Tourist Board**		[1]
	Correctly inserted title 100% accurate	1 mark	
15	**Merge cells A1 to G1.** **Format this cell to have a black background, with a white, 36 point, centre aligned, sans-serif font.** **Make sure all the text is fully visible.**		[5]
	A1 to G1 merged and Centre aligned	1 mark	
	Sans-serif font	1 mark	
	white text, 36 point font	1 mark	
	black background	1 mark	
	Heading fully visible and may be wrapped.	1 mark	
16	**In cell F3 enter the text Rate.** **In cell F4 enter 124.2 rupees**.		[1]
	Text and numbers added accurately in the correct cells	1 mark	
17	**Make the contents of cells in the rows starting with *Resort* and *Number of rooms…* bold and underlined.**		[1]
	Rows 5 and 26 bold and underlined	1 mark	
18	**In cell D6 enter a function to look up, from the external file 163taluka.csv the *Taluka name* for this resort.**		[6]
	=VLOOKUP()	1 mark	
	C6 as relative reference	1 mark	
	External file '163taluka.csv'	1 mark	
	Correct range !\$A\$2:\$B\$12 with absolute referencing	1 mark	
	,2	1 mark	
	,False or ,0	1 mark	
19	**In cell E6 enter a function to look up, from the external file 163taluka.csv the *Location* for this resort.**		[4]
	=VLOOKUP(C6,)	1 mark	
	External file '163taluka.csv'	1 mark	
	Correct range !\$A\$2:\$C\$12 with absolute referencing	1 mark	
	,3,0	1 mark	

No	Steps	Mark

20	In cell G6 enter a formula to calculate the advertising cost which is the rate (entered in step 16) multiplied by:
	    25 if the *resort* has between 1 and 50 rooms
	    75 if the *resort* has more than 50 but less than 101 rooms
	    150 if the *resort* has more than 100 but less than 201 rooms
	    200 if the *resort* has more than 200 rooms
	
	=F4 multiplied by (for all instances) 1 mark
	as absolute cell reference 1 mark
	3 nested IFs 1 mark
	Containing only relative cell references 1 mark
	IF(F6<51,25,) 1 mark
	IF(F6<101,75,) 1 mark
	IF(F6<201,150 1 mark
	,200) 1 mark
		[8]

21	In cell B27 enter a formula to add the number of rooms in that location in column A. =SUMIF() 1 mark $E$6:$E$24 must be absolute referencing 1 mark A27 must be relative referencing 1 mark $F$6:$F$24 must be absolute referencing 1 mark	[4]
22	Replicate the formulae entered in steps 18, 19, and 20 for each resort. Replicate the formula entered in step 21 for each location. All 4 formulae replicated 1 mark	[1]
23	Apply appropriate formatting to all cells Rate & Advertising cost column formatted to 2dp in rupees 1 mark	[1]

24	Save and print the spreadsheet showing the formulae. Make sure:
	    Your name, Centre number and candidate number are entered in an appropriate place on your spreadsheet
	    it is in landscape orientation
	    the row and column headings are displayed
	    the contents of all cells are fully visible.
	
	Landscape orientation & contents of all cells fully visible 1 mark
	Row and column headings displayed 1 mark
		[2]

25	Print the spreadsheet showing the values. Make sure:
	    it is in portrait orientation
	    the printout fits on a single page
	    the contents of all cells are fully visible.
	
	Printout fits on single portrait page and contents of all cells are fully visible 1 mark
		[1]

No	Steps		Mark
26	**Change the data model so that the resort *Sun Village* has an extra 50 rooms added.** Change made as specified	1 mark	[1]

27	**Save and print the spreadsheet showing the values: Make sure:**
	    it is in portrait orientation
	    the printout fits on a single page
	    the contents of all cells are fully visible.
	
	Printout fits on single portrait page and contents of all cells are fully visible
		1 mark	[1]

Evidence Document

Question 1

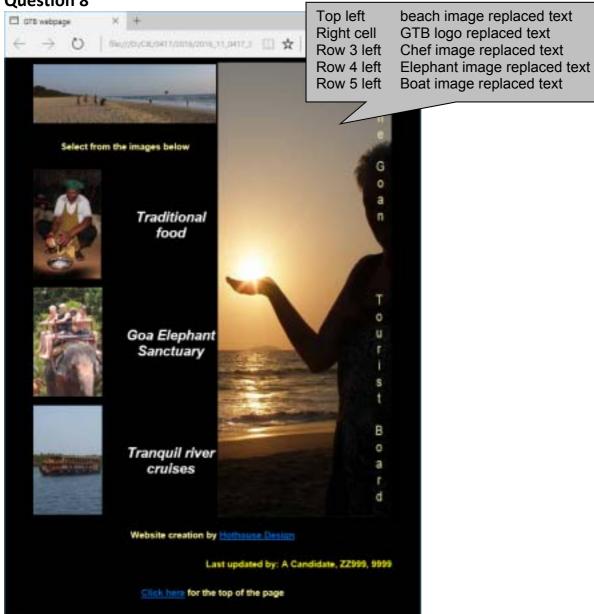|	
Valid positive or negative comment on efficiency	1 mark
… with a reason	1 mark
One method of improving the efficiency…	1 mark
… with an explanation	1 mark

Example answer:
Internal styles not efficient (for these pages)…
…duplication of effort to create and edit
Replace internal styles with an attached stylesheet…
…only have to edit the styles once

Question 8

Top left	beach image replaced text	1
Right cell	GTB logo replaced text	1
Row 3 left	Chef image replaced text	1
Row 4 left	Elephant image replaced text	1
Row 5 left	Boat image replaced text	1

Question 9

4 from:

Test <u>internal</u> links between pages

Test <u>internal</u> anchor/hyperlink works

Test mailto <u>opens</u> an <u>email</u> client

Test mailto has correct recipient (hothouse-design@cie.org.uk)

Test mailto has correct Subject line (Web design enquiry)

Test alt text works for each image

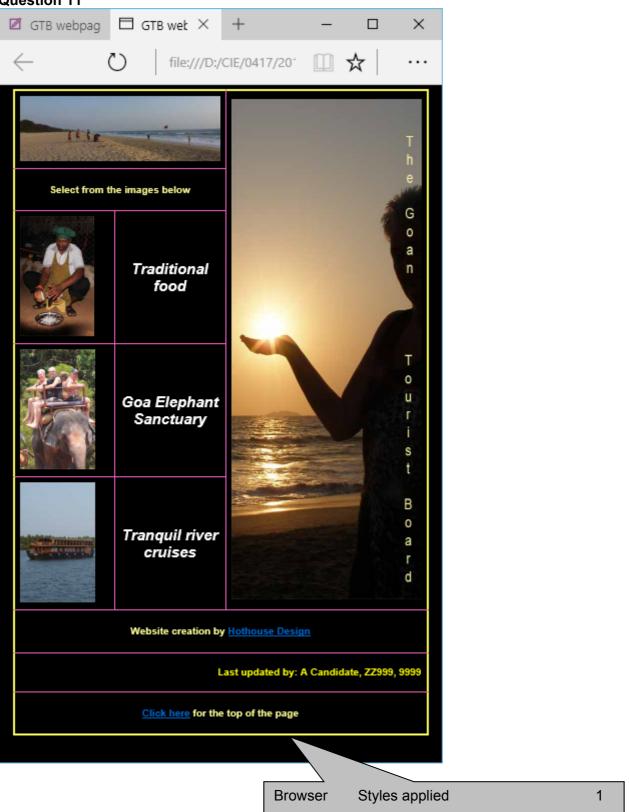Test link to GES opens in a new window

[Max 4]

Question 10

```
File  Edit  Format  View  Help
table,td        {border-style:solid;
                 padding:10px;
                 spacing:10px}

table           {border-color:#FFFF66;
                 border-collapse:collapse;
                 border-width:4px;}

td              {border-color:#FF66CC;
                 border-width:2px;}

ul              {list-style-type:square;}

/*by A Candidate, ZZ999, 9999*/
```

table,td {border-style:solid;	1
padding:10px;	1
spacing:10px}	1
table {border-color:#FFFF66;	1
border-collapse:collapse;	1
border-width:4px;}	1
td {border-color:#FF66CC;	1
border-width:2px;}	1
ul {list-style-type:square;}	1
Candidate details as a comment	1
Use of table, td for efficient syntax for border-style	1

Question 11

Browser   Styles applied   1

Question 11

```
<!DOCTYPE html>
<html lang="en">
  <head>
    <meta http-equiv="Content-Type" content="text/html; charset=utf-8"/>
    <style>
      body     {background-color:#000000;}
      h1,h2    {font-family:Helvetica,Arial,sans-serif;}
      h1
{color:#FFFFFF; font-style:italic; font-size:30px; text-align: center}
      h2,h3    {font-family:Helvetica, Arial, sans-serif; font-size:20px}
      h2        {color:#FFFF00; text-align: right}
      h3        {color:#FFFF99; text-align: center}
      table,td {border:0}
    </style>
    <link rel="stylesheet" href="nov163ss.css">
    <title>GTB webpage</title>
    <base target="_self">
 </head>
 <body>
    <a id="top"></a>
    <table style="margin-left:auto; margin-right:auto;">
     <tr style="height:130px;">
      <td colspan=2>
        <img src="163beach.jpg" alt="">
      </td>

      <td rowspan=5><img src="163logo.jpg" height=1000 width=380 alt="Logo
image for the Goan Tourist Board">
      </td>
     </tr>
     <tr style="height:80px;">
      <td colspan=2>
        <h3>Select from the images below</h3>
      </td>
     </tr>
     <tr style="height:240px;">
      <td>
        <img src="163img7.jpg" alt="">
      </td>
      <td>
        <h1>Traditional food</h1>
      </td>
     </tr>
     <tr style="height:240px;">
      <td>
        <a   href="nov163ges.htm"   target="_blank"><img   src="163img4.jpg"
alt=""></a>
      </td>
      <td style="width:200px;">
        <h1>Goa Elephant Sanctuary</h1>
      </td>
     </tr>
     <tr style="height:240px;">
      <td>
        <img src="163img6.jpg" alt="">
```

Annotations:

- nov163ss.css   in head after in-line styles   1
- base target = "_self"   1
  Placed in head section outside style tags   1
- Anchor   in body above table   1
- GTB logo   380 wide & 1000 high   1
  Appropriate ALT text   1
- Anchor   from Elephant image (163img4)   1
  href="nov163ges.htm"   1
  target="_blank"   1

```
    </td>
    <td>
      <h1>Tranquil river cruises</h1>
    </td>
  </tr>
  <tr>
    <td colspan=3>
      <h3>Website creation by <a href="mailto:hothouse-
design@cie.org.uk?subject=Web%20design%20enquiry">Hothouse Design</a></h3>
    </td>
  </tr>
  <tr>
    <td colspan=3>
      <h2>Last updated by: A Candidate, ZZ999, 9999</h2>
    </td>
  </tr>
  <tr>
    <td colspan=3>
      <h3><a href=#top>Click here</a> for the top of the page</h3>
    </td>
  </tr>
  </table>
 </body>
</html>
```

Hyperlink	From **Hothouse Design** only	1
	href="mailto:	1
	hothouse-design@cie.org.uk	1
	?subject=	1
	Web design enquiry"	1

| Hyperlink | From **Click here** only | 1 |
| | To internal anchor | 1 |

Question 24

Header - Automated filename with file path on right

D:\CIE\0417\2016\2016_11_0417_3\worked\163_ZZ999_9999.xlsx

4 new rows before row 1 — 1

Taluka
=VLOOKUP()	1
C6 as relative reference	1
External file '163taluka.csv'	1
!$A$2:$B$12 with abs ref	1
,2	1
,False or ,0	1

Number of rooms
=SUMIF()	1
$E$6:$E$24 must be abs ref	1
A27 must be relative ref	1
$F$6:$F$24 must be abs ref	1

C:\Users\Graham\Desktop\2016_11_0417_3\worked\a163_ZZ999_9999.xlsx

Rate

F3	Rate 100% correct	
F4	124.2	1

the Great Tourist Board

	E	F	G
2			
3		Rate	
4		124.2	
5	Location	Rooms	Advertising cost
6	=VLOOKUP(C6,'163taluka.csv'!$A$2:$C$12,3,0)	27	=$F$4*IF(F6<51,25,IF(F6<101,75,IF(F6<201,150,200)))
7	=VLOOKUP(C7,'163taluka.csv'!$A$2:$C$12,3,0)	25	=$F$4*IF(F7<51,25,IF(F7<101,75,IF(F7<201,150,200)))
8	=VLOOKUP(		(F8<51,25,IF(F8<101,75,IF(F8<201,150,200)))
9	=VLOOKUP(C		(F9<51,2 IF(F9<101,75,IF(F9<201,150,200)))
10	=VLOOKUP(C1		F(F10<51, IF(F10<101,75,IF(F10<201,150,200))
11	=VLOOKUP(C1		(F11<51, (F11<101,75,IF(F11<201,150,200))
12	=VLOOKUP(C1		F(F12<51, F12<101,75,IF(F12<201,150,200)))
13	=VLOOKUP(C13,'163taluka.csv'!$A$2:$C$12,3,0)	75	=$F$4*IF(F13<51, 3<101,75,IF(F13<201,150,200)))
14	=VLOOKUP(C14,'163taluka.csv'!$A$2:$C$12,3,0)	55	=$F$4*IF(F14<51, <101,75,IF(F14<201,150,200)))
15	=VLOOKUP(C15,'163taluka.csv'!$A$2:$C$12,3,0)	142	=$F$4*IF(F15<51, 101,75,IF(F15<201,150,200)))
16	=VLOOKUP(C16,'163taluka.csv'!$A$2:$C$12,3,0)	205	=$F$4*IF(F16<51, 1,75,IF(F16<201,150,200)))
17	=VLOOKUP(C17,'163taluka.csv'!$A$2:$C$12,3,0)	69	=$F$4*IF
18	=VLOOKUP(C18,'163taluka.csv'!$A$2:$C$12,3,0)	97	=$F$4*IF
19	=VLOOKUP(C19,'163taluka.csv'!$A$2:$C$12,3,0)	250	=$F$4*IF
20	=VLOOKUP(C20,'163taluka.csv'!$A$2:$C$12,3,0)	153	=$F$4*IF
21	=VLOOKUP(C21,'163taluka.csv'!$A$2:$C$12,3,0)	140	=$F$4*IF
22	=VLOOKUP(C22,'163taluka.csv'!$A$2:$C$12,3,0)	132	=$F$4*IF
23	=VLOOKUP(C23,'163taluka.csv'!$A$2:$C$12,3,0)	181	=$F$4*IF
24	=VLOOKUP(C24,'163taluka.csv'!$A$2:$C$12,3,0)	206	=$F$4*IF
25			
26			
27			

Location

=VLOOKUP(C6,)		1
External file	'163taluka.csv'	1
Correct range	!$A$2:$C$12 with abs ref	1
	,3,0	1

Advertising cost

=F4 multiplied by (for all instances)		1
as absolute cell reference		1
3 nested IFs…		1
…containing only relative cell references		1
IF(F6<51,25,)		1
IF(F6<101,75,)		1
IF(F6<201,150		1
,200)		1

Replication	All 4 formulae	1
Row and column headings present		1
Landscape & fully visible		1

Question 25

Cell A1
Text 100% accurate 1
White text, 36 point font 1
Black background 1
Sans-serif font 1
A1 to G1 merged & centre aligned 1
Heading fully visible (can be wrapped) 1

9999.xlsx

Hothouse Design costs for the Goan Tourist Board

Rows 5 and 26   Bold and underlined   1

Rate
₹ 124.20

Resort	Beach	Tcode	Taluka	Location	Rooms	Advertising cost
Living Room	Vagator	BRD	Bardez	North West	27	₹ 3,105.00
Sun Village	Anjuna	BRD	Bardez	North West	25	₹ 3,105.00
Marinha Dourada	Baga	BRD	Bardez	North West	206	₹ 24,840.00
Ronil Beach	Baga	BRD	Bardez	North West	24	₹ 3,105.00
Colonia Santa Maria	Baga	BRD	Bardez	North West	107	₹ 18,630.00
Santiago	Calangute	BRD	Bardez	North West	71	₹ 9,315.00
Silver Sands Holiday Village	Candolim	BRD	Bardez	North West	99	₹ 9,315.00
The O resort and spa	Candolim	BRD	Bardez	North West	75	₹ 9,315.00
Aldia Santa Rita	Candolim	BRD	Bardez	North West	55	₹ 9,315.00
Vivanta by Taj-Fort Aguada	Candolim	BRD	Bardez	North West	142	₹ 18,630.00
Cidade de Goa	Vainguinim	TSW	Tiswadi	West	205	₹ 24,840.00
Sandalwood Hotel and Retreat	Vainguinim	TSW	Tiswadi	West	69	₹ 9,315.00
Heritage Village	Arossim	MGM	Mormugao	West	97	₹ 9,315.00
Park Hyatt	Utorda	MGM	Mormugao	West	250	₹ 24,840.00
Alila Diwa	Utorda	SLC	Salcete	West	153	₹ 18,630.00
Taj Exotica	Benaulim	SLC	Salcete	West	140	₹ 18,630.00
Radisson Blu	Cavelossim	SLC	Salcete	West	132	₹ 18,630.00
Dona Sylvia	Cavelossim	SLC	Salcete	West	181	₹ 18,630.00
Leela Kempinski	Cavelossim	SLC	Salcete	West	206	₹ 24,840.00

Number of rooms by Location

Central	0
East	0
North	0
North East	0
North West	831
South	0
South West	0
West	1433

Format   Rate & Advertising cost in rupees 2dp   1
Printout   Single portrait page & fully visible   1

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Question 27

C:\Users\Graham\Desktop\2016_11_0417_3\worked\a163_ZZ999_9999.xlsx

Hothouse Design costs for the Goan Tourist Board

Rate
₹ 124.20

Resort	Beach	Tcode	Taluka	Location	Rooms	Advertising cost
Living Room	Vagator	BRD	Bardez	North West	27	₹ 3,105.00
Sun Village	Anjuna	BRD	Bardez	North West	75	₹ 9,315.00
Marinha Dourada	Baga	BRD	Bardez	North West	206	₹ 24,840.00
Ronil Beach	Baga	BRD	Bardez	North	24	₹ 3,105.00
Colonia Santa Maria	Baga	BRD	Bardez	West	107	₹ 18,630.00
Santiago					71	₹ 9,315.00
Silver Sands Holiday V					99	₹ 9,315.00
The O resort and spa	Candolim	BRD	Bardez	North West	75	₹ 9,315.00
Aldia Santa Rita	Candolim	BRD	Bardez	North West	55	₹ 9,315.00
Vivanta by Taj-Fort Aguada	Candolim	BRD	Bardez	North West	142	₹ 18,630.00
Cidade de Goa	Vainguinim	TSW	Tiswadi	West	205	₹ 24,840.00
Sandalwood Hotel and Retreat	Vainguinim	TSW	Tiswadi	West	69	₹ 9,315.00
Heritage Village	Arossim	MGM	Mormugao	West	97	₹ 9,315.00
Park Hyatt	Utorda	MGM	Mormugao	West	250	₹ 24,840.00
Alila Diwa	Utorda	SLC	Salcete	West	153	₹ 18,630.00
Taj Exotica	Benaulim	SLC	Salcete	West	140	₹ 18,630.00
Radisson Blu	Cavelossim	SLC	Salcete	West	132	₹ 18,630.00
Dona Sylvia	Cavelossim	SLC	Salcete	West	181	₹ 18,630.00
Leela Kempinski	Cavelossim	SLC	Salcete	West	206	₹ 24,840.00

Sun Village   Data changed to 75 rooms   1
Printout   Single portrait page & fully visible   1

Number of rooms by Location

Central	0
East	0
North	0
North East	0
North West	881
South	0
South West	0
West	1433