Cambridge Assessment
International Education

Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY   **0417/03**

Paper 3 Data Analysis and Website Authoring   **For examination from 2020**

MARK SCHEME

Maximum Mark: 80

Specimen

This document has **14** pages. Blank pages are indicated.

Generic Marking Principles

These general marking principles must be applied by all examiners when marking candidate answers. They should be applied alongside the specific content of the mark scheme or generic level descriptors for a question. Each question paper and mark scheme will also comply with these marking principles.

GENERIC MARKING PRINCIPLE 1: Marks must be awarded in line with: •   the specific content of the mark scheme or the generic level descriptors for the question •   the specific skills defined in the mark scheme or in the generic level descriptors for the question •   the standard of response required by a candidate as exemplified by the standardisation scripts.
GENERIC MARKING PRINCIPLE 2: Marks awarded are always **whole marks** (not half marks, or other fractions).
GENERIC MARKING PRINCIPLE 3: Marks must be awarded **positively**: •   marks are awarded for correct/valid answers, as defined in the mark scheme. However, credit is given for valid answers which go beyond the scope of the syllabus and mark scheme, referring to your Team Leader as appropriate •   marks are awarded when candidates clearly demonstrate what they know and can do •   marks are not deducted for errors •   marks are not deducted for omissions •   answers should only be judged on the quality of spelling, punctuation and grammar when these features are specifically assessed by the question as indicated by the mark scheme. The meaning, however, should be unambiguous.
GENERIC MARKING PRINCIPLE 4: Rules must be applied consistently e.g. in situations where candidates have not followed instructions or in the application of generic level descriptors.
GENERIC MARKING PRINCIPLE 5: Marks should be awarded using the full range of marks defined in the mark scheme for the question (however; the use of the full mark range may be limited according to the quality of the candidate responses seen).
GENERIC MARKING PRINCIPLE 6: Marks awarded are based solely on the requirements as defined in the mark scheme. Marks should not be awarded with grade thresholds or grade descriptors in mind.

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Task	Answer	Marks
1		

Task	Answer	Marks
2	Please see below for allocation of marks.	**52**

Task	Answer	Marks
3	Please see below for allocation of marks.	**28**

Printout 1 – TTSsales formula view

Name and details centred in the header   1 mark
Text Branch inserted in E1   1 mark

Name, centre number, candidate number

	A	B	C	D	E
1	Given_name	Family_name	Branch Code	Sales ($)	Branch
2	Eve	Kelly	Al	491000	=VLOOKUP(C2,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
3	Jade	Hobbs	Al	489000	=VLOOKUP(C3,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
4	Yasmin	Talbot	Al	462000	=VLOOKUP(C4,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
5	Charlotte	Hyde	Al	431000	=VLOOKUP(C5,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
6	Tyler	Skinner	Al	320000	=VLOOKUP(C6,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
7	Hollie	Harrison	Al	223000	=VLOOKUP(C7,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
8	Aaliyah	Kennedy	Al	204000	=VLOOKUP(C8,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
9	Aurturo	Conseca	Al	2000	=VLOOKUP(C9,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
10	Georgia	Henry	Al	1	=VLOOKUP(C10,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
11	Bailey	Poole	Al	0	=VLOOKUP(C11,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
12	Luke	Vincent	Al	000	=VLOOKUP(C12,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
13	Freddie	Doyle			12,2,0)
14	Evie	Barber			12,2,0)
15	Rhys	Mannin			12,2,0)
16	Tilly	Pollard			12,2,0)
17	Bedia	Benjam			12,2,0)
18	Iddo	Raas			12,2,0)
19	Irmgard	Nieboe			12,2,0)
20	Jobbe	Henken			12,2,0)
21	Antsje	Gerrits			12,2,0)
22	Ayman	Wuite	Am	341000	=VLOOKUP(C22,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
23	Saman	Breebaart	Am	326000	=VLOOKUP(C23,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
24	Doede	Ruitenberg	Am	313000	=VLOOKUP(C24,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
25	Sabria	Norbart	Am	282000	=VLOOKUP(C25,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
26	Ermin	Finke	Am	267000	=VLOOKUP(C26,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
27	Dima	Beaumont	Am	256000	=VLOOKUP(C27,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
28	Charina	Stam	Am	236000	=VLOOKUP(C28,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
29	Gulsum	Stoutjesdijk	Am	236000	=VLOOKUP(C29,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
30	Kalina	Daalhuizen	Am	232000	=VLOOKUP(C30,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
31	Jihan	Oosterwijk	Am	197000	=VLOOKUP(C31,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
32	Anne-Claire	Greuter	Am	195000	=VLOOKUP(C32,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)
33	Benji	Tesselaar	Am	181000	=VLOOKUP(C33,[TTSanalysis.xlsx]TTSbranches!$A$3:$B$12,2,0)

VLOOKUP() function used   1 Mark
Lookup_value   C2 used   1 Mark
Table_array   TTSanalysis $A$3:$B$12 used   1 Mark
Index_number, 2 used   1 Mark
False parameter included   1 Mark
Printout only Amsterdam – Almere and complete   1 Mark
Landscape orientation   row and column headings shown   1 Mark
All contents visible   1 Mark

Printout 2 – TTSsales values

Lorna	Calabrese	Na	483000	Naples
Natalino	Pagnotto	Na	467000	Naples
Curzio	Baresi	Na	466000	Naples
Gualtiero	Lombardo	Na	405000	Naples
Speranza	Nucci	Na	398000	Naples
Corrado	Lori	Na	388000	Naples
Tranquillo	Ferri	Na	372000	Naples
Wanda	Greece	Na	340000	Naples
Immacolata	Endrizzi	Na	309000	Naples
Cinzia	Padovesi	Na	293000	Naples
Livia	Barese	Na	292000	Naples
Rosina	Cattaneo	Na	261000	Naples
Natascia	Folliero	Na	109000	Naples
Nino	De Luca	Na	105000	Naples
Assunta	Toscani	Na	85000	Naples
Mohammad	Fleming	Po	501200	Porto
Hannah	Matthews	Po	490000	Porto
Sophie	Smart	Po	490000	Porto
Lydia	Humphreys	Po	399000	Porto
Daisy	Carr	Po	398000	Porto
Ryan	Khan	Po	292000	Porto
Sienna	Collins	Po	209000	Porto
Abigail	Coles	Po	49000	Porto

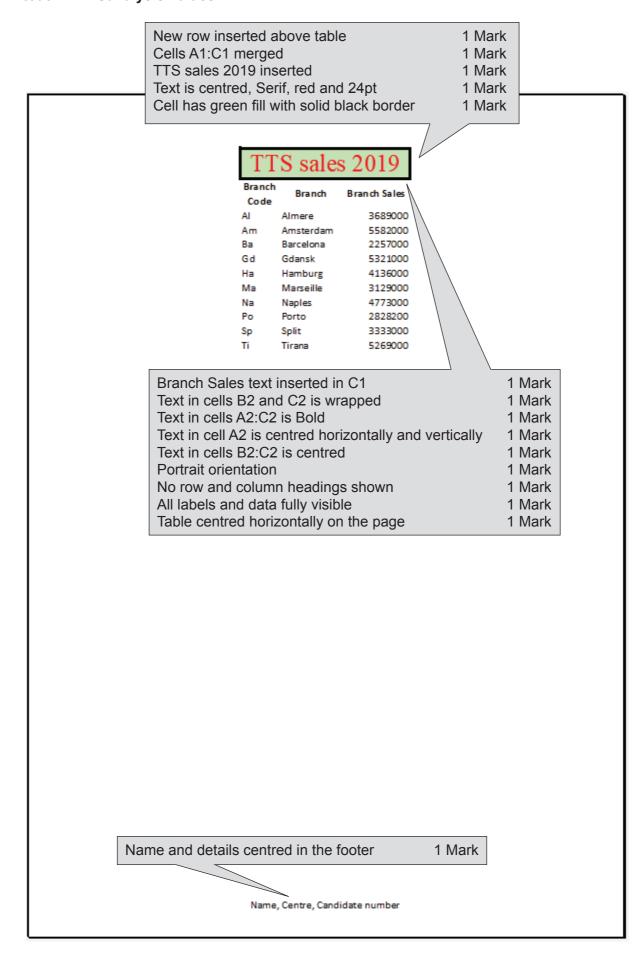|	
Data in Branch order – values shown	1 Mark
Sales descending order in Branch	1 Mark
Printout only Naples – Porto	1 Mark
Portrait orientation, no row or column headings shown	1 Mark
All contents visible	1 Mark

Printout 3 – TTSanalysis – Formulae

	A	B	C
1		**TTS sales 2019**	
2	**Branch Code**	**Branch**	**Branch Sales**
3	Al	Almere	=SUM([TTSsales.xlsx]TTSstaff!$D$2:$D$16)
4	Am	Amsterdam	=SUM([TTSsales.xlsx]TTSstaff!$D$17:$D$36)
5	Ba	Barcelona	=SUM([TTSsales.xlsx]TTSstaff!$D$37:$D$45)
6	Gd	Gdansk	=SUM([TTSsales.xlsx]TTSstaff!$D$46:$D$65)
7	Ha	Hamburg	=SUM([TTSsales.xlsx]TTSstaff!$D$66:$D$79)
8	Ma	Marseille	=SUM([TTSsales.xlsx]TTSstaff!$D$80:$D$94)
9	Na	Naples	=SUM([TTSsales.xlsx]TTSstaff!$D$95:$D$109)
10	Po	Porto	=SUM([TTSsales.xlsx]TTSstaff!$D$110:$D$117)
11	Sp	Split	=SUM([TTSsales.xlsx]TTSstaff!$D$118:$D$129)
12	Ti	Tirana	=SUM([TTSsales.xlsx]TTSstaff!$D$130:$D$146)
13			

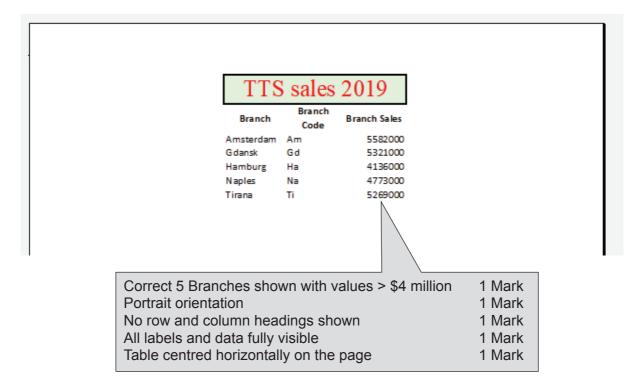|	
Branches in ascending order and data integrity maintained	1 Mark
SUM() function used	1 Mark
Contiguous ranges within TTSsales D2:D146	1 Mark
Landscape orientation with row and column headings shown	1 Mark
All labels and data fully visible	1 Mark

Printout 4 – TTSanalysis Values

New row inserted above table	1 Mark
Cells A1:C1 merged	1 Mark
TTS sales 2019 inserted	1 Mark
Text is centred, Serif, red and 24pt	1 Mark
Cell has green fill with solid black border	1 Mark

TTS sales 2019

Branch Code	Branch	Branch Sales
Al	Almere	3689000
Am	Amsterdam	5582000
Ba	Barcelona	2257000
Gd	Gdansk	5321000
Ha	Hamburg	4136000
Ma	Marseille	3129000
Na	Naples	4773000
Po	Porto	2828200
Sp	Split	3333000
Ti	Tirana	5269000

Branch Sales text inserted in C1	1 Mark
Text in cells B2 and C2 is wrapped	1 Mark
Text in cells A2:C2 is Bold	1 Mark
Text in cell A2 is centred horizontally and vertically	1 Mark
Text in cells B2:C2 is centred	1 Mark
Portrait orientation	1 Mark
No row and column headings shown	1 Mark
All labels and data fully visible	1 Mark
Table centred horizontally on the page	1 Mark

Name and details centred in the footer	1 Mark

Name, Centre, Candidate number

Printout 5 – TTSanalysis Extract

TTS sales 2019

Branch	Branch Code	Branch Sales
Amsterdam	Am	5582000
Gdansk	Gd	5321000
Hamburg	Ha	4136000
Naples	Na	4773000
Tirana	Ti	5269000

Correct 5 Branches shown with values > $4 million	1 Mark
Portrait orientation	1 Mark
No row and column headings shown	1 Mark
All labels and data fully visible	1 Mark
Table centred horizontally on the page	1 Mark

Printout 6 – TTSanalysis Chart

Only the chart is shown, all branches shown, values match the data 1 Mark
Y axis labelled as Total Sales value or equivalent 1 Mark
X axis uses Branch names 1 Mark
X axis title labelled as TTS Branches or equivalent 1 Mark
Chart title includes TTS Branch Sales 2019 1 Mark

Printout 7 – TTSanalysis – Target Sales formulae

	A	B	C	D
1			TTS sales 2019	
2	**Branch Code**	**Branch**	**Branch Sales**	**Target Sales**
3	Al	Almere	=SUM([TTSsales.xlsx]TTSstaff!$D$2:$D$16)	=C3*125%
4	Am	Amsterdam	=SUM([TTSsales.xlsx]TTSstaff!$D$17:$D$36)	=C4*125%
5	Ba	Barcelona	=SUM([TTSsales.xlsx]TTSstaff!$D$37:$D$45)	=C5*125%
6	Gd	Gdansk	=SUM([TTSsales.xlsx]TTSstaff!$D$46:$D$65)	=C6*125%
7	Ha	Hamburg	=SUM([TTSsales.xlsx]TTSstaff!$D$66:$D$79)	=C7*125%
8	Ma	Marseille	=SUM([TTSsales.xlsx]TTSstaff!$D$80:$D$94)	=C8*125%
9	Na	Naples	=SUM([TTSsales.xlsx]TTSstaff!$D$95:$D$109)	=C9*125%
10	Po	Porto	=SUM([TTSsales.xlsx]TTSstaff!$D$110:$D$117)	=C10*125%
11	Sp	Split	=SUM([TTSsales.xlsx]TTSstaff!$D$118:$D$129)	=C11*125%
12	Ti	Tirana	=SUM([TTSsales.xlsx]TTSstaff!$D$130:$D$146)	=C12*125%
13		**Total Sales**	=SUM(C3:C12)	=C13*125%

SUM(C3:C12) in cell C13	1 Mark
Target Sales formula +25% or equivalent	1 Mark
Formula replicated for branches	1 Mark
Landscape, row and column headings shown	1 Mark
All data and labels fully visible	1 Mark

Printout 8 – TTSanalysis – Target Sales values

TTS sales 2019

Branch	Branch Code	Branch Sales	Target Sales
Amsterdam	Am	5582000	6977500
Antwerp	An	3689000	4611250
Barcelona	Ba	2257000	2821250
Gdansk	Gd	5321000	6651250
Hamburg	Ha	4136000	5170000
Marseille	Ma	3129000	3911250
Naples	Na	4773000	5966250
Porto	Po	2828200	3535250
Split	Sp	3333000	4166250
Tirana	Ti	5269000	6586250
	Total Sales	40317200	50396500

Total Sales label in Bold in cell C13
Value in D13 in Bold   1 Mark

Portrait, no row and column headings shown
All data and labels fully visible   1 Mark

Evidence 1 – cropped image

Banner Image shown	1 Mark
Correct proportions	1 Mark

Evidence 2 – TTSstyle.css

body { background-image: url("Wallpaper.png");}
table {width:600px; margin-left:auto; margin-right:auto; border-style:none; }
td {padding: 10px; border-style:none;}
h1,h2,h3,li{font-family:Arial,Calibri,sans-serif;}
h1,h2 {color:red;}
h1 {font-size:36pt; text-align:center;}
h2 {font-size:24pt; text-align:left;}
h3,li {color:blue; font-size:14pt; text-align:justify;}

Stylesheet		
background-image	url(Wallpaper.png) image repeated or default used	1 Mark
table	width:600px	1 Mark
	Margin-left/right: Auto	1 Mark
	border-style: none	1 Mark
td	padding:10px	1 Mark
	border-style:none	1 Mark
h1, h2, h3, li	Combined for font-family:	1 Mark
	Arial, Calibri, Sans-Serif	1 Mark
h1, h2	Combined for color: red	1 Mark
h1	36pt text align: center	1 Mark
h2	24pt text align: left	1 Mark
h3, li	Combined for color, font-size, text-align	1 Mark
	blue, 14pt, justify	

Evidence 3 – TTShomepage.html Source

```
<!DOCTYPE html>
<html>
 <head>
<meta charset="UTF-8">
<link rel="stylesheet" href="TTSstyle_9999.css">
 </head>
<body>
 <table>
  <tr>
   <td colspan="2"> <img src="TTSBanner.jpg" alt="banner"></td>
  </tr>
  <tr>
   <td colspan="2"><h1>How we can support you</h1></td>
  </tr>
  <tr>
   <td rowspan="2"> <img src="TTSOffer.png" alt="offer" ></td>
    <td><h3>We use proven systems built in accordance with industry compliance and best practice to
provide tailored support.
     We can guarantee great customer service and prompt resolution of your ICT issues and
requests.</h3></td>
  </tr>
  <tr>
   <td><h2>We can:</h2>
     <ul>
       <li> scan your networks for problems</li>
       <li> secure your backups</li>
       <li> maintain your website</li>
       <li> manage your security, anti-virus, anti-spam needs</li>
       <li> handle your software licensing and manage all scheduled updates and patches.</li>
     </ul>
   </td>
  </tr>
  <tr>
   <td><h3>Click <a href="mailto:info@tawaratechnology.com?subject=Support enquiry">here</a> to
contact us.</h3></td>
   <td><h3>Website maintained by: Name, centre number, candidate number</h3></td>
  </tr>
</table>
</body>
</html>
```

TTSstyle.css correctly attached in <head>　　　1 Mark

<a href="mailto: used	1 Mark
info@tawaratechnology.com shown	1 Mark
?subject= Support enquiry">	1 Mark

hyperlink from text **>here** only	1 Mark
Name etc. inserted	1 Mark

Evidence 4 – TTShomepage.html Browser view

Browser view

Wallpaper applied as background	1 Mark
Correct table structure	1 Mark
How we can … set as h1, We can: set as h2	1 Mark
TTSOffer image shown in correct place	1 Mark
Text1 set in h2	1 Mark
Correct text2 set as bulleted list	1 Mark
Correct text: Click here to contact us.	
Website maintained by: Name, centre number etc.	1 Mark
Set in h3	1 Mark

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