# Cambridge IGCSE™ (9–1)

**INFORMATION AND COMMUNICATION TECHNOLOGY** **0983/03**

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.

**[Turn over**

**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:<br><br>Marks must be awarded in line with:<br><br>• the specific content of the mark scheme or the generic level descriptors for the question<br>• the specific skills defined in the mark scheme or in the generic level descriptors for the question<br>• the standard of response required by a candidate as exemplified by the standardisation scripts. |
| GENERIC MARKING PRINCIPLE 2:<br><br>Marks awarded are always **whole marks** (not half marks, or other fractions). |
| GENERIC MARKING PRINCIPLE 3:<br><br>Marks must be awarded **positively**:<br><br>• 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<br>• marks are awarded when candidates clearly demonstrate what they know and can do<br>• marks are not deducted for errors<br>• marks are not deducted for omissions<br>• 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:<br><br>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:<br><br>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:<br><br>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. |

| 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$12,2,0) |
| 13 | Freddie | Doyle | | | …12,2,0) |
| 14 | Evie | Barber | | | …12,2,0) |
| 15 | Rhys | Mannin | | | …12,2,0) |
| 16 | Tilly | Pollard | | | …12,2,0) |
| 17 | Bedia | Benjam | | | …12,2,0) |
| 18 | Iddo | Raas | | | …12,2,0) |
| 19 | Irmgard | Nieboe | | | …12,2,0) |
| 20 | Jobbe | Henken | | | …12,2,0) |
| 21 | Antsje | Gerrits | | | …12,2,0) |
| 22 | Ayman | Wulte | Am | 341000 | =VLOOKUP(C22,[TTSanalysis.xlsx]TTSbranches!$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$1 2 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**
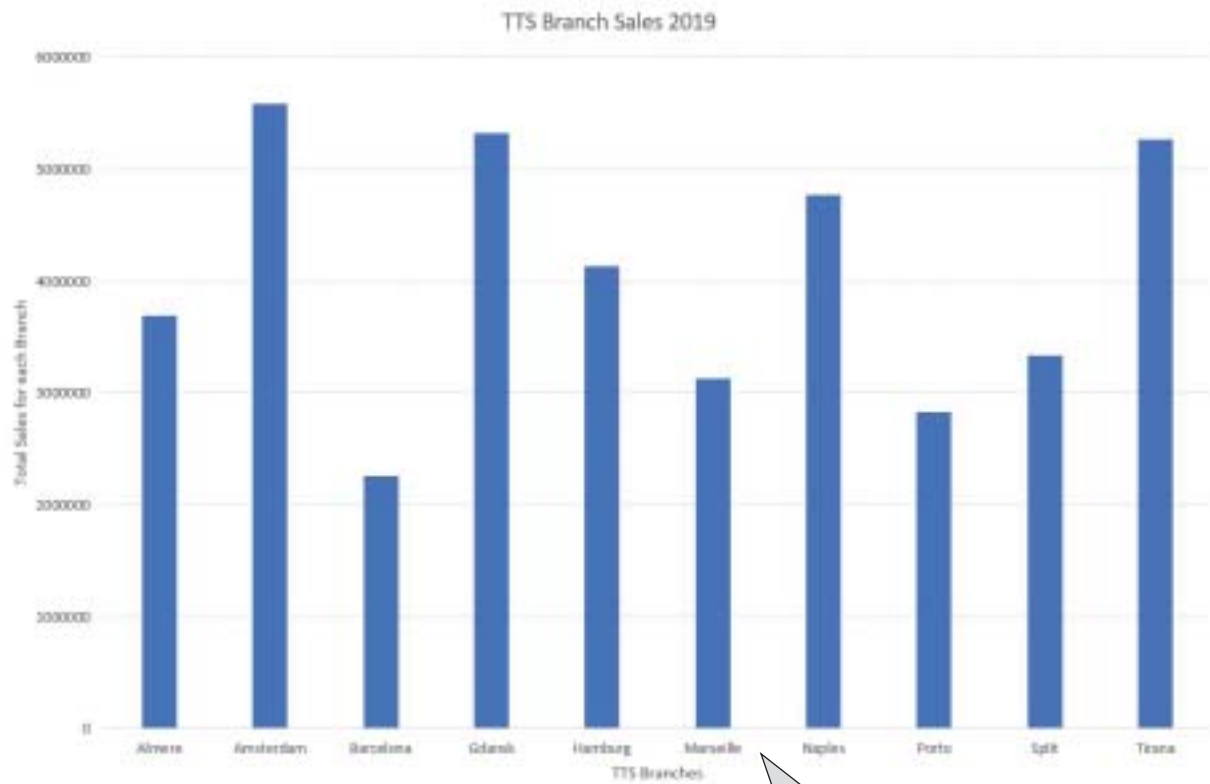


| | |
|---|---|
| Only the chart is shown, all branches shown, values match the data | 1 Mark |
| Y axis labelled as Total Sales value or equivalent | 1 Mark |
| X axis uses Branch names | 1 Mark |
| X axis title labelled as TTS Branches or equivalent | 1 Mark |
| Chart title includes TTS Branch Sales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

Annotations:

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</a>** 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 |

**BLANK PAGE**