## MARK SCHEME

Maximum Mark: 110

## 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.

Cambridge will not enter into discussions about these mark schemes.
Cambridge is publishing the mark schemes for the May/June 2017 series for most Cambridge IGCSE ${ }^{\circledR}$, Cambridge International A and AS Level and Cambridge Pre-U components, and some Cambridge O Level components.

## Task 1a



| 2 | Given_name | Family name | email |
| :---: | :---: | :---: | :---: |
| 3 | Evie | Barber | =LOWER(LEFT(A3,1)\&"."\&B3\&"@tts.com") |
| 4 | Aurturo | Conseca | =LOWER(LEFT(A4,1)\&"."\&B4\&"@tts.com") |


| 1b |  |
| :--- | :---: |
| Left (A3,1) | 1 |
| \&"."\& | 1 |
| B3 | 1 |
| \&"@tts.com" | 1 |
| Lower() | 1 |
| $\mathbf{5}$ |  |

1c
Describe the problem with generating the email addresses
Duplicates can be generated
[1]
Describe a method to automatically detect this problem
Use conditional formatting and highlight duplicate values Any valid

Give an example of an email address that is affected.

| Rhys | Manning | r.manning@tts.com |
| :--- | :--- | :--- |
| Roger | Manning | r.manning@tts.com |

Suggest a method of correcting this address
Manually change address by adding a number or a letter

Place screenshots of the corrected email addresses.

| 30 | Roger | Manning | ro.manning@tts.com |  |
| :--- | :--- | :--- | :--- | :--- |
| 13 | Rhys | Manning | r.manning@tts.com |  |
| 107 | Hatas | Imre | h.imre@tt.com |  |
| 120 | Hajnalka | Imre | hj.imre@tt.com |  |

[3]


1d

| 2 | Given name | Family | mail | Em | I | Pay scale, Branch code |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | Evie | Barber | le.barberetts com | 12914 |  | Ca |  |
| 4 | Aurturo | Conseca | a.consecaetts.co | 4300 |  | B1 | 32 |


| 1d |  |  |
| :--- | :--- | :--- |
| Upper() | 1 |  |
| Left (A3,1) | 1 |  |
| \&Left(B3,2) | 1 |  |
| \&D3\& | 1 |  |
| TEXT() or | Nested IF() | 1 |
| G3 | (and Works) | 1 |
| ,"000" | (max 2/3) | 1 |
| $\mathbf{7}$ |  |  |

1e

Pay
$=\mathrm{VLOOKUP}(\operatorname{LEFT}(F 3,1)$,TTSPay_Scales.x|sx|\$A\$2:\$J\$8,MATCH(VALUE(RIGHT(F3,1)),TTSPay_Scales.xlsx|\$A\$2:\$J\$2,0),0)

| 1e |  |
| :--- | :--- |
| Vlookup() | 1 |
| Left(F3,1) | 1 |
| Full Range | 1 |
| Final ,0 | 1 |
| $\mathbf{4}$ |  |


| $\mathbf{1 e}$ |  |
| :--- | :--- |
| Match() | 1 |
| Right() | 1 |
| (F3,1) | 1 |
| Range Top row | 1 |
| , 0 | 1 |
| $\mathbf{5}$ |  |


| d | A | 8 | C | D | E | $F$ | 6 | H | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Given_name | Farnily_name | email | Employment number | Payroll number | Day Scale | Branch Code | Branch | Pay |
| 2 | Evie | Barber | c.barber (i)tts.com | 2914 | EBA 2914032 | C3 | 32 | Antwerp | C28,400 |
| 3 | Aurturo | Conseca | a.consecajotts.com | 4300 | ACO4300032 | B1 | 32 | Antwerp | C26,000 |

1e
Euros \& 0 d.p.

| 2 | Given | Family ${ }^{-}$ | Email | Employ- ${ }^{\text {- }}$ | Payroll m |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12 | Joel | Knight | I knightetts.com | 9875 | JKN9875C |
| 59 | Harumi | Valencia | h.valencia@tts.com | 4440 | HVA4440 |
| 105 | Endre | Mekek | e.mekek@tts.com | 7395 | EME7395 |

## 1f

Filter out Es (no deletion) 1

| Antwerp Total | $=$ SUBTOTAL(109,13:119) |
| :--- | :--- |
| Antwerp Average | $=$ SUBTOTAL( $101,13: 19)$ |
| Antwerp Total | $=$ =SUBTOTAL $(9,13: 119)$ |
| Antwerp Average | $=$ SUBTOTAL( $1,13: 119)$ |


| 1f |  |
| :--- | :--- |
| Efficient subtotal formula | 1 |
| Efficient averages | 1 |
| Correct Subtotals | 1 |
| Correct averages | 1 |
| All branches subtotalled | 1 |
| $\mathbf{5}$ |  |


| Antwerp Total | $€$ | 452,100 |
| :--- | :--- | ---: |
| Antwerp Average | $€$ | 28,256 |
| Marseille Total | $€$ | 456,300 |
| Marseille Average | $€$ | 28,519 |
| Porto Total | $€$ | 270,700 |
| Porto Average | $€$ | 30,078 |
| Barcelona Total | $€$ | 289,800 |
| Barcelona Average | $€$ | 28,980 |
| Gdansk Total | $€$ | 559,700 |
| Gdansk Average | $€$ | 27,985 |
| Naples Total | $€$ | 451,100 |
| Naples Average | $€$ | 30,073 |
| Split Total | $€$ | 322,400 |
| Split Average | $€$ | 29,309 |
| Tirana Total | $€$ | 484,300 |
| Tirana Average | $€$ | 28,488 |
| Amsterdam Total | $€$ | 584,500 |
| Amsterdam Average | $€$ | 29,225 |
| Hamburg Total | $€$ | 392,700 |
| Hamburg Average | $€$ | 28,050 |

1g

| Total Day | Anteserp | -TTSMarge2.xtsx 1 \|1519 |
| :---: | :---: | :---: |
|  | Marseille | -TTSMerge2.xtar1 11537 |
|  | Porto | -TTSMAerge2.xdar\|\$1548 |
|  | Aarcelona | -TTSM/arge2.xdsal\$1561 |
|  | Gdansk | -TTSMArge2.aski\$1583 |
|  | Naples | -TTSMArge2.absalin09 |
|  | Split | -TTSMerge2.xastill4 |
|  | Tirana | -TTSMergez.xtalin3 |
|  | Amsterdam | -TTMEerge2.xtsiliss |
|  | Hamburg | -fTMMergez.xisxilin |
| Average Pay | Antaerp | artimerge2.xtsx 151520 |
|  | Marseille |  |
|  | Porto | afTSMerge2.xisx 11549 |
|  | Barcelona | artsMergee2.xtsr 1 \$1562 |
|  | Gdansk | afTSMerge2.xtalisise4 |
|  | Naples | -TTSMerge2.alsatiliol |
|  | Split | -TTSMerge2.xtallilis |
|  | Tirana | -TTSM Arge 2 .xisalil3 |
|  | Ansterdam | -TTSMArge2.xdstilis6 |
|  | Hamburg | -TTSMarge2.atseliliz |


| $\mathbf{1 g}$ |  |
| :--- | :---: |
| All branch totals shown | 1 |
| Branches Total linked to TTSMerge | 1 |
| All branch averages shown | 1 |
| Branches Averages linked to TTSMerge | 1 |
| $\mathbf{4}$ |  |

1h

| $\mathbf{~} \mathbf{h}$ |  |
| :--- | :--- |
| Total Bars | 1 |
| Average bars | 1 |
| Average data labels | 1 |
| Appropriate title | 1 |
| Appropriate axes labelled | 1 |
| Appropriate legend | 1 |
| $\mathbf{6}$ |  |

Branch pay excluding executives


## Task 1i

What is the difference between a spreadsheet function and a spreadsheet formula?
A function is a built in calculation or operation
A formula is entered by a user and may consist of several functions and operations

Give an example of each from your TTSMerge file.

| Example of a function: $=\operatorname{SUBTOTAL}(109,13: 119)$ - any valid |
| :--- |
| Example of a formula: $=\operatorname{LOWER}(\operatorname{LEFT}(\mathrm{A} 3,1) \& " . " \& B 3 \& " @ t t s . c o m ")$ - any valid |

Task 2

| 16:19-1280 $\times 720$ | 1 | Jan-18 Caption | 1 | Leaves clip | 1 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Correct transitions | 1 | 2 secs | 1 | Trimmed | 1 |
| Title clip | 1 | Same position | 1 | 5secs | 1 |
| 4 secs | 1 | Both White | 1 | A chance to ....Caption | 1 |
| Protecting Nature Caption | 1 | Both 48pt | 1 | Same font | 1 |
| 2 secs | 1 | Both Sans-Serif | 1 | Same position | 1 |
| Centred | 1 |  |  |  |  |
| Flowers clip | 1 | Bee clip | 1 | January 2018 caption | 1 |
| Trimmed | 1 | Correct trim | 1 | Remainder of clip | 1 |
| 7 secs | 1 | London Caption | 1 | Black | 1 |
| An international...Caption | 1 | After 1 sec | 1 | Same font - 48pt | 1 |
| Same font | 1 | 3 secs | 1 | Position(Both) | 1 |
| Same position | 1 |  |  |  |  |
|  |  |  |  |  | 35 |



## Task 3


(c) Inaelar Standinitert $\qquad$ OEnd ef cangh
Adepatar


| Soundtrack saved as Soundtrack128.mp3 at 128kbs | 1 |
| :--- | :--- |
| Soundtrack added to movie | 1 |

[2]

Task 3b

| Enter the size of the DoveCall128.mp3 file | 27 KB |
| :--- | :--- |
| Enter the size of the DoveCall256.mp3 file | 54 KB |
| Enter the size of the DoveCall.wav file | $140 K B$ |

Explain the difference in these file sizes.
DoveCall128.mp3 is a compressed file exported with a bit rate of 128 kbps .
DoveCall256.mp3 is a compressed file exported with a higher bit rate so more data is saved and the file is bigger.

DoveCall.wav is the original unprocessed recording so all the data is saved resulting in the biggest file size.

Give an advantage of each of the two file types.
All the data is preserved in a WAV file so processing can be carried out on the original recording.
.MP3 files are compressed so file sizes are smaller.

