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Cambridge Assessment International Education

Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY **0417/31**

Paper 3 Spreadsheets and Website Authoring **February/March 2023**

2 hours 15 minutes

You will need: Candidate source files (listed on page 2)

INSTRUCTIONS

- Carry out **all** instructions in each step.
- Enter your name, centre number and candidate number on every printout before it is sent to the printer.
- Printouts with handwritten candidate details will **not** be marked.
- At the end of the examination, put all your printouts into the Assessment Record Folder.
- If you have produced rough copies of printouts, put a cross through each one to indicate that it is **not** the copy to be marked.
- You must **not** have access to either the internet or any email system during this examination.

INFORMATION

- The total mark for this paper is 70.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **8** pages.

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[Turn over

You have been supplied with the following source files:

m23bat.jpg
m23batting.csv
m23logo.jpg
m23tcc.htm
m23text.txt

Task 1 – Evidence Document

Create a new word-processed document.

Make sure your name, centre number and candidate number will appear on every page of this document.

Save this document in your work area as **m23evidence_** followed by your centre number_candidate number, for example, m23evidence_ZZ999_9999

You will use this as your Evidence Document during the examination.

Task 2 – Spreadsheet

The Tawara Cricket Club records on a spreadsheet the number of runs scored by each player in each match that they played.

1 Open and examine the file **m23batting.csv** in your spreadsheet software.

Delete row 2.

Insert a new row at the top of the spreadsheet.

Merge cells A1 to V1. Place the text **Tawara Cricket Club** in this merged cell.

Merge cells A2 to V2.

Place in the footer, right aligned, the text **Spreadsheet edited by** followed by a space, your name, centre number and candidate number.

Save this as a spreadsheet with the file name **m23cricket_**centre number _candidate number, for example, m23cricket_ZZ999_9999

[5]

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2 Format the spreadsheet to look like this.

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	Tawara Cricket Club																					
2	First team batting statistics																					
3	Name	Match 1	Match 2	Match 3	Match 4	Match 5	Match 6	Match 7	Match 8	Match 9	Match 10	Match 11	Match 12	Match 13	Match 14	Match 15	Match 16	Match 17		Not out	Number of matches played	Average score
4	Wilfred Hook	22	73		79	17		84	104	73				37			86			2		
5	Haunar Singh	17	82	25		85					88		107		38	105						
6	Ishir Singh	92	5		39		8	90		82		36	74	57			33			3		
7	Ikshit Rupesinga	2		41		71					87	54		83	71	58		59		1		
8	Ishaan Singh	0			94			79														
9	Harbajan Singh	18	18			71			67	54	10		32		100	110	54					
10	Arnav Singh	0	100		100		40		102		23	12		81				49		1		
11	Chitaksh Ahuja	84	94	60	17		24		78			1	59					12				
12	George Reddy															30						
13	Eeshan Dhar			66		50	14	74			17	81		57	29	68	44			1		
14	Gitik Gangopadhyay						47	60		47			19	64		45		79				
15	Gauransh Bhatt			12		39		47				4	56		101		2			1		
16	Himmat Reddy		66				59		67		93	39	106				37	16				
17	Ivaan Guha		21	38		52		60	2			49			60	42				1		
18	Manav Kar			20	54		25			19				22			25					
19	Krish Laghari							12		15	18			55			5					
20	Lakshay Anthony	23	47	25	54	1				41			15	7	39	36	27			1		
21	Purab Laghari			11	41				39		46		49		28			3		1		
22	Ranbir Lahiri		1					35		46	35	49		52		51		50				
23	Ojas Ghatak			16	53	0	45		18						27	1	7			1		
24	Samar Patel	10						7		19	13			1		0		2		3		
25	Izaan Banerjee			32			33	4	29	11	0	22	8		35			34				
26	Kiaan Ghosh				0	0			6			0					12					
27	Tejasa Das		1			13	2															
28	Tanmay Laghari	8			35		33		26				21		11							
29	Umang Dhar																	4				
30	Shlok Babu																	16				
31	Shaan Agarwai									2										1		

Format row 1 to have 36 point sans-serif white text on a dark-grey background.

Format row 2 to have 18 point sans-serif black text on a light-grey background.

[10]

3 Place in cell U4 a function to count the number of matches played by this player. Replicate this formula for each player.

[3]

4 Place in cells B33 and B34 functions to display the highest and lowest scores for this match. Replicate this for all other matches.

[5]

5 Place a replicable formula in cell V4 to calculate the average score for this player, rounded to 1 decimal place.

$$\text{Average score} = \frac{\text{Total runs scored}}{\text{Number of matches played} - \text{Not out}}$$

Edit this formula to make sure that cell contents are **not** displayed if this player has played fewer than 5 matches.

Replicate this formula for all players.

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6 Save your spreadsheet.

Print your spreadsheet showing the formulae.

Make sure:

- the row and column headings are displayed
- the gridlines are displayed
- the page orientation is landscape
- the contents of all cells are fully visible and can be easily read.

[2]

7 Sort all the data for the players in descending order of their average score. Those players who do **not** have an average score displayed must be at the bottom of the list.

[5]

8 Save your spreadsheet with the file name **m23cricket1_**centre number_candidate number, for example, m23cricket1_ZZ999_9999

Print your spreadsheet showing the values.

Make sure:

- the row and column headings are **not** displayed
- the gridlines are **not** displayed
- the page orientation is landscape
- the contents of all cells are fully visible and can be easily read.

[2]

[Total: 43]

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Task 3 – File Management and Image Manipulation

9 Create a new folder called **TCC**

Locate the following files and store them in your *TCC* folder:

m23bat.jpg
m23logo.jpg
m23tcc.htm
m23text.txt

Open and edit the file **m23logo.jpg** by:

- reflecting (flipping) it horizontally
- rotating it 180 degrees so that the text is readable
- reducing the image dimensions to 900 pixels wide by 180 pixels high.

Save this new image in your *TCC* folder in **.png** format, using the file name **tcclogo_** followed by your candidate number, for example, tcclogo_9999

Display the contents of your *TCC* folder showing the folder name, all file names, file extensions, image dimensions and file sizes.

Take a screenshot of this folder and place this in your Evidence Document.

[5]

[Total: 5]

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[Turn over

Task 4 – Web Page

You are going to create a stylesheet and part of a web page for the Tawara Cricket Club. The web page and stylesheet must work in any browser. All colour codes are in hexadecimal and any new colour codes must also be in hexadecimal. Make sure that your stylesheet contains no HTML. Make your HTML and stylesheet as efficient as possible.

10 Create a new stylesheet in your *TCC* folder called **m23tcc.css**

Add CSS to this stylesheet to meet these specifications:

background	colour	blue component 0a green component 04 red component 6d
h1, h2, h3 and p	font style	**Domino**, but if this font is **not** available then **Domino Regular**, or if these fonts are **not** available, the browser's default serif font
	font colour	yellow
table	alignment	centre within the browser window
	borders	collapsed **not** visible

Place your name, centre number and candidate number as a comment at the start of the stylesheet.

Save your stylesheet. Place a copy of your stylesheet in your Evidence Document. Make sure that the contents are easy to read.

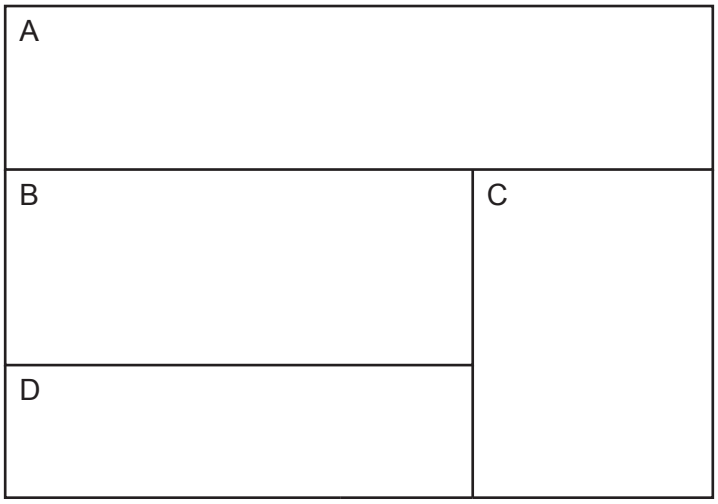
[13]

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11 Open, in your *TCC* folder, the web page called **m23tcc.htm**

The web page has a structure like this.



Each cell contains a letter which must **not** appear on your final web page.

Replace the letter:

- A with the image **tcclogo** that you saved in step 9
- B with the contents of the file **m23text.txt**
- C with the image **m23bat.jpg**
- D with the text **Web page created by:** followed by your name, centre number and candidate number.

Apply style h2 to all text in cells B and D.

Make sure the aspect ratio of both images is maintained.

[6]

12 Edit this web page so that the table fits 85% of the browser window. [1]

13 Attach the stylesheet *m23tcc.css* to this web page.

Save the web page.

Display the web page in your browser. Take screenshot evidence and place this in your Evidence Document.

Make sure that:

- all the page can be seen
- all the text can be easily read
- the address bar is fully visible.

Display the HTML source. Take a copy of the HTML source and place this in your Evidence Document.

[2]

[Total: 22]

Please turn over for Task 5

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Task 5 – Printing the Evidence Document

Make sure your name, centre number and candidate number appear on every page of your Evidence Document.

Save and print your Evidence Document.

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