

# Cambridge IGCSE™

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**INFORMATION AND COMMUNICATION TECHNOLOGY****0417/31**

Paper 3 Spreadsheets and Website Authoring

**February/March 2024**

MARK SCHEME

Maximum Mark: 70

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**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 International will not enter into discussions about these mark schemes.

Cambridge International is publishing the mark schemes for the February/March 2024 series for most Cambridge IGCSE, Cambridge International A and AS Level components, and some Cambridge O Level components.

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This document consists of **11** printed pages.

**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 descriptions 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.

Question	Answer	Marks
For <b>Question 1</b> see below for examples of folder screen shot and browser view below for reflection.		
1	Image m24image.png reflected horizontally ...	1
	... and saved as <b>balloon</b> in appropriate file format	1
	Screen shot includes folder name, image dimensions, frame width, frame height, file names, file extensions and sizes	1

Question	Answer	Marks
For <b>Question 2</b> see below for examples of html		
2	Table width 90% of browser window	1
	Table borders visible	1
	Row 1 – rowspan=4	1
	Row 1 left – width 30% and right – width 70%	1
	Row 2 right – height 10%	1
	Row 3 right – height 15%	1
	No heights set for cells B & E	1

Question	Answer	Marks
For <b>Question 3</b> see below for example of HTML.		
3	Title accurate and in head section	1

Question	Answer	Marks
For <b>Question 4</b> see below for examples of html and browser view.		
4	Balloon image fills width of top left cell	1
	Banner fills width of top right cell.	1
	Video visible in bottom right cell.	1
	video <...> tag used ...	1
	... style="width:100%"	1
	source<...> tag used	1
	... src="m24video.mp4"	1
	type="video/mp4"	1
	Appropriate error message before </video>	1
	Set to autoplay	1

Question	Answer	Marks
For <b>Question 5</b> see below for example of HTML.		
5	Appropriate alternate text to both still images	1

Question	Answer	Marks
For <b>Question 6</b> see below for example of HTML.		
6	Cell C – This web page was created by: ...	1
	... ZZ999 9999 on a new line ...	1
	... all set in style h2	1

Question	Answer	Marks
For <b>Question 7</b> see below for example of HTML.		
7	Cell D – text from source file 100% accurate ...	1
	... set in style p	1
	<b>Memorable and inspiring</b> set in style h1	1

Question	Answer	Marks
For <b>Question 8</b> see below for example of CSS, HTML and browser view.		
8	Correct filename and type	1
	Comment /* A Candidate zz999 9999 */ at top of stylesheet	1
	Table {} with margin-left:auto;	1
	Table {} with margin-right:auto;	1
	Table {} with border-spacing:10px	1
	td {padding:20px;}	1
	h1 and h2 {} font-family: "Cooper Black"...	1
	... font name in speech marks	1
	, Impact	1
	, serif	1
	h1 and h2 {} text-align: center;	1
	h1 and h2 {} color: #000099;	1
	All h1 and h2 elements except size in a single selector	1
	h1 {font-size: 18pt;}	1
	h2 {font-size: 14pt;}	1
	Stylesheet <b>m24sbs.css</b> attached in head section	1

Question	Answer	Marks
For <b>Question 9</b> see below for example of browser view.		
9	In browser, address visible	1

Question	Answer	Marks
For <b>Question 10</b> see below for example of spreadsheet.		
10	Formatting Cells A1:C1 merged and centre aligned	1
	Row 1 – 18point black text on light blue background	1
	All text sans-serif	1
	Cell borders as shown	1
	Column A right, cells B3 and B4 centre, column C left aligned	1

Question	Answer	Marks
For <b>Question 11</b> see below for example of spreadsheet.		
11	Name, centre and candidate number right aligned in header	1

Question	Answer	Marks
For <b>Question 12</b> see below for example of spreadsheet formulae.		
12	=VLOOKUP ( ... )	1
	... B4, ...	1
	... m24distance.csv! ...	1
	... \$A\$4:\$B\$27 ...	1
	... ,2	1

Question	Answer	Marks
For <b>Question 13</b> see below for example of spreadsheet formulae.		
13	=HLOOKUP ( ... )	1
	... B3, ...	1
	... m24distance.csv! ...	1
	... \$D\$2:\$J\$27 ...	1
	... B4 ...	1
	... +2 ...	1
	... ,0	1

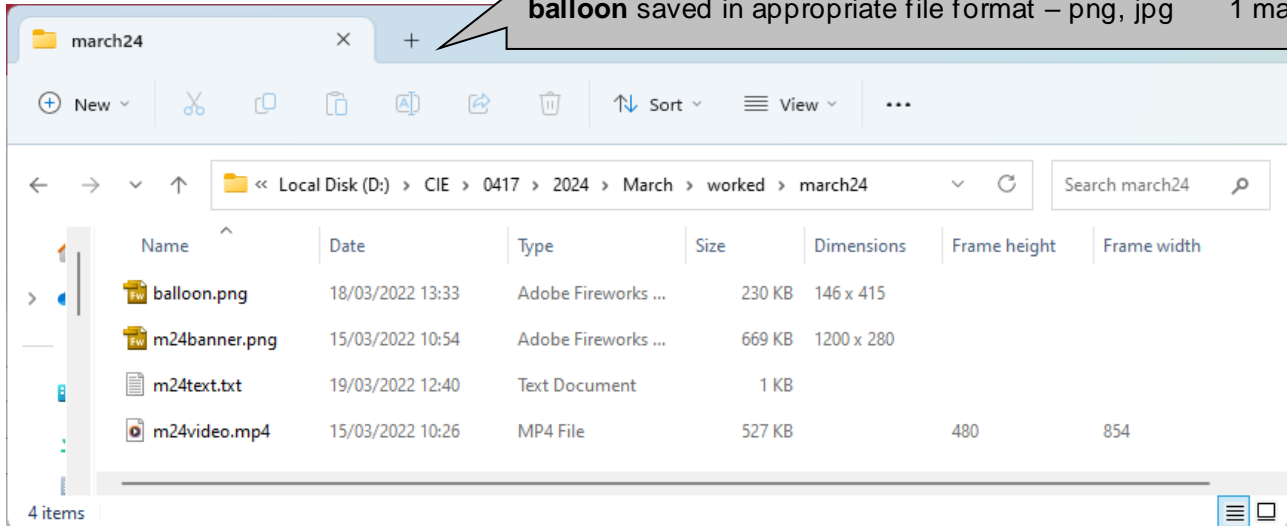
Question	Answer	Marks
For <b>Question 14</b> see below for example of spreadsheet formulae.		
14	=B7*60	1
	... /20	1

Question	Answer	Marks
For <b>Question 15</b> see below for example of spreadsheet formulae.		
15	=ROUND( ... ,0)	1
	B8/60	1
	*2200+B7*800	1

Question	Answer	Marks
For <b>Question 16</b> see below for example of spreadsheet.		
16	Cell B10 set as TZX with 2 decimal places	1
	Formulae printout with landscape orientation & row and column headings displayed, fully visible	1

# Evidence document

Screen shot includes folder name, image dimensions, frame width, frame height, file names, file extensions and sizes 1 mark  
**balloon** saved in appropriate file format – png, jpg 1 mark



```

/*m24sbs_ZZ999_9999.css - Notepad
File Edit Format View Help
/* A Candidate zz999 9999 */

body {background-color: #cbe6ff;}

table {margin-left: auto;
margin-right: auto;
border-spacing: 10px;}

td {padding: 20px;}

h1,h2 {font-family: "Cooper Black", Impact, serif;
text-align: center;
color: #000099;}

h1 {font-size: 18pt;}

h2 {font-size: 14pt;}
    
```

Stylesheet m24sbs_?????_?????.css	Correct filename & type	1 mark
Comment /* A Candidate details */ at start		1 mark
table { }	margin-left:auto;	1 mark
	margin-right:auto;	1 mark
	border-spacing:10px	1 mark
td { }	padding:20px	1 mark
h1,h2 { }	font-family: "Cooper Black"...	1 mark
	... font name in speech marks	1 mark
	, Impact	1 mark
	, serif;	1 mark
	text-align: center;	1 mark
	color: #000099	1 mark
All h1 and h2 elements except size in a single selector		1 mark
h1 { }	font-size: 18pt	1 mark
h2 { }	font-size: 14pt	1 mark



```
<!DOCTYPE html>
<html>
```

Title accurate and in head section 1 mark  
**m24sbs\_ZZ999\_9999.css** attached in head section 1 mark

```
<head>
  <title>Serengeti Balloon Safaris</title>
  <link rel="stylesheet" type="text/css" href="m24sbs_zz999_9999.css">
</head>
<body>
```

Table style="width:90%" 1 mark

```
<table style="width:90%; border: 1px solid black;">
  <tr>
```

Row 1 left rowspan="4" style="width:30%;" 1 mark  
 1 mark

```
    <td rowspan="4" style="width:30%; text-align: center;">
      
    </td>
    <td style="width:70%; text-align: center;">
```

Appropriate alternate text to both still images 1 mark

```
      
    </td>
  </tr>
```

Row 2 right style="height:10%" 1 mark

```
  <tr>
    <td style="height:10%; text-align: right;">
      <h2>This web page was created by: <br>A Candidate ZZ999 9999</h2>
    </td>
  </tr>
```

Row 3 right style="height:15%" 1 mark  
 Rows 1 & 4 right Heights not set 1 mark

```
  <tr>
    <td style="height:15%; text-align: right;">
      <h1>Memorable and inspiring</h1>
      <p>Your visit to Tanzania is incomplete if you haven't experienced
this awesome safari from the sky. This allows you to explore untouched and
more inaccessible parts of the Serengeti as you casually drift over the
surface of the earth as the dawn breaks. You are safe in the basket of a
hot air balloon, sometimes drifting only feet above the wildlife. Join us
for a memorable balloon safari in the Serengeti followed by a champagne
bush breakfast. Bases in Seronera, Kirawira, Ndutu and Kogatende allow us
to follow the great migration all year round.</p>
    </td>
  </tr>
</table>
```

video <...> tag used ... 1 mark  
 ... style="width:100%" 1 mark  
 source<...> tag used 1 mark  
 ... src="m24video.mp4" 1 mark  
 type="video/mp4" 1 mark  
 Appropriate error message before </video> 1 mark  
 Set to autoplay 1 mark

```
  <video width="100%">
    <source src="m24video.mp4" type="video/mp4">
    Your browser does not support this video file type.
  </video>
</td>
</tr>
</table>
</body>
</html>
```

Browser	In browser, address visible	1 mark
	In browser borders visible	1 mark
Top left	Balloon image fills cell width	1 mark
	Balloon image reflected horizontally	1 mark
Top right	Banner fills cell width	1 mark
2nd right	<b>This web page was created by: ...</b>	1 mark
	... Name ZZ999 9999 on a new line ...	1 mark
	... all set in style h2	1 mark
3 <sup>rd</sup> right	text from source file 100% accurate ...	1 mark
	... set in style p	1 mark
	Memorable and inspiring set in style h1	1 mark
Lower right	Video visible	1 mark

The screenshot shows a web browser window titled 'Serengeti Balloon Safaris'. The browser's address bar contains 'File | D:/C'. The website layout includes a vertical navigation menu on the left with a balloon image. The main content area features a banner image of hot air balloons over a savanna, a text block stating 'This web page was created by: A Candidate ZZ999 9999', a section titled 'Memorable and inspiring' with descriptive text about a safari, and a video player at the bottom showing a hot air balloon in flight over a landscape.

	A	B	C
1	<b>Serengeti Balloon Safaris</b>		
2			
3	Launch site	E	
4	Camp code	17	
5			
6	Camp name	Mara Engai Camp	
7	Distance from camp to launch site	27.8	in miles
8	Driving time	83.4	in minutes
9			
10	Cost	TZS 24,440.00	

Header	Name, centre, candidate right aligned	1 mark
Formatting	Cells A1:C1 merged and centre aligned	1 mark
Row 1	18pt black text on light blue background	1 mark
	All text sans-serif	1 mark
	Cell borders as shown	1 mark
	Col A right, cells B3 and B4 centre and col C left aligned	1 mark
	Cell B10 set as TZS with 2 decimal places	1 mark

	A	B	C
1	<b>Serengeti Balloon Safaris</b>		
2			
3	Launch site	E	
4	Camp code	17	
5			
6	Camp name	=VLOOKUP(B4,m24distance.csv!\$A\$4:\$B\$27,2)	
7	Distance from camp to launch site	=HLOOKUP(B3,m24distance.csv!\$D\$2:\$J\$27,B4+2,0)	
8	Driving time	=B7*60/20	
9			
10	Cost	=ROUND(B8/60,0)*2200+B7*800	

B6	=VLOOKUP ( ... )	1 mark
	... B4, ...	1 mark
	... m24distance.csv! ...	1 mark
	... \$A\$4:\$B\$27 ...	1 mark
	... ,2	1 mark
B7	=HLOOKUP ( ... )	1 mark
	... B3, ...	1 mark
	... m24distance.csv! ...	1 mark
	... \$D\$2:\$J\$27 ...	1 mark
	... ,B4 ...	1 mark
	... +2 ...	1 mark
	... ,0	1 mark
B8	=B7*60	1 mark
	/20	1 mark
B10	=ROUND( ... ,0)	1 mark
	... B8/60	1 mark
	*2200+B7*800	1 mark
Formulae	Landscape, row and column headings displayed, fully visible	1 mark