

Cambridge IGCSE[™]

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/32

Paper 3 Spreadsheets and Website Authoring

May/June 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 [].



You have been supplied with the following source files:

j2332banner.jpg j2332elep.htm j2332eleph1.jpg j2332elephant.jpg j2332monkey.jpg j2332project.csv j2332tas.css j2332tas.txt j2332tiger.jpg j2332tiger.mp4

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 **j2332evidence**_ followed by your centre number_candidate number, for example, j2332evidence_ZZ999_9999

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

Task 2 – Image Editing and File Management

1 Create a new folder called TAS

Locate the following files and store them in your *TAS* folder.

```
j2332banner.jpg
j2332elep.htm
j2332eleph1.jpg
j2332elephant.jpg
j2332monkey.jpg
j2332tas.css
j2332tas.txt
j2332tiger.jpg
j2332tiger.mp4
```

Open the file **j2332tiger.jpg** in a graphics package. Edit the image by:

- rotating it 180 degrees
- reflecting (flipping) it horizontally so the tyre is on the left
- cropping it to remove most of the tyre but none of the tiger
- cropping it to remove everything above the tiger's ears
- resizing it so that the image is 1000 pixels high but without changing the aspect ratio
- cropping it to remove the right side so that the image is 500 pixels wide by 1000 pixels high.

Save this new image in your *TAS* folder in **.png** format, using the file name **tiger_** followed by your candidate number, for example, tiger 9999

Display the contents of your *TAS* 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.

[8]

[Total: 8]

Task 3 – Web Page

You are going to create a web page and stylesheet to promote the Tawara Animal Sanctuary. 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.

2 Create in your TAS folder a web page called tas.htm

This web page must be created using a single table and work in all browsers. The table must fit 80% of the browser window. The table must have a structure as shown in this diagram:

| А | | | | | | |
|---------------|---------------|--|--|--|--|--|
| B width = 58% | width = 58% | | | | | |
| D | | | | | | |
| E width = 29% | F width = 29% | | | | | |

Each table cell is identified with a letter. Some dimensions are shown.

The cell contents shown in the diagram must **not** appear on your final web page.

Table borders must **not** appear on your final web page.

[10]

3 Use video and source tags to place in cell B the video file j2332tiger.mp4

The video must fit the width of the cell. Display an appropriate text-based error message if the browser does **not** support this video type.

Place in cell:

- A the image j2332banner.jpg
- C the image tiger that you saved in Step 1
- E the image j2332monkey.jpg
- F the image j2332elephant.jpg

Make sure the aspect ratio is maintained for all images.

Set appropriate alternate text for each still image.

[11]

4 Place in cell D the contents of the file j2332tas.txt

Display this text as two paragraphs.

Add, as a third paragraph, the text:

Web page edited by: followed by your name, centre number and candidate number

Apply style h2 to all text in cell D.

[3]

- 5 Create a hyperlink from the image *j2332elephant.jpg* to open the web page **j2332elep.htm** [2]
- 6 Create a hyperlink from the image *j2332monkey.jpg* to send an email message to tas@cambridge.org with a subject line Support a monkey [5]
- 7 Attach the stylesheet **j2332tas.css** to this web page.

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

[2]

[Total: 33]

Task 4 – Spreadsheets

The Tawara Animal Sanctuary is currently running three projects: Elephant, Monkey and Tiger. Income is from donations and for each project they record the amount spent on food, veterinary bills and relocating the animals back into the wild. You will edit a spreadsheet for this data. All currency values must be in dollars (\$), displayed to 2 decimal places.

8 Open and examine the file **j2332project.csv** in your spreadsheet software.

Copy and paste the contents of cell A4 into cell B5.

Delete rows 3 and 4.

Place in the header, centre aligned, the text **Spreadsheet prepared by** followed by a space, your name, centre number and candidate number, then a space followed by **on** followed by a space and today's automated date, then a space followed by **at** followed by a space and the automated time.

Save your spreadsheet with the file name **project_**centre number_candidate number, for example, project ZZ999 9999

[6]

9 Merge cells A1:N1, A9:A12, A13:A16 and A17:A20. Format the merged cell A1:N1 to have a solid black background. Format the spreadsheet to look like this.

| | | | | | | | | 1 | | | | | | |
|----|-----------|-------------|--------------|----------------|---------|---------|---------|---------|---------|---------|-----------|---------|----------|----------|
| | Α | В | С | D | E | F | G | Н | ı | J | K | L | M | N |
| | | Tawa | ara <i>l</i> | ۱nim | al S | anct | ııar\ | , inc | ome | and | d exp | endi | ture | |
| 1 | | Idvv | ala <i>F</i> | 7111111 | ai J | ance | uai | , iiic | OIIIC | - and | u cxp | Ciidi | tuic | |
| 2 | | Month | January | February | March | April | May | June | July | August | September | October | November | December |
| 3 | Project | Income | | | | | | | | | | | | |
| 4 | Elephant | | 3480.38 | 2061.45 | 1893.74 | 4586.43 | 2159.94 | 6447.05 | 6541.33 | 5889.93 | 6281.2 | 8244.76 | 8249.47 | 8514.5 |
| 5 | Monkey | | 754.21 | 3421.02 | 1134.94 | 2565.61 | 3338.51 | 4056.3 | 2089.17 | 3501.97 | 1018.73 | 3604.78 | 455.33 | 3126.84 |
| 6 | Tiger | | 2952.38 | 1846.3 | 1487.65 | 4718.89 | 5897.85 | 6828.12 | 8690.99 | 1525.76 | 8812.25 | 472.59 | 6400.24 | 4808.71 |
| 8 | Project | Expenditure | | | | | | | | | | | | |
| 9 | | Relocation | 2716.18 | 4118.3 | 3239.28 | 2469.32 | 2973.13 | 3579.62 | 3260.53 | 33.8 | 2719.38 | 2096.41 | 831.69 | 421.84 |
| 10 | Elephant | Veterinary | 2190.97 | 913.83 | 1604.3 | 3595.88 | 1753.4 | 934.38 | 3886.05 | 3200.7 | 3052.32 | 2874.79 | 1306.57 | 1675.18 |
| 11 | Elephant | Food | 2048.94 | 2815.71 | 2295.06 | 2629.31 | 280.63 | 1149.43 | 2479.65 | 2007.2 | 4420.34 | 542.01 | 365.61 | 2438.75 |
| 12 | | Total | | | | | | | | | | | | |
| 13 | | Relocation | 542.2 | 629.55 | 357.86 | 844.56 | 681.08 | 251.3 | 485.6 | 866.48 | 523.59 | 698.75 | 685.38 | 534.26 |
| 14 | Monkey | Veterinary | 381.8 | 186.53 | 240.2 | 327.27 | 351.5 | 210.9 | 284.51 | 299.61 | 188.59 | 309.2 | 123.29 | 283.5 |
| 15 | iviolikey | Food | 38.87 | 20.33 | 39.66 | 36 | 18.63 | 24.15 | 57.47 | 17.97 | 21.86 | 35.45 | 7.67 | 34.32 |
| 16 | | Total | | | | | | | | | | | | |
| 17 | | Relocation | 1323.71 | 2813.99 | 694.47 | 3050.36 | 2387.33 | 340.58 | 1893.51 | 2375.29 | 2964.81 | 3778.31 | 2764.51 | 4239.04 |
| 18 | Times | Veterinary | 1727.69 | 174.66 | 4028.66 | 646.21 | 3094.14 | 753.83 | 3335.82 | 26.2 | 1051.52 | 3373.79 | 139.1 | 2872.11 |
| 19 | Tiger | Food | 4319.77 | 2678.66 | 803.92 | 2731.27 | 3085.12 | 854.12 | 1463.75 | 1310.9 | 1850.41 | 1611.76 | 1603.44 | 1308.39 |
| 20 | | Total | | | | | | | | | | | | |
| 22 | Project | Balance | | | | | | | | | | | | |
| 23 | Elephant | | | | | | | | | | | | | |
| 24 | Monkey | | | | | | | | | | | | | |
| 25 | Tiger | | | | | | | | | | | | | |
| 25 | riger | | | | | | | | | | | | | |

[7]

- 10 Place in appropriate cells functions to calculate the total expenditure for each project for each month. [3]
- Place in cell C23 a formula to calculate the balance for the Elephant project in January. This is the income for this project for this month minus the total expenditure for this project for this month. Calculate, in cells C24 and C25, the balances for the other two projects. Replicate these three formulae for all other months.

7

12 Apply appropriate formatting to all cells containing numeric data.

[1]

- **13** Apply conditional formatting to only the cells in the range C23 to N25 so that if a cell contains a value:
 - greater than or equal to zero, the cell has a light-green background with dark-blue text
 - less than zero, the cell has red text on a white background.

Place in your Evidence Document a screenshot showing the conditional formatting rules, cell ranges and formats.

[6]

14 Save your spreadsheet.

Print your spreadsheet showing the formulae.

Make sure:

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

[1]

15 Print your spreadsheet showing the values.

Make sure:

- the printout fits on a single landscape page
- the row and column headings are not displayed
- the contents of all cells are fully visible and can be easily read.

[1]

[Total: 29]

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.

8

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