



Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/21

Paper 2 Document Production, Databases and Presentations

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 [].

This document has **12** pages. Any blank pages are indicated.



You have been supplied with the following source files:

j2321cat_codes.csv
j2321evidence.rtf
j2321festival.rtf
j2321results.csv
j2321rider.jpg
j2321scratch.rtf
j2321start_times.csv
j2321winners.csv

Task 1 – Evidence Document

Open the file **j2321evidence.rtf**

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

Save this document in your work area as **EVIDENCE** followed by your candidate number, for example, EVIDENCE9999

You will need your Evidence Document during the examination to place screenshots when required.

Task 2 – Document

You are going to edit a document for the Tawara Cycling Festival. The company uses a corporate house style for all their documents. Paragraph styles must be created and applied as instructed.

1 Using suitable software, open the file **j2321festival.rtf**

The page setup is set to A4, portrait orientation with 2 centimetre margins. Do **not** make any changes to these settings.

Three paragraph styles have already been created. Do **not** make any changes to these unless instructed.

Save the document in your work area with the file name **FESTIVAL**

Make sure that it is saved in the format of the software you are using.

Place in your Evidence Document a screenshot to show this file has been saved. Make sure that there is evidence of the file type.

[1]

- 2 Place in the header of the *FESTIVAL* document your name, centre number and candidate number right aligned.

Place in the footer automated page numbers left aligned.

Make sure that:

- all the alignments match the page margins
- no other text or placeholders are included in the header or footer areas
- the headers and footers are displayed on all pages.

[2]

- 3 Create and store the following style, basing it on the default/normal paragraph style:

Style name	Font style	Font size (points)	Alignment	Enhancement	Line spacing	Space before (points)	Space after (points)
CF-title	serif	32	centre	bold, italic	single	0	9

Take a screenshot to show that you have defined the settings for the *CF-title* style.

Make sure that there is evidence that you have based this on the default/normal paragraph style.

Place this in your Evidence Document.

[2]

- 4 Apply the *CF-title* style to the title text *Tawara Cycling Festival* [1]

- 5 Change the page layout so that the subheading *The Trails* and the following text up to and including the paragraph ending *... their equipment is safe.* is displayed in two columns of equal width with a 1.5 centimetre space between the columns. [2]

- 6 Import the image **j2321rider.jpg** and place it in the paragraph beginning *All trails start and finish ...* [1]

- 7 Reflect the image so that the bike points to the left. [1]

- 8 Format the image so that:

- it is resized to a width of 4 centimetres with the aspect ratio maintained
- it is aligned to the left column margin and the top of the paragraph starting *All trails start and finish ...*
- the text wraps around the image.

[2]

- 9 Apply bullets to the text from:

bike handling for children ...

to

... yoga for cyclists.

Make sure that:

- the bullets are indented 1.5 centimetres from the left margin
- the list is in single line spacing with no space before or after each line
- there is a 6 point space after the last item in the list.

[3]

- 10 Locate the table in the document.

Delete the entire column and contents with the heading *Lunch*

[1]

- 11 Format the left column of the table so that it looks like the left column of this table:

Trail Details	Distance (mi)	Fee	Climb (ft)
6 to 10	£7.00	209	
25	£15.00	949	
50	£20.00	1,640	
75	£25.00	2,112	
100	£25.00	2,637	
150*NEW	£32.00	4,169	

[4]

- 12 Apply the *CF-table* style to columns 2, 3 and 4 of the table.

Make sure that:

- all the text of each row displays on one line
- 1 point black internal and external gridlines are displayed when printed
- the table borders and all the data fit within the column width
- there is a 6 point space after the table.

[3]

- 13 Locate the text **NEW* in the table and format it to be superscript so that it looks like this:

*150^{*NEW}*

[1]

14 Spell check and proofread the document.

Make sure that:

- the list and table are **not** split over two columns or pages
- there are no widows or orphans
- there are no blank pages
- the original styles are maintained
- all styles are applied consistently
- spacing is consistent between all items.

Save the document using the same file name and format used in Step 1.

Print the document.

[1]

[Total: 25]

Task 3 – Database

You are now going to prepare some reports.

- 15** Examine the file **j2321results.csv** and identify the most appropriate field to set as a primary key. Close this file.

Using database software, import the file *j2321results.csv*

Use these field names and data types:

Field name	Data type	Display
<i>Start_Code</i>	Text	
<i>Last_Name</i>	Text	
<i>First_Name</i>	Text	
<i>Race_No</i>	Number	0 decimal places
<i>Club_Name</i>	Text	
<i>Cat_Code</i>	Text	
<i>YOB</i>	Number	0 decimal places
<i>Race_Time</i>	Date/Time	hh:mm:ss
<i>Status</i>	Text	
<i>Event_Rank</i>	Number	0 decimal places
<i>Cat_Rank</i>	Number	0 decimal places

Set the identified field as a primary key.

Save the data.

Place in your Evidence Document a screenshot showing the field names, data types and primary key used in the table.

[2]

16 Import the file **j2321start_times.csv** as a new table in your database.

Use these field names and data types:

Field name	Data type	Display
<i>Group_Code</i>	Text	
<i>Bib_Colour</i>	Text	
<i>Grade</i>	Text	
<i>Group_Name</i>	Text	
<i>Start_Time</i>	Date/Time	hh:mm:ss

Set *Group_Code* as a primary key.

Place in your Evidence Document a screenshot showing the field names, data types and primary key used in the table.

[1]

17 Import the file **j2321cat_codes.csv** as a new table in your database. Set all the data types to text.

Set *Cat_Code* as a primary key.

Place in your Evidence Document a screenshot showing the field names, data types and primary key used in the table.

[1]

18 Create one-to-many relationships as links between:

- the *Group_Code* field in the start times table and the *Start_Code* field in the results table
- the *Cat_Code* field in the cat codes table and the *Cat_Code* field in the results table.

Place in your Evidence Document screenshots showing the one-to-many relationships between the three tables.

[1]

19 Add the following as a new record in the results table:

<i>Start_Code</i>	HC06
<i>Last_Name</i>	Wardle
<i>First_Name</i>	Basil
<i>Race_No</i>	1203
<i>Club_Name</i>	Power Cycles
<i>Cat_Code</i>	C5
<i>YOB</i>	1992
<i>Race_Time</i>	01:25:13
<i>Status</i>	FIN
<i>Event_Rank</i>	122
<i>Cat_Rank</i>	68

Check your data entry for errors. Save the data.

[2]

20 Using fields from the results and start times tables, produce a tabular report that:

- selects the records where:
 - *Group_Code* is **HC00**
 - *YOB* is **1975** or later
- shows only the fields *Group_Code*, *Last_Name*, *First_Name*, *YOB*, *Status*, *Race_Time* and *Event_Rank* in this order, with data and labels displayed in full. Do **not** group the data
- sorts the data into descending order of *YOB*
- has a page orientation of portrait
- fits on a single page
- includes only the title **Scratch Category Outcomes** displayed in a larger font size, fully visible, at the top of the page
- calculates the number of database records shown in this report and places this at the end of the report, fully visible and formatted to 0 decimal places
- has the label **Number of cyclists** fully visible to the left of this value
- has your name, centre number and candidate number on the report.

Place in your Evidence Document a screenshot showing the database formula used to calculate the number of cyclists.

Save and print your report.

[9]

21 Using fields from the results and cat codes tables, produce a tabular report that:

- selects the records where:
 - *Club_Name* includes the text **power**
 - *Status* does **not** include **DNF** or **DNS**
- contains a new field called **Time_per_km** which is calculated at run-time. This field will calculate the *Race_Time* divided by the race distance of 50 km. Format this field to display time as hh:mm:ss
- shows only the fields *Race_No*, *First_Name*, *Last_Name*, *Cat_Rank*, *Club_Name*, *Category*, *Status*, *Time_per_km* and *Race_Time* in this order, with data and labels displayed in full. Do **not** group the data
- sorts the data into ascending order of *Club_Name* and ascending order of *Cat_Rank*
- has a page orientation of landscape
- fits a single page wide
- includes only the title **Power Club Results** displayed in a larger font size, fully visible, at the top of the page
- has your name, centre number and candidate number in the footer of the report so it appears in the same position on every page.

Place in your Evidence Document a screenshot showing the database search criteria used to select the records where *Status* does **not** include *DNF* or *DNS*.

Save and print your report.

[11]

[Total: 27]

Task 4 – Presentation

You are going to create a short presentation.

All slides must have a consistent layout and formatting.

22 Create a presentation of six slides using the file **j2321scratch.rtf**

Unless otherwise instructed, the slides must display a title and a bulleted list.

[1]

23 Use a master slide to display only the following features:

- automated slide numbers on the top right
- your name, centre number and candidate number on the bottom left
- a 3 to 4 point wide horizontal line about 3 centimetres from the bottom of the slide, above your details and across the full width of the slide.

Make sure that:

- master slide items appear in the same position on every slide
- no items overlap on any slide.

[3]

24 Format the first slide so that:

- a title slide layout is applied with no bullets
- the title and subtitle text are centre aligned and in the middle of the slide.

[1]

25 Use the data in the file **j2321winners.csv** to create a pie chart to compare the number of race wins by each group. [1]

26 Label the chart with the title **Percentage wins by group** [1]

27 Format the chart to display only group names and percentages as sector labels.

Position these labels outside each chart sector.

Display the percentage values to 1 decimal place.

Do **not** display a legend.

[3]

28 Emphasise the group with the largest percentage by pulling only this sector away from the other groups. [1]

- 29 Place the chart to the right of the bullets on the slide with the title *Scratch Group Cyclists*

Make sure that:

- no words are split
- all the data and labels are fully visible
- the chart and its contents do **not** overlap any slide items.

[1]

- 30 Add the following text as presenter/speaker notes to the slide with the title *Scratch Group Cyclists*

Race winner analysis – 38 races completed in 2022

Print only this slide as presenter/speaker notes in portrait orientation.

[2]

- 31 On the slide with the title *Handicaps* format the text *Race Director* so that when clicked it opens an email editor ready to send a message to **RD@cambridge.org** with a subject line **Race Handicaps**

Place in your Evidence Document a screenshot showing the linked text, email address and subject.

[3]

- 32 Save the presentation.

Print the full presentation as handouts in portrait orientation with 2 slides to the page, each filling half the page.

[1]

[Total: 18]

Task 5 – Printing the Evidence Document

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

Save your Evidence Document.

Print your Evidence Document.

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