Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY   **0417/21**

Paper 2 Document Production, Databases and Presentations   **May/June 2023**

                                                                2 hours 15 minutes

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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.

[Turn over

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:

	Distance (mi)	Fee	Climb (ft)
Trail Details	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
Start_Code	Text	
Last_Name	Text	
First_Name	Text	
Race_No	Number	0 decimal places
Club_Name	Text	
Cat_Code	Text	
YOB	Number	0 decimal places
Race_Time	Date/Time	hh:mm:ss
Status	Text	
Event_Rank	Number	0 decimal places
Cat_Rank	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
Group_Code	Text	
Bib_Colour	Text	
Grade	Text	
Group_Name	Text	
Start_Time	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:

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