



Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY

0417/22

Paper 2 Document Production, Data Manipulation and Presentations

May/June 2020

2 hours 30 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 80.
- The number of marks for each question or part question is shown in brackets [].

This document has **16** pages. Blank pages are indicated.

You have been supplied with the following source files:

J220BIKE.jpg
 J220BIKEPACK.rtf
 J220BOOK.rtf
 J220CLUBS.csv
 J220EVIDENCE.rtf
 J220RAAM.rtf
 J220RESULTS.csv
 J220SPEED.csv
 J220TOURS.csv

Task 1 – Evidence Document

Open the file **J220EVIDENCE.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 **J220EVIDENCE** followed by your candidate number, for example: J220EVIDENCE9999

You will need to place screenshots in this Evidence Document.

Task 2 – Document

You are going to edit a report. The company uses a corporate house style for all its documents. One paragraph style has been created and applied. Additional paragraph styles must be created and applied to the report as instructed.

1 Open the file **J220BIKEPACK.rtf**

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

Save the document in your work area, in the format of the software you are using, with the file name **BPGUIDE**

EVIDENCE 1

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

[1]

2 Remove any pre-set page breaks in the document.

[1]

3 Place in the footer:

- automated page numbers left aligned
- your name, centre number and candidate number right aligned.

Make sure that:

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

[1]

4 Create and store the following styles, basing each on the default paragraph style:

House style specifications							
Style name	Font style	Font size (points)	Alignment	Enhancement	Line spacing	Space before (points)	Space after (points)
BP-Subtitle	sans-serif	20	right	italic	single	0	0
BP-Subhead	serif	18	centre	bold, underline	single	0	9
BP-Body	sans-serif	11	justified with a first line indent of 1.5cm	none	single	0	6
BP-Table	serif	10	centre	italic	single	0	0

EVIDENCE 2

Place in your Evidence Document a screenshot to show that the style settings have been defined for the *BP-Body* style. Make sure this style is based on the default paragraph style.

[3]

5 Display these custom style names as a list in the style manager/organiser. Provide screenshot evidence of this list.

EVIDENCE 3

Place this screenshot in your Evidence Document.

[1]

- 6 The style name *BP-Title* has already been created, stored and applied to the title text.
Modify the *BP-Title* style so only the following formatting is applied:

Style name	Font style	Font size (points)	Alignment	Enhancement	Line spacing	Space before (points)	Space after (points)
<i>BP-Title</i>	serif	34	centre	bold, italic	single	0	0

EVIDENCE 4

Place in your Evidence Document a screenshot of these style settings for the *BP-Title* style.

[2]

- 7 Below the title add the subtitle:

Produced by: and add your name

Apply the *BP-Subtitle* style to this text.

[2]

- 8 Apply the *BP-Body* style to the rest of the document.

[1]

- 9 Apply tick-shaped bullets (✓) to the text from:

full course must be completed ...

to

... and observe local laws.

Make sure that:

- the bullets are indented **1.5** centimetres from the left margin with a hanging indent applied if text wraps to a second line
- the list is in single line spacing with no space between the lines
- there is a **6** point space after the last item in the list.

[3]

- 10 Identify the 5 subheadings in the document and apply the *BP-Subhead* style to each one.

[1]

- 11 Locate the table in the document.

Delete the entire column with the heading *Time Limit*

[1]

- 12 Change the page layout so that the subheading *Racing* and all following text is displayed in **two** columns of equal width with a **2** centimetre space between the columns.

[2]

13 Format the table so that:

- the border and all data fit within the column width
- the *BP-Table* style is applied to all data
- text in all rows is centre aligned vertically
- no words are split where text is wrapped within the table
- all internal and external gridlines are displayed when printed
- there is no cell shading
- there is a 6 point space after the table.

[3]

14 Sort the data in the table into descending order of *KM*.

[1]

15 Insert a new row as the first row of the table and enter the title:

Popular Distance Bikepacking Races

[2]

16 Format the first row of the table to be:

- bold
- centre aligned over the four columns.

[2]

17 Import the image **J220BIKE.jpg** and place it in the paragraph beginning *Conventional cycle touring ...*

Rotate the image 180 degrees.

Format the image so that:

- it is resized to a width of **4** centimetres with the aspect ratio maintained
- it is aligned to the right of the column and top of the paragraph starting *Conventional cycle touring ...*
- the text wraps round the image.

[4]

18 Spell check and proofread the document.

Make sure that:

- the list and table are not split over columns or pages
- there are no widows or orphans
- there are no blank pages
- spacing is consistent between all items.

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

Print the document.

PRINTOUT 1

Make sure your **name**, **centre number** and **candidate number** are on your report.

[1]

[Total: 32]

Task 3 – Database

You are now going to prepare some reports. Dates are to be imported in the format of day month year.

19 Using a suitable database package, import the file **J220RESULTS.csv**

Use these field names and data types:

Field name	Data type	Format
<i>Racer_ID</i>	Text	
<i>Last_Name</i>	Text	
<i>First_Name</i>	Text	
<i>Club_Code</i>	Text	
<i>Birth_Date</i>	Date/Time	
<i>Age_Jan</i>	Number	Integer
<i>Avg_MPH</i>	Number	Store and display to 2 decimal places
<i>Event_Rank</i>	Number	Integer
<i>Points</i>	Number	Integer
<i>Racing_No</i>	Number	Integer
<i>Penalty</i>	Boolean/Logical	To display as Yes/No
<i>Category</i>	Text	
<i>Year_Band</i>	Text	
<i>Ability</i>	Text	
<i>Gender</i>	Text	

Set *Racer_ID* as a primary key.

Save the data.

EVIDENCE 5

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

[2]

20 Import the file **J220CLUBS.csv** as a new table in your database.

Set *Club_ID* as a primary key.

Create a one-to-many relationship between *Club_ID* in the clubs table and *Club_Code* in the results table.

EVIDENCE 6

Place in your Evidence Document screenshot(s) showing the type of relationship between the two tables.

[1]

21 Enter the following details as a new record in the results table:

<i>Racer_ID</i>	XC0235
<i>Last_Name</i>	Olsen
<i>First_Name</i>	Janet
<i>Club_Code</i>	MTBC10
<i>Birth_Date</i>	12/02/1991
<i>Age_Jan</i>	28
<i>Avg_MPH</i>	13.67
<i>Event_Rank</i>	6
<i>Points</i>	105
<i>Racing_No</i>	1550
<i>Penalty</i>	Yes
<i>Category</i>	Senior
<i>Year_Band</i>	19 to 29
<i>Ability</i>	Expert
<i>Gender</i>	Female

Check your data entry for errors.

Save the data.

[2]

22 Using fields from both tables produce a tabular report that:

- selects the records where:
 - *Event_Rank* is **5 or less**
 - *Ability* does **not** include **Novice**
- shows only the fields:
First_Name, Last_Name, Club_Name, Category, Gender 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 *Category* and ascending order of *Event_Rank*
- has a page orientation of portrait
- fits on a single page wide
- includes only the text **Results By Category** as a title displayed in a larger font size, fully visible, at the top of the page
- calculates the number of racers and places this under the *Gender* column, formatted as an integer
- has a label **Number of racers** to the left of this value
- has only your name, centre number and candidate number in the footer of the report so it appears on every page.

Save and print your report.

PRINTOUT 2

Make sure that you have entered your **name, centre number** and **candidate number** on your report.

EVIDENCE 7

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

[11]

23 Using fields from both tables, produce a tabular report that:

- selects the records where:
 - *Location* includes the text **East**
 - *Category* is **Senior**
 - *Penalty* is **Yes**
- contains a new field called **Revised_MPH** which is calculated at run-time, using the data from the *Avg_MPH* field and reducing this by **5%**. Format this field to display 2 decimal places
- shows only the following 9 fields:
First_Name, Last_Name, Club_Name, Location, Category, Event_Rank, Penalty, Avg_MPH and *Revised_MPH*
 in this order with data and labels displayed in full. Do **not** group the data.
- sorts the data into descending order of *Avg_MPH*
- has a page orientation of landscape
- fits on a single page
- includes only the text **Speed Penalties Applied** as a title at the top of the page, formatted so that it displays:
 - in a black, **30** point, serif font style
 - with all letters fully visible
- has your name, centre number and candidate number on the report.

Save and print your report.

PRINTOUT 3

Make sure that you have entered your **name**, **centre number** and **candidate number** on your report.

Export this report to your work area:

- in rich text format (rtf)
- with the file name **SPA**

EVIDENCE 8

Place in your Evidence Document a screenshot to show the exported file saved in your work area. Make sure there is evidence of the file type.

[11]

[Total: 27]

Task 4 – Mail merge

You are required to carry out a mail merge.

- 24** Create a mail merge letter using the file **J220BOOK.rtf** as the master document and **J220TOURS.csv** as your data source file.

Replace the text and chevrons in the master document with the merge fields from the data source file as follows:

Text and chevrons to replace	Replace with merge field
<TTL>	Title
<LAST>	Last_Name
<ADD1>	Street
<ADD2>	Town
<POST>	Postcode
<HOLIDAY>	Tour_Name
<LOCATION>	Region
<LENGTH>	Distance
<SIZE>	People
<LEAVE>	Departure
<DURATION>	Duration
<COST>	Price_PP

Make sure the spacing, punctuation and alignment in the original master document are maintained. [3]

- 25** Replace the text *Candidate Name* with your name.

Enter your name, centre number and candidate number in the header of the document.

Save and print your master document.

PRINTOUT 4

Make sure you have entered your **name**, **centre number** and **candidate number** on your master document.

[1]

- 26** Set an automated filter to select people who are booking for a *Duration* of **4 or less**

EVIDENCE 9

Place in your Evidence Document a screenshot to show the use of an automated selection method.

[1]

- 27 Merge and print the letters for the selected people only.
Save and close the files.

PRINTOUT 5

Print the result of the merge. Make sure you have entered your **name**, **centre number** and **candidate number** on your letters.

[1]

[Total: 6]

Task 5 – Printing the Evidence Document

- 28 Save and print your Evidence Document.

PRINTOUT 6

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

Task 6 – Presentation

You are going to create a short presentation.

All slides must have a consistent layout and formatting. Unless otherwise instructed, slides must be formatted to display a title and bulleted list.

- 29 Create a presentation of 6 slides using the file **J220RAAM.rtf**

On slide 1 enter your name after the text *Presented by*:

[1]

- 30 Format the first slide so that:

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

[1]

- 31 Use a master slide to display only the following features:

- your name, centre number and candidate number
- automated slide numbers on the bottom left.

Make sure that:

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

[2]

- 32 Move the slide with the title *Background* so that it becomes slide 2.

[1]

33 Use the data in the file **J220SPEED.csv** to create a line chart to compare the records for each year for **Solo Female** and **Solo Male** racers only. Include the years as category axis labels. [1]

34 Label the chart with the title:

Solo Average Speed Records

[1]

35 Format the value axis to display:

- the label **Miles Per Hour**
- a minimum value of **6**
- a maximum value of **22**
- increments of **4**

[3]

36 Format the chart to display:

- only the data values as labels displayed to 2 decimal places above each data point
- a legend to display Solo Female and Solo Male

[3]

37 Place the chart to the left of the bullets on the slide with the title *Completion Records*

Make sure that all data is fully visible with no overlap.

[1]

38 Save the presentation.

Print the presentation as handouts with **2** slides to the page, each filling half the page.

PRINTOUT 7

Print this handout. Make sure your **name**, **centre number** and **candidate number** are on all slides.

[1]

[Total: 15]

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