Cambridge IGCSE™

INFORMATION AND COMMUNICATION TECHNOLOGY	**0417/21**
Paper 2 Document Production, Data Manipulation and Presentations	**February/March 2022**
	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 **12** pages.

[Turn over

You have been supplied with the following source files:

M2221DELNOTE.rtf
M2221DRIVES.csv
M2221EVIDENCE.rtf
M2221EXTRA.txt
M2221MAKERS.csv
M2221ORDERS.csv
M2221PRES.rtf
M2221SALES.csv
M2221SSD.jpg
M2221STORAGE.rtf

Task 1 – Evidence Document

Open the file **M2221EVIDENCE.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 **M2221EVIDENCE** followed by your candidate number, for example, M2221EVIDENCE9999

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 a company. The company uses a corporate house style for all its documents. Paragraph styles must be created, modified and applied as instructed.

1   Open the file **M2221STORAGE.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, in the format of the software you are using, with the file name **UPGRADE**

Take a screenshot to show this file has been saved including evidence of the file type. Place this screenshot in your Evidence Document.

[1]

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EVIDENCE 1
Screenshot evidence of the document saved in your work area.
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2   Remove any pre-set page breaks in the document.   [1]

3 Place in the header your name, centre number and candidate number right aligned.

Place in the footer automated page numbers centre aligned.

Make sure that:

- the header is right aligned to the page margin
- the footer is centre aligned between the page margins
- no other text or placeholders are included in the header or footer areas
- headers and footers are displayed on all pages.

[2]

4 Create the following paragraph style, basing it on the default paragraph style:

Style name	Font style	Font size (points)	Alignment	Enhancement	Line spacing	Space before (points)	Space after (points)
HD-title	serif	28	centre	bold, italic	single	0	0

[2]

Take screenshot evidence to show the settings for the *HD-title* paragraph style and place this in your Evidence Document.

> **EVIDENCE 2**
> Screenshot evidence showing the settings for the *HD-title* paragraph style.

5 At the start of the document enter the title:

Upgrade your data storage

Apply the *HD-title* style to this text.

[2]

6 Select the subheading *Which drive works for you?* and the following text up to and including the paragraph ending *… a slimmer drive in a 9.5 mm space.*

Change the page layout so that only this text is displayed in two columns of equal width with a 1.5 centimetre space between them.

[2]

7 Apply bullets to the text from:

> *Mechanical hard drives …*
> to
> *… M.2 format SSDs*

Make sure that:

- you use a square (■) shaped bullet point
- 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]

8 The paragraph style *HD-subhead* has already been created and applied to the six subheadings.

Modify the *HD-subhead* paragraph 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)
HD-subhead	serif	12	centre	italic, bold, all capitals	single	0	9

[2]

Take screenshot evidence to show your modified settings for the *HD-subhead* paragraph style and place this in your Evidence Document.

> **EVIDENCE 3**
> Screenshot evidence showing your modified settings for the *HD-subhead* paragraph style.

9 Place a text box at the top of the paragraph that starts *If you can physically upgrade …*

Align the text box to the top of the paragraph and the right margin of the document.

Wrap the text to make sure that no text is hidden behind the text box.

Locate the file **M2221EXTRA.txt** and place the contents of this file into the text box.

Format this text as *HD-body* paragraph style and make it bold. Make sure that all the text is visible and words are not split over lines in the text box.

Format the text box with a light grey background and a 3–4 point thick line.

It may look like this:
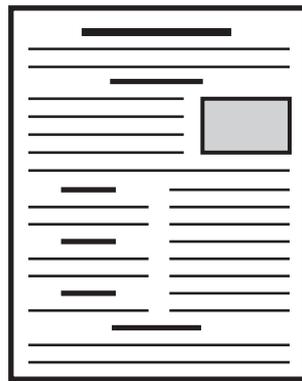
[4]

10 Locate the table in the document.

Set 1 point black internal and external gridlines.

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

Apply the *HD-table* paragraph style to all the data in this table.

Set the table width to 15 centimetres.

Centre the table within the page margins.

Make sure that:

- words are not split over lines when text is wrapped
- all gridlines are displayed when printed
- there is a 6 point space after the table.

[5]

11 Import the image **M2221SSD.jpg** and place it in the paragraph beginning *The M.2 format is effectively …*

Rotate the image 180 degrees.

Format the image so that:

- it is resized to half the column width with its aspect ratio maintained
- it is aligned to the right of the column and top of the paragraph starting *The M.2 format is effectively …*
- the text wraps round the image.

[4]

12 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
- the original page break has been removed
- there are no blank pages
- paragraph styles have been applied as instructed with consistent spacing maintained between all items
- there is a 6 point space after the table and the list.

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.

[2]

[Total: 30]

Task 3 – Database

You are now going to prepare some reports. Make sure all currency values display the same currency symbol and are set to 2 decimal places.

13 Using a suitable database package, import the file **M2221MAKERS.csv**

Use these field names and data types:

Field name	Data type	Notes
Maker_Code	Text	
Maker	Text	
City	Text	
Country	Text	

Set *Maker_Code* as a primary key.

Import the file **M2221DRIVES.csv** as a new table in your database.

Use these field names and data types:

Field name	Data type	Store	Display
Drive_Code	Text		
Model_Code	Text		
Model	Text		
Maker_Code	Text		
Suitability	Text		
Connection	Text		
Form_Factor	Text		
Format	Text		
Capacity_TB	Number	3 decimal places	3 decimal places
Read	Number	0 decimal places	0 decimal places
Write	Number	0 decimal places	0 decimal places
Price	Number/Currency	2 decimal places	currency symbol with 2 decimal places
Stock	Number	0 decimal places	0 decimal places

Set the *Drive_Code* field as a primary key.

Save the data.

Take screenshot evidence of the table structures showing the primary keys, field names and data types. Place this in your Evidence Document.

[5]

EVIDENCE 4
Screenshot evidence of the table structures in your database.

                   [Turn over

14 Create a one-to-many relationship between the *Maker_Code* field in the makers table and the *Maker_Code* field in the drives table. [1]

Take screenshot evidence showing the fields and type of relationship. Place this in your Evidence Document.

> **EVIDENCE 5**
> Screenshot evidence showing the fields and type of relationship.

15 In the drives table, locate the record with *Drive_Code* **DD88** and make the following amendments:

Capacity_TB	**2.000**
Price	**450**

Check your data entry for errors.

Save the data.

[1]

16 In the drives table, locate and delete the record with the *Drive_Code* **DD65**

Save the data.

[1]

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

- selects the records where:
  – *Suitability* is Gaming or includes the text Creative
  – *Read* is greater than 2200
- contains a new field called **Retail** which is calculated at run-time. This field will calculate the *Price* increased by 20%. Format this field to display as currency with 2 decimal places
- shows only the fields *Drive_Code*, *Model_Code*, *Model*, *Maker*, *Country*, *Suitability*, *Form_Factor*, *Read*, *Capacity_TB*, *Price* and *Retail* in this order, with data and labels displayed in full. Do **not** group the data
- sorts the data into ascending order of *Country*
- has a page orientation of landscape
- fits on a single page wide with no page number displayed
- includes only the text **Drives for Gamers or Creative Work** as a title at the top of the report
- has your name, centre number and candidate number on the report.

Save and print your report.

> **PRINTOUT 2**
> Make sure that you have entered your **name**, **centre number** and **candidate number** on your report.

[8]

18 Using fields from both tables produce labels for drives that:

- select the records where:
  - *Suitability* is Home or includes the text SOHO
  - *Format* is SSD
  - *Price* is less than 130
  - *Capacity_TB* is 1 or more.

Using this selection produce labels which:

- are sorted into ascending order of *Price*
- display 8 to the page and 2 side by side in portrait layout, for example, 99.00 mm wide × 67.70 mm high (9.90 cm × 6.77 cm)
- display the fields in the positions as shown:

Maker	*Model*
City	*Country*
Suitability	
Connection	*Format*
Price	

- display the text **Large capacity drives for home use** in a larger, bold font at the top of each label
- have your name, centre number and candidate number at the bottom of each label.

Save and print your labels.

> **PRINTOUT 3**
> Make sure that you have entered your **name**, **centre number** and **candidate number** on your labels.

[12]

[Total: 28]

Task 4 – Mail merge

You are required to carry out a mail merge.

19 Create a mail merge document using the file **M2221DELNOTE.rtf** as the master document and **M2221ORDERS.csv** as your data source file.

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

[1]

20 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
<FN>	First_Name
<LN>	Last_Name
<ADD1>	Address_1
<TN>	Town
<PC>	Post_Code
<DC>	Drive_Code
<MD>	Model
<MK>	Make
<CN>	Connection
<FF>	Form_Factor
<CP>	Capacity
<PR>	Price

Replace *<DATE>* with a field to display today's date in the format dd MMMM yyyy

Make sure the spacing, alignment and enhancements in the original master document are maintained.

Replace the text *<Candidate Name>* with your name.

Take screenshot evidence to show the date field code format and place this in your Evidence Document.

EVIDENCE 6
Screenshot evidence of the date field format.

Save and print your master document showing the merge field codes.

PRINTOUT 4
Make sure you have entered your **name**, **centre number** and **candidate number** on your master document showing the merge field codes.

[5]

21 Set an automated filter to select records where:

- *Ready* is Yes
- *Delivered* is No

Take a screenshot to show your automated selection method and place this in your Evidence Document.

EVIDENCE 7
Screenshot evidence of your automated selection method.

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[1]

22 Merge and print the delivery notes for the selected records only. [1]

PRINTOUT 5
Make sure you have entered your **name**, **centre number** and **candidate number** on your delivery notes.

Save and close the files.

[Total: 8]

Task 5 – Printing the Evidence Document

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.

23 Create a presentation of nine slides using the file **M2221PRES.rtf**

Unless otherwise instructed, slides must be formatted to display a title and bulleted list.

Change the layout of slide 1 to title slide layout.

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

[2]

24 Use a master slide to display the following features:

- automatic slide numbers on the top right
- your name, centre number and candidate number.

Make sure that:

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

[1]

25 Delete the slide with the title *Suitable applications for HDDs* [1]

26 On the slide with the title *Consider your storage needs*, demote to the next level all the points that follow the text *Is it:* [1]

27 Use the data in the file **M2221SALES.csv** to create a vertical bar chart to compare units sold for the sales years 2020 and 2021. [1]

28 Label the chart as follows:

- chart title **Sales of storage devices**
- value axis title **Units sold**
- category axis title **Types and connections**

[2]

29 Display the following:

- only the data values at the top of each bar
- a legend to show the years.

[2]

30 Place the chart to the left of the bullets on the slide with the title *Sales analysis 2020 – 2021* [1]

31 Add the following text as presenter/speaker notes for the slide with the title *Sales analysis 2020 – 2021*

M.2 drives have solid state memory chips on a small 'stick'

Print only this slide as presenter/speaker notes.

[2]

> **PRINTOUT 7**
> Make sure your **name**, **centre number** and **candidate number** are on this slide.

32 Save the presentation.

Print the presentation as handouts in landscape orientation with 4 slides to the page.

> **PRINTOUT 8**
> Make sure your **name**, **centre number** and **candidate number** are on the slides.

[1]

[Total: 14]