Cambridge Assessment International Education
Cambridge International Advanced Subsidiary and Advanced Level

INFORMATION TECHNOLOGY	**9626/04**
Paper 4 Advanced Practical	**May/June 2019**
	2 hours 30 minutes

Additional Materials: Candidate Source Files:

Enquiry.rtf
EvidenceDocument.rtf
MediStock.ods
MediStock.xlsx
MediSuppliers.rtf
MediSuppliesList.csv
Task5.html
Trace.png

READ THESE INSTRUCTIONS FIRST

DO **NOT** WRITE IN ANY BARCODES.

Carry out **every** instruction in each task.
Save your work using the file name given in the task as and when instructed.

The number of marks is given in brackets [ ] at the end of each task or part task.

Any businesses and web addresses described in this paper are entirely fictitious.

You must **not** have access to either the internet or any email system during this examination.

You must save your work in the correct file format as stated in the tasks. If work is saved in an incorrect file format, you will **not** receive marks for that task.

This document consists of **7** printed pages and **1** blank page.

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[Turn over

All documents produced must be of a professional standard and contain your candidate details.

Create a folder called **Examination** to save all your work.

Copy the following files into your *Examination* folder:
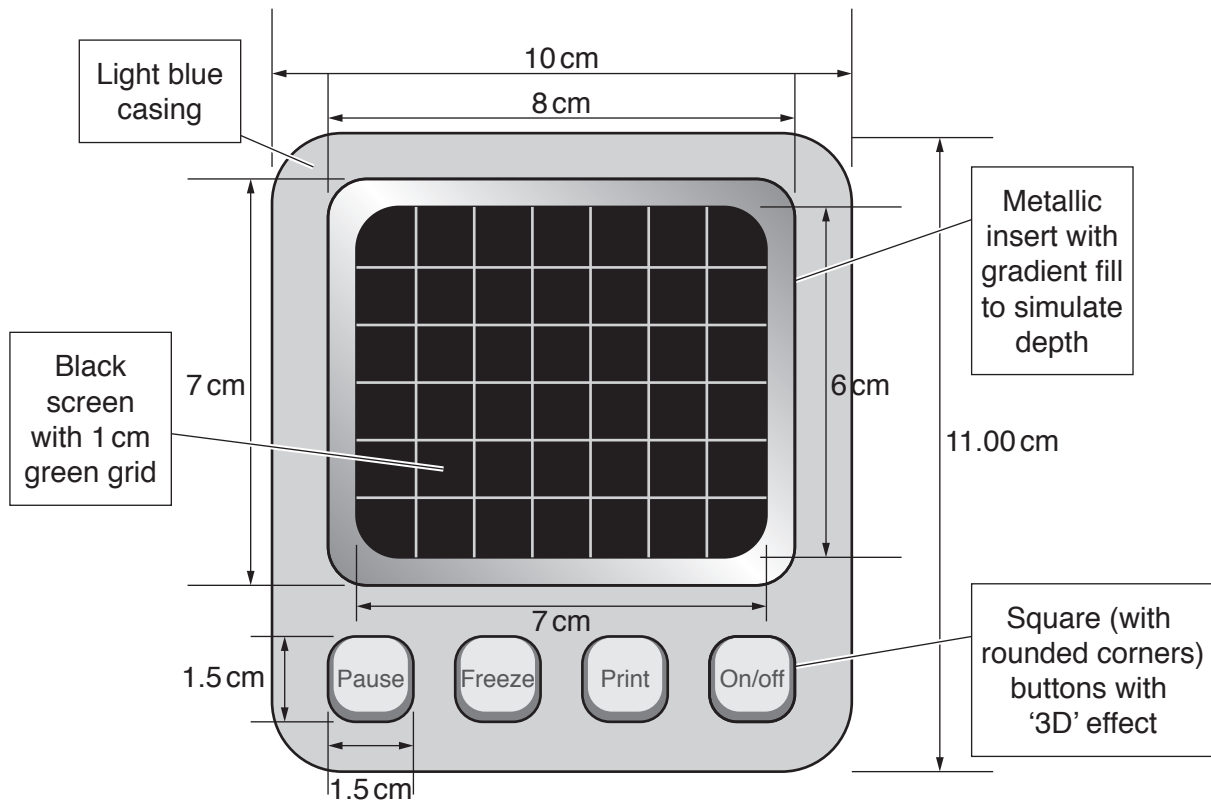**Enquiry.rtf**
EvidenceDocument.rtf
MediStock.ods
MediStock.xlsx
MediSuppliers.rtf
MediSuppliesList.csv
Task5.html
Trace.png

1

Light blue casing

10 cm

8 cm

Metallic insert with gradient fill to simulate depth

Black screen with 1 cm green grid

7 cm

6 cm

11.00 cm

Pause   Freeze   Print   On/off

7 cm

1.5 cm

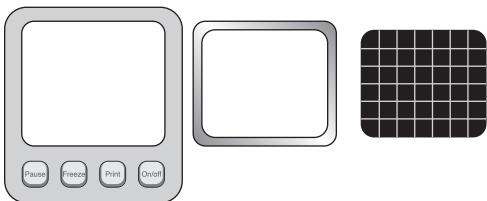Square (with rounded corners) buttons with '3D' effect

1.5 cm

In a vector graphics application, recreate this image of a medical monitor.

The dimensions are for guidance only and should **not** be drawn.

The measurements need only be approximate but the proportions of the image must be preserved.

Create the image as grouped objects.

Pause Freeze Print On/off

Make sure that the panels in the casing and the metallic insert are transparent.

Save the grouped objects separately as **Casing**, **MetalInsert**, and **Grid** in a **bitmap format** that supports transparency.

Save the final grouped image in a **scalable vector graphics format** as **HMonitor_** followed by your centre number_candidate number.
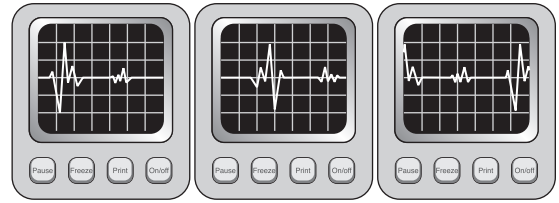For example: HMonitor_ZZ999_9999   [25]

2   Use your images and the **Trace.png** file to create an animation of a continuous wave trace scrolling across the screen of the monitor every second.
The animation must play continuously.

The monitor must fill the frame without distortion.

Export the animation in a file format that will play in a browser as **HMonAnimation_** followed by your centre number_candidate number.
For example: HMonAnimation_ZZ999_9999

Export the animation in a **lossless video format** with a frame width of 500 pixels as **HMonVideo_** followed by your centre number_candidate number.
For example: HMonVideo_ZZ999_9999

In your Evidence Document identify **three** ways IT is used in Medicine and Healthcare.

Describe **two** advantages of using IT in Medicine and Healthcare.

Describe **two** disadvantages of using IT in Medicine and Healthcare.

[20]

3 Open the **MediSuppliesList.csv** file in a spreadsheet application and examine the data. The file contains data about medical supplies. You should note that the format of the **Old SKU** data is inconsistent.

Open the **MediStock** file and examine the workbook.

Create a new worksheet named **Working** and import or copy the data in the *MediSuppliesList.csv* file to this worksheet. You must use this worksheet to standardise the *Stock Keeping Unit* code *(SKU#)* so all codes are in the same format.

The format must be:

1	2	3	4	5	6	7	8	9	10	11	12
Stock Keeping Unit Prefix				Supplier code		6-digit item code					
S	K	U	#	A	A	9	9	9	9	9	9

You must use spreadsheet tools and formulae to convert the SKU data.

In your Evidence Document, place screen shots of any methods you use that are not obvious from the spreadsheet when you save the file.

Copy the new data to the **Revised MediStock Data** worksheet.

Insert formulae to display the *Supplier Code* and the *Supplier Name* in columns A and B.

Remove the repeated text *units per case* from the data in column F.

Save the workbook as **MediStockRevised_** followed by your centre number_candidate number. For example: MediStockRevised_ZZ999_9999

[25]

4   Use the **Enquiry.rtf** file to mail merge letters to the suppliers. Their contact details are available in **MediSuppliers.rtf**
Replace the <prompts> to complete the letter requesting details of their current stock lists.

In your Evidence Document, place screen shots of any methods you use that are not obvious from the merge document or from the letters when you save the files.

Use a conditional field to complete the salutation which must be:

- the contact title and full contact name if the title is Dr.
- **Sir/Madam** if the contact name is unknown
- or just the contact forename.

Use a conditional field to complete the closure which must be either:

- **Yours faithfully** if the contact name is unknown
- or **Yours sincerely**

The current stock lists for *Sof-Form*, *Medline* and *Good Sense* are already available. Exclude them from the merge.

Save the data for the merge as **MediMergeData_** followed by your centre number_candidate number.
For example: MediMergeData_ZZ999_9999

Save the merge document as **MediMergeDocument_** followed by your centre number_candidate number.
For example: MediMergeDocument_ZZ999_9999

Carry out the merge and save the letters as **MediRequests_** followed by your centre number_ candidate number.
For example: MediRequests_ZZ999_9999

[25]

5   Open the file **Task5.html** in a browser.

Clicking the Start button is supposed to prompt for two numbers and display their sum in an alert.

Test the web page by entering numbers when prompted and take note of the result.

Open the file in a text editor and examine the JavaScript to identify the error(s).

Correct the code and insert programmer comments to indicate where you have made changes or additions.

Save the file as **Task5Corrected_** followed by your centre number_candidate number.
For example: Task5Corrected_ZZ999_9999

In your Evidence Document explain the error(s) and describe your changes.

[10]

6 Many companies are developing software solutions for smartphones to monitor older adults and to connect to carers and healthcare providers.

The following is a statement from one of those companies: *'With an aging population, the most effective way to keep patients healthy and healthcare costs down is to employ remote patient monitoring systems.'*

In your Evidence Document, using no more than 200 words, analyse the possibilities for the use of smartphone apps in caring for the elderly. Evaluate the benefits of these developments and any problems there might be in the implementation.

[5]

7 Save your Evidence Document.

8

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