Cambridge IGCSE™(9–1)

INFORMATION AND COMMUNICATION TECHNOLOGY **0983/32**

Paper 3 Data Analysis and Website Authoring **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 **8** pages. Blank pages are indicated.

[Turn over

You have been supplied with the following source files:

2032-ab.css
2032-ab2.htm
2032-accom.jpg
2032-alinao.mp4
2032-beach.jpg
2032-logo.jpg
2032-summary.csv
2032-view.jpg

Task 1 – Evidence Document

Create a new word-processed document.

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

Save this Evidence Document in your work area as **J2032-evidence** followed by your candidate number. For example, J2032-evidence9999

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

Task 2 – Web Page

You are going to create a web page for the Alinao Beach and Dive Resort in the Philippines. The web page must work in any browser. All colour codes must be in hexadecimal.

1   Create a new folder called **AB**

Locate the following files and store them in your *AB* folder.

> **2032-ab.css**
> **2032-ab2.htm**
> **2032-accom.jpg**
> **2032-alinao.mp4**
> **2032-beach.jpg**
> **2032-logo.jpg**
> **2032-view.jpg**

Open the file **2032-accom.jpg**

Crop this image to remove the top so that the image is 456 pixels high and 265 pixels wide.

Save this image as **2032-acc.jpg**

Display the contents of your *AB* folder showing the folder name, all file names, extensions, image dimensions and file sizes.   [3]

> **EVIDENCE 1**
>
> Take a screenshot of your *AB* folder and place this in your Evidence Document. Make sure that the folder name, all file names, extensions, image dimensions and file sizes are clearly visible.

2 Create a web page called **ab.htm**

This web page must work in all browsers and will have a table structure as shown below:

| A 855 × 200 |
| B 855 × 480 |

C 265 × 60	D 265 × 60	E 265 × 60
F 265 × 456	G 265 × 456	H 265 × 274
		I 265 × 162

Each table cell is identified with a letter and all dimensions are in pixels. The letters and dimensions shown in the table must **not** appear on your final web page. The table shows the spacing between cells which will be set when your stylesheet is attached in step 9.

Table borders must appear on the final web page.

[12]

3 Place in cell A the image **2032-logo.jpg** [1]

4 Place in cell B, a placeholder, 855 pixels wide and 480 pixels high, containing the video clip **2032-alinao.mp4** Display an automated text-based error message if the browser does not support this video type. [7]

5 Place in cell:
• C the text **Location**
• D the text **Accommodation**
• E the text **Beach**

Set this text to style h2.

[2]

6   Place in cell:
- F the image **2032-view.jpg**
- G the image **2032-acc.jpg**
- H the image **2032-beach.jpg**

Where necessary, in the HTML, make sure that each image is displayed as 265 pixels wide whilst maintaining the aspect ratio.

[3]

7   Enter in cell I the text:

Web page last updated by followed by a space, then your name, centre number and candidate number.

Set this text to style h3.

[2]

8   Add appropriate alternate text to all still images. [1]

9   Attach the stylesheet **2032-ab.css** to this web page.

Save your web page.

[1]

10 Set the name of the default target window to **_blank** [1]

11 Create hyperlinks from the text *Location* and from the image *2032-view.jpg* to open the web page **2032-ab2.htm** in a new browser window called **_location** [4]

12 Create a hyperlink from all the text placed in cell I to send an email message to ab@cambridgeinternational.org with a subject line **Enquiry about Alinao** [5]

Display the web page in your browser. If necessary, resize it so that:

- all the page width can be seen
- all text can be easily read
- the address bar is visible.

EVIDENCE 2

Place in your Evidence Document screenshots showing the web page in your browser.

Display the HTML source in your editor.

EVIDENCE 3

Take a copy of the HTML source and place this in your Evidence Document.

[Total: 42]

Task 3 – Data Analysis

You are going to edit a spreadsheet to calculate profit and loss for the Alinao Beach and Dive Resort. Alinao's financial year is split into four quarters. Each quarter has three months. All currency values must be in dollars to 0 decimal places.

13 Open and examine the file **2032-summary.csv** in a spreadsheet package.

In the header enter and centre align the text:

Edited by: followed by a space, your name, centre number and candidate number.

In the footer enter and centre align the text:

Edited on: followed by a space, today's automated date, a space then the text **at** followed by a space then the automated time.

Save this as a spreadsheet with the file name **Summary_** followed by your centre number and candidate number. For example, Summary_ZZ999_9999

[4]

14 Format the spreadsheet to look like this:

	A	B	C	D	E	F	G
1	*Alinao Beach and Dive Resort*						
2							
3	**Highest quarterly profit**						
4	**Lowest quarterly profit**						
5	**Average monthly profit**						
6	**Average quarterly profit**						
7							
8		**Quarter**	**Month**	**Visitors**	**Income**	**Expenditure**	**Profit**
9			April	15	16515	8896	
10		**1**	May	15	18003	12089	
11			June	11	14600	10530	
12	**Sub-total**						
13			July	9	12048	11724	
14		**2**	August	8	11724	8632	
15			September	23	42424	23975	
16	**Sub-total**						
17			October	22	38698	19345	
18		**3**	November	12	16451	23041	
19			December	0	0	16040	
20	**Sub-total**						
21			January	7	10321	5324	
22		**4**	February	11	15087	9379	
23			March	32	40320	36691	
24	**Sub-total**						
25	**Annual total**						

Format the merged cell in row 1 to contain orange text, font size 24, on a black background. The text in this cell should contrast with the background when printed in black and white.

Format the text in the merged cells in column B to be font size 20.

[11]

15 In cell D12 use a function to calculate the total number of visitors for April, May and June.   [1]

16 In cell E12 use a function to calculate the total income for April, May and June.   [1]

17 In cell F12 use a function to calculate the total expenditure for April, May and June.   [1]

18 Replicate the formulae entered in steps 15 to 17 to calculate the sub-totals for all other quarters. [1]

19 Calculate the profit for each month and each quarter.

Profit = Income – Expenditure   [2]

20 Calculate, in appropriate cells, the total number of visitors, the total income, the total expenditure and the total profit for the year.   [1]

21 Format cell G9 to have a red background with white text, only if the value in the cell is negative.

Apply this formatting to cells B3 to B6 and to all other cells containing numeric values in column G.
[4]

> **EVIDENCE 4**
> Place in your Evidence Document a screenshot that shows how you applied the formatting to cell G9.

22 In cell B3 use a function to display the highest profit for any quarter.   [2]

23 In cell B4 use a function to display the lowest profit for any quarter.   [1]

24 In cell B5 use a function to display the average monthly profit.   [2]

25 In cell B6 use a function to display the average quarterly profit.   [1]

26 Format all currency values in dollars with 0 decimal places.   [1]

27 In cell C3 use a formula to display the number of the quarter which made the highest quarterly profit. The number of each quarter is displayed in column B.   [2]

28 Save your spreadsheet.

Print your spreadsheet showing the formulae. Make sure:

- it is in landscape orientation
- the row and column headings are displayed
- the contents of all cells are fully visible and can be easily read.

[2]

> **PRINTOUT 1**
>
> Make sure that you have entered your **name**, **centre number** and **candidate number** on your spreadsheet showing the formulae.

29 Print your spreadsheet showing the values. Make sure the:

- printout fits on a single page
- row and column headings are **not** displayed
- contents of these cells are fully visible and can be easily read.

[1]

> **PRINTOUT 2**
>
> Make sure that you have entered your **name**, **centre number** and **candidate number** on your spreadsheet showing the values.

[Total: 38]

Task 4 – Printing the Evidence Document

You now need to print your Evidence Document.

> **PRINTOUT 3**
>
> Make sure that your **name**, **centre number** and **candidate number** appear on every page of your Evidence Document.

8

BLANK PAGE