



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
General Certificate of Education
Advanced Subsidiary Level and Advanced Level

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/02

Paper 2 Practical Test A

May/June 2008

2 hours 30 minutes

Additional Materials: Candidate Source Files

READ THESE INSTRUCTIONS FIRST

Make sure that your **Centre number**, **candidate number** and **name** are clearly visible on every printout, before it is sent to the printer.

Carry out **every** instruction in each task.

Before each printout you should proof-read the document to make sure that you have followed all the instructions correctly.

At the end of the assignment put **all** your printouts into the Assessment Record Folder.

If you have produced rough copies of printouts, these should be neatly crossed through to indicate that they are **not** the copy to be marked.

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

This document consists of **4** printed pages.



You work as an ICT consultant for the Tawara Beach Hotel. You are going to analyse the details of the hotel's mini-bus services.

- 1 Using a suitable software package, open the file **J8BUS.CSV**
- 2 Insert 4 new rows at the top of the worksheet. [1]
- 3 Place these labels in the correct cells:
 - **Delays** in cell A1,
 - **Average** in cell A2,
 - **Maximum** in cell B2,
 - **Long** in cell C2. [1]
- 4 In the *Late* column, enter a formula to calculate the number of minutes by which the bus was late. This must be displayed in a 00:00 time format. If the bus was early this should return 00:00 [4]
- 5 In the *Minutes* column, enter a function to calculate the minutes by which the bus was late as an integer value. [2]
- 6 In the *Route* column, enter a formula to extract the route number from the *Bus Code*. The route number is the third character of the *Bus Code* [4]
- 7 In the *Passengers* column, use a lookup function to show the maximum number of seats on the bus for each route, using the file **J8SEATS.CSV** [5]
- 8 In the *Destination* column, use a lookup function to show the destination for this journey. The destination code is the fifth character of the *Bus Code* and the destinations are held in the file **J8DEST.CSV** [8]
- 9 Replicate the formulae entered at Steps 4 to 8 for every journey. [1]
- 10 In cell A3, enter a function to calculate the average delay for all journeys using the *Minutes* column. [2]
- 11 In cell B3, enter a function to calculate the longest delay from all of the journeys. [2]
- 12 In cell C3, enter a function to calculate the number of delays where the bus was more than 4 minutes late. [3]
- 13 Sort rows 6 to 131 into ascending order of *Route* and then into descending order of *Minutes* [2]
- 14 Format cells A3, B3 and C3 as integers. [1]
- 15 Format all cells in the *Minutes*, *Route* and *Passengers* columns to be right aligned. [1]
- 16 Format all cells in the *Destination* column to be centre aligned. [1]
- 17 Format all cells in rows 1, 2 and 5 to be bold and centre aligned. [2]
- 18 Select only those buses with a *Due* time of between 11:00 and 11:30 inclusive. [2]
- 19 Create a header which says **Due between 11:00 and 11:30** and a footer which contains your name, Centre number and candidate number. [2]
- 20 Save and print all details of this extract, adjusting the page layout if necessary so that the whole table fits on a single page. Make sure that the contents of all cells are fully visible. [2]
- 21 From all the data select, only those buses where the *Minutes* late are greater than 10. [2]
- 22 Change the wording of the header to **Formulae Used** [1]
- 23 Print this extract in landscape orientation, showing all formulae instead of values. Ensure that all formulae and labels are fully visible. Show row and column headings. [4]

- 24 Sort all the data into *Route* order.

In cells A1 to I3 of a new sheet, create a table like this:

Number of buses late, by route								
Route 1	Route 2	Route 3	Route 4	Route 5	Route 6	Route 7	Route 8	Route 9
9	9	9	9	9	9	9	9	9

Note that the numbers shown are examples, they are not correct.

Make sure the cells A1 to I1 are merged as shown.

[2]

- 25 In this table, enter formulae to count the number of buses that are 5 or more minutes late for each bus route.

You may sort the data into *Route* order and use ranges within the sorted data or an extra column to help you.

[6]

- 26 Copy cells A2 to I3 and transpose them from A5 to B13 like this:

Route 1	9
Route 2	9
Route 3	9
Route 4	9
Route 5	9
Route 6	9
Route 7	9
Route 8	9
Route 9	9

[2]

- 27 Create a header which says **Late buses by Route** and a footer which contains your name, Centre number and candidate number.

[2]

- 28 Save and print all details of this extract, adjusting the page layout if necessary so that both tables fit on a single page. Make sure that the contents of all cells are fully visible.

[2]

You have been asked to prepare a graph for the manager comparing the number of trips to each destination and the average number of minutes late for each destination.

- 29 Count the number of trips to each destination.

[2]

- 30 Calculate the average number of minutes late for each destination.

[2]

- 31 Extract only the destinations where the average number of minutes late is greater than 3.5

[2]

- 32 Use this extract to produce the graph comparing the number of buses sampled and the average number of minutes late for each destination. Select the most appropriate type of graph or chart to display the data.

[2]

- 33 Make sure that the primary and secondary axes are appropriately scaled so that both data series are clearly visible. Rescale the average number of minutes so that the minimum value is set to 3. Ensure that your chart is fully labelled. Place your name, Centre number and candidate number on the chart. Save and print this chart.

[13]

You have been asked to edit a word processed document about the hotel.

- 34 Using a suitable software package, load the file **J8TAWARA.RTF**
- 35 Set the page size to A4 and the orientation to portrait. Set all of the margins to 2 centimetres. [2]
- 36 Insert a header which has your name on the left-hand side, your candidate number in the centre and your Centre number on the right-hand side. Insert a footer which has automated page numbering on the right-hand side. Make sure that the header and footer align with the margins and that they appear on every page. [5]
- 37 Set a style for the body text which:
- has a size of 12 points
 - has single line spacing
 - has 2 columns with a 0.5 centimetre space and a vertical line between the columns
 - has a serif font
 - is fully justified.
- Format all the text with the body style. [6]
- 38 Replace the text @@@ with the chemical formula **C₁₂H₂₂O₁₁** [3]
- 39 Set the heading as a bold, underlined, centre aligned, 16 point, sans-serif font. [5]
- 40 Place the image **J8TAWARA.JPG** in the top half of the left column of the first page. The top of the image must align with the top of the right column. Resize and crop the image so that it fits exactly within the margin width, and fills more than a third of the column height and shows all of the hotel building. Ensure that the text wraps around the image and do not distort the image. [6]
- 41 Check the position of page and column breaks and adjust, if necessary, to ensure that:
- there are no widows or orphans
 - bulleted lists are not split between columns or pages. [2]
- 42 Create a hyperlink within this document to link the words *clicking here* with an e-mail to the mailbox at **design.h@cie.org.uk**
- Set the default subject line to **ICTCOREX**
- Print evidence showing the creation of this hyperlink. Ensure that your name, Centre number and candidate number are visible. [3]
- 43 Save the document using a new filename and print it.