



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

May/June 2010

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.

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

Any businesses described in this paper are entirely fictitious.

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



You are going to develop a database to record and extract information for a small garage selling cars. The database contains details of customers and used cars.

The database must meet the following requirements:

- Each car has a unique car ID which is used to identify the car within the garage.
- Each customer has a unique customer ID which is a 5 character code. The first character is a letter which identifies the category of customer, using P for personal customers or B for business customers.
- The telephone number of each customer is in the format of 5 digits, followed by a space then 6 digits.
- The field Address3 will be restricted to only Essex, Suffolk or Cambridgeshire.
- The garage does not purchase cars for less than £500 or sell cars for less than £1000.
- The garage does not sell cars made before 1991.

- 1 You are required to provide evidence of your work, including screen shots at various stages. Create a document named:

CentreNumber_CandidateNumber_Evidence.rtf

e.g. ZZ987_82_Evidence.rtf

Place your name, Centre number and candidate number in the header of your evidence document.

- 2 Look at the data in the files **JXCARS.TXT** and **JXCUST.CSV**

Use these files to create a relational database. Use the most appropriate record structure, primary key field/s and relationship/s.

Include in your evidence document screenshots that show the structure of the tables, showing all of the field types, primary key/s and relationship/s between these tables.

[18]

- 3 Validate the data entry to meet the garage's requirements.

Include in your evidence document screenshots that show how this validation has been achieved.

[15]

- 4 Save and print your evidence document.

You are going to prepare a report from the database.

- 5 Your report will include only cars sold to business customers. You will need to calculate the profit for each car sold. Show only the make, purchase price, sale price, date sold, company names and profit, sorted into ascending order of date sold.

Display your name, Centre number and candidate number in the header. Add the title **Cars sold to business customers**

Calculate the total profit and display it at the end of the report.

Format all currency values in pounds (sterling) to 2 decimal places.

Save and print this report.

[18]

You are going to prepare a report and a graph or chart showing the average sale price of more expensive cars.

- 6 Calculate the average sale price of each make of car for all cars in the database.
Select only the makes of car where the average price is more than £15,000. Sort this data into ascending order of the make. [3]
- 7 Use this extract to prepare a report. Add the title **Average sale price of luxury cars** to this report. Place your name, Centre number and candidate number in the header. Save and print this report. [3]
- 8 Use this extract to produce a graph or chart comparing the average sale price of each make. Select the most appropriate type of graph or chart to display the data. Ensure that labels are fully displayed. Place your name, Centre number and candidate number on the chart. Save and print this chart. [6]

You are going to prepare a report comparing the average profit for the sale of vehicles to both personal and business customers.

- 9 Produce a report which shows the average profit per sale for each of the categories of customer (personal and business). Place your name, Centre number and candidate number in the header. Save and print this report. [6]

The garage is planning to send advertising leaflets to every house in the region. The region comprises six areas. You are going to prepare a spreadsheet to calculate how much it would cost.

This spreadsheet will be used to model the costs depending upon the supplier chosen.

- 10 Using a suitable software package, load the file **JXLEAFLET.CSV**
- 11 In cell A2 enter the name of one of the suppliers. These can be found in cells A7 to A11. [1]
- 12 In cell B21 enter a formula to calculate the total number of properties in the region. [1]
- 13 In cell C15 enter a formula that will display the fixed fee for the supplier selected in cell A2. This formula will look up the chosen supplier in the supplier table and return the corresponding *Fixed Fee*. [4]
- 14 In cell D15 enter a formula that will display the rate charged for each delivery for the supplier selected in cell A2. This formula will look up the chosen supplier in the supplier table and choose the correct rate, depending on the number of properties for that area and return the corresponding rate from the supplier table.
- For example:
- If the supplier chosen was *X Mail* and the area was *Cambridge*, this should return the rate for this supplier for a town of 27000 properties which would give a rate of 0.002 for each delivery. [15]

- 15 In cell E15 enter a formula that will display the cost of the deliveries. This formula will multiply the number of properties by the rate. [1]
- 16 In cell F15 enter a formula that will display the total cost for this area. This formula will add the fixed fee to the delivery charge. [1]
- 17 Replicate the formulae entered in steps 13 to 16 for all areas. [1]
- 18 In cell F21 enter a formula that will display the total cost of the deliveries to all of the areas. [1]
- 19 Format only the cells in the *Fixed fee*, *Total cost* and *Delivery* columns, to currency in pounds (sterling) with 2 decimal places. [1]
- 20 Enter your name, Centre number and candidate number in the footer of the page. [1]
- 21 By changing the chosen supplier in cell A2, use the spreadsheet model to find the supplier with the lowest total cost to distribute leaflets to all of the areas. Save and print all details of only this supplier, 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. [4]
- 22 Print this sheet showing formulae instead of values. Ensure that all formulae and labels are fully visible.

The manager is required to publish a range of documents about the garage.

- 23 The manager says: "Documents for publication need to have accurate content and be error free".

You must prepare a report for the manager to explain in your own words what this means and how you can achieve this. Your report must be between 100 and 400 words. Place your name, Centre number and candidate number on the report. Save and print this report.

[20]