



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

CANDIDATE
NAME

CENTRE
NUMBER

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CANDIDATE
NUMBER

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APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/02

Paper 2 Practical Test

October/November 2012

2 hours 30 minutes

Additional Materials: Candidate Source Files

READ THESE INSTRUCTIONS FIRST

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

DO **NOT** WRITE IN ANY BARCODES.

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

At the end of the exam put this **Question Paper** and **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 **5** printed pages and **3** blank pages.



You work as an ICT consultant for RockICT who produce and sell music. They run a number of websites and stores selling music and videos in different formats. You are going to develop a database to record and extract information regarding the stores, their employees and the jobs that they do.

- 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. ZZ999_99_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 **N12STORES.TXT**, **N12EMPLOYEE.CSV** and **N12JOB.CSV**
- 3 Using a suitable software package, create a new database and import these files.

Some field names, primary key fields and data types are shown below. Use this information and to help you to create the tables:

[31]

N12STORES		
	Field name	Type
🔑	Branch	Integer
	BranchName	Alphanumeric
		Alphanumeric
		Alphanumeric
	Country	
	Telephone	
	Music	Boolean
	Video	

N12EMPLOYEE		
	Field name	Type
	Payroll_ID	
	Forename	
	Surname	
	JobCode	
	BranchCode	

N12JOB		
	Field name	Type
	Job	
	Description	
	Department	
	PayType	
	RateOfPay	Numeric: Currency, € with 2 decimal places

🔑 denotes primary key

- 4 Include in your evidence document screenshots that show the structure of the three tables including all of the field types and primary keys.

- 5 Establish the following relationship:

N12STORES.Branch 1 — ∞ *N12EMPLOYEES.BranchCode*

- 6 Establish an appropriate relationship to link the table N12JOB to the other data. [3]
- 7 Include in your evidence document screenshots that show the relationships between these tables. Make sure that there is evidence of the relationship type.
- 8 Employees are paid either monthly or hourly. Add appropriate validation to make sure data can only be entered as *M* or *H*. [5]
- 9 The RateOfPay field holds the rates of pay for both monthly and hourly paid workers.
Workers who are paid monthly can earn between €1500 and €10000 a month (inclusive). Workers who are paid hourly are paid between €8 and €20 an hour (inclusive). Add appropriate validation. [10]
- 10 Include in your evidence document screenshots that show your validation rules.
- 11 Create a table in your evidence document that looks like this:

Testing the data entered is valid:

Data chosen	Type of data	Expected outcome	Actual outcome

[2]

- 12 There are three types of test data used for data entry. Complete the first three columns of the table with three pieces of test data, one for each type, that will be used to test the validation rule created in step 9.

Perform the tests with this data and record the actual outcomes. If the actual outcome of a test is an error message, take a screen shot of the message and place that in the correct cell of the table. Ensure that all of the message is clearly visible. [12]

- 13 Use your database to select only the employees with a job code starting with the letters SP. [2]
- 14 Use this extract to prepare a report on A4 paper in portrait orientation. List the employees grouped by the branch name.

Within each group:

- sort by job code in ascending order
- include only full names, job codes and job descriptions.

Add the title **Sales employees by branch** to this report. Place your name, Centre number and candidate number in the header of the report. Keep the number of pages to a minimum. Ensure that all the data from a single branch fits on the same page. Save and print this report, ensuring that all data and labels are fully visible. [13]

- 15 Using the data extracted in step 14, produce a report for branches in only Spain or Germany. Show only the branch name and the number of sales personnel that work in each branch. Present this report sorted in descending order of the number of sales employees and ascending order of the branch name. Ensure the total number of sales personnel is shown at the bottom of the report. Place your name, Centre number and candidate number in the header of the report. Save and print this report, ensuring that all data and labels are fully visible. [10]
- 16 Using the data from your report in step 15, create a chart to show the number of sales personnel in each branch in Germany and Spain. Ensure that your chart is fully labelled. Place your name, Centre number and candidate number in the footer of the page containing the chart. Save and print this chart. [7]

You are going to use a spreadsheet to manipulate some data about a survey where 500 people rated the latest song from the band Lyryx.

- 17 Create a new spreadsheet model. The top of the spreadsheet must look like this:

Market research for Lyryx			
Survey number	Gender	Age	Rating
1			
2			
3			
4			
5			
6			

- The spreadsheet should contain space for 500 entries. [3]
- 18 Fill the cells in the top two rows of columns A, B, C and D with a yellow background. Show screen shot evidence of how you set these cells to yellow in your evidence document. [2]
- 19 Set all of the text in the top two rows to a dark blue font colour. Show screen shot evidence of how you set this text to dark blue in your evidence document. [2]
- 20 Restrict data entry for all cells in the gender column (except the top 2 rows) so that they only accept “**Male**” or “**Female**”. Show how you ensured this in your evidence document. [4]
- 21 Restrict data entry for all cells in the age column (except the top 2 rows) to accept only integer values between 12 and 115 inclusive. Show how you ensured this in your evidence document. [5]
- 22 Restrict data entry for all cells in the Rating column (except the top 2 rows) to accept a number of stars, from * to *****. Show how you ensured this in your evidence document. [2]
- 23 Enter the following data for survey number 1.

Survey number	Gender	Age	Rating
1	Male	23	*****

- 24 Insert the other survey results from **N12SURVEY.CSV** into the spreadsheet.
- 25 Place your name, Centre number and candidate number in the header.
- 26 Save the spreadsheet. Print only the first and last pages.
- 27 Find the most common rating given by females between the ages of 18 and 31 (inclusive). Record the answer to this question and show how you obtained this answer in your evidence document. [3]
- 28 Save and print your evidence document.

Write today's date in the box below.

Date

