

CANDIDATE
NAME

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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 2016

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. Printouts with handwritten candidate information will **not** be marked.

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 **6** printed pages and **2** blank pages.

You work for Tawara Music who produce and sell music. The company has regional offices in 9 different cities around the world. Spreadsheet data from 8 of these offices has been combined into a file written using comma separated values. One office has sent the data in a document.

You are going to manipulate this data to create a spreadsheet and use this to develop a relational database. This will be used to record and extract information about employees.

You must use the most efficient method to solve each task.

- 1 You will provide evidence of your work, including screen shots at various stages. Make sure that these screen shots can be easily read. Open the document **N16_evidence.rtf**

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

Save this Evidence Document with the filename:

CentreNumber_CandidateNumber_Evidence

e.g. ZZ999_99_Evidence

[1]

- 2 Open the files **N16staff.csv** and **N16data.rtf** and examine the data.

Manipulate the data in **N16data.rtf** to match the structure of **N16staff.csv**

Add this data to the end of the file **N16staff** and save this file as a spreadsheet.

Make sure that any omissions in the original data are corrected.

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

Print only rows 140 to 157 of the spreadsheet on a single page showing the values.

[8]

- 3 For each employee, use a function in the *City* column to look up the city name from the file **N16city.csv**

Show evidence of your method in your Evidence Document.

[8]

- 4 For each employee, use a function in the *Country* column to look up the country name from the file **N16city.csv**

Show evidence of your method in your Evidence Document.

[8]

- 5 For each employee, use a function in the *Office name* column to duplicate the value held in the *City* column.

Show evidence of your method in your Evidence Document.

[2]

- 6 In the *Full name* column for each employee, use a function to display each name in the format Surname: Forename

Show evidence of your method in your Evidence Document.

[6]

- 7 Use a formula to automatically generate an *Employee code* for each employee. The *Employee code* is often a 7 digit code, but can be 8 digits long. It is the employee's *Office code* followed by the first 2 letters of their *Surname* followed by the first 2 letters of their *Forename*.

e.g. if the *Office code* is LDN, the *Surname* is Jones and the *Forename* is Peter, the employee code will be LDNJoPe

Show evidence of your method in your Evidence Document.

Save this file. [7]

- 8 In your Evidence Document, explain in no more than 50 words, with your own examples, why this structure for an employee code would not be suitable for use in a relational database. [9]

- 9 Examine the values in the *Employee code* column.

Find the employee codes that would cause a problem in creating efficient relationships in a database.

Place in your Evidence Document, either text or screen shots to show the values that you will change.

Edit, but do **not** remove, these values.

Place in your Evidence Document, either text or screen shots to show the amended values.

Place in your Evidence Document, a description and screen shots to show how you found and changed these values.

Save this spreadsheet. [17]

- 10 Create a new database with a table called **Staff** using the following field names:

Employee_Code
Office_Code
Full_Name
Job_Description
Pay_Grade

Examine the data saved in step 9 and select the most appropriate data types for each field.

Import only the required data. Set the *Employee_Code* as the primary key.

Show evidence of the table structure and contents in your Evidence Document. [10]

- 11** Create a new table called **Office** using the contents of the *Office code*, *Office name*, *Currency* and 5 address columns from the file saved in step 9.

Choose your own field names using the naming conventions shown in step 10.

Examine the data file saved in step 9 and select the most appropriate data types for each field.

Import only the required data. Make sure that no data is duplicated. Set the most appropriate key field.

Show evidence of the table structure and contents in your Evidence Document. [13]

- 12** The *Pay_Grade* field in the staff table must contain 1 letter. Restrict the data entry for this field to any 1 letter. Include in your Evidence Document screen shots that show how you have restricted the data entry. [3]

- 13** Create an appropriate relationship between these tables.

Include in your Evidence Document screen shot(s) that show the relationship between these tables. Make sure that there is evidence of the field names and type of relationship you have created. [3]

The Managing Director wants a list of the members of staff on the lowest income.

- 14** Extract and print a report grouped by offices which lists only the employee code, name, job description, pay grade, office code and currency of all employees on pay grade A or B. Group this report into ascending order of office name. The group header must contain the name, full address and currency used for each office. Sort each group into ascending order of job description.

Place a suitable title, your name, Centre number and candidate number at the top of the report in a white sans-serif font on a black background.

Each group header must have a grey background.

The report layout should look like this:

Title in here					
A Candidate, ZZ999,9999					
Beijing 82 Chongwenmennei Yuan Dongcheng District Beijing 100005 China					
BJNChSi	BJN	Cheng: Si Ma	Admin/clerical	A	
BJNChYo	BJN	Chan: Yo-Yo	Admin/clerical	A	
BJNOoWa	BJN	Oon: Wai Wai Hnin	Admin/clerical	A	
BJNChMa	BJN	Cheung: Mao	Admin/clerical	A	
BJNRoLa	BJN	Ross: Lauren	IT systems manager	B	
Belo Horizonte Avenida Bias Fortes 382 Real Lourdes Belo Horizonte MG 30170-012 Brazil					
BLHD'Ch	BLH	D'Silva: Chaka	Admin/clerical	A	

Print this report which must fit on a single page wide.

[15]

Questions 15, 16 and 17 are on page 6.

The Managing Director wants to compare graphically the number of employees on the lowest incomes. Employees on pay grades A or B are classed as low income.

- 15** Using your database software, calculate the number of employees on low income in each of the 9 offices and the number of employees working in each office.

Show evidence of your methods in your Evidence Document. [4]

- 16** Using the data you saved in step 15, create a graph or chart to display, for each office, the percentage of employees on low income.

Place a copy of this graph or chart in your Evidence Document. [6]

- 17** Save and print your Evidence Document.

Write today's date in the box below

Date

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