

## **Cambridge International Examinations**

Cambridge International Advanced Subsidiary and Advanced Level

CANDIDATE NAME							
CENTRE NUMBER				CANDIDA NUMBER			

#### APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/02

Paper 2 Practical Test February/March 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.



You work for Tawara Music who produce and sell music. The company has 10 regional branches in India. All currency values must be in Rupees set to 2 decimal places.

You are going to manipulate data collected from these branches in a spreadsheet, then create a database to record and extract information regarding 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 file **M16evidence.rtf** 

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

Save it with the name:

CentreNumber\_CandidateNumber\_Evidence.rtf

e.g. ZZ999\_99\_Evidence.rtf

[1]

2 Open the files M16Employees.csv, M16Branch.csv, M16Paygrade.csv and M16Job.csv.

Examine the data.

Save the file **M16Employees** as a spreadsheet.

For each employee, use a function in the *Branch code* column to extract the first three characters of the employee's *Payroll number*.

Show evidence of your method in your Evidence Document.

[4]

**3** For each employee, use a function in the *Pay grade* column to extract the 4<sup>th</sup> and 5<sup>th</sup> characters of the employee's *Payroll number*.

Show evidence of your method in your Evidence Document.

[5]

- 4 Insert a new column between the *Payroll number* and *Forename* columns and in row 1 enter the text **Full name** [2]
- In the *Full name* column for each employee, use a function to display each name in the format Surname: Forename

Save your spreadsheet.

Show evidence of your method in your Evidence Document.

[6]

6 Use this spreadsheet to create a new database with a table called **Employees** using the following field names:

PayrollNumber FullName BranchCode PayGrade JobCode

Examine the data saved in step 5 and select the most appropriate data types for each field.

Import only the required data. Select the most appropriate field as the primary key.

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

[10]

7 Create new tables called **Branch**, **PayGrade and Job** using the contents of the files examined in step 2.

Choose your own field names using the naming conventions shown in step 6.

Select the most appropriate data types and key fields.

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

[23]

- 8 Restrict the data entry for the pay grade fields so that each of these fields has only 2 characters. The first character must be a letter and the second a number. Include in your Evidence Document screen shots that show how you have restricted the data entry.

  [4]
- **9** Establish appropriate relationships to link the tables to create a relational database.

Include in your Evidence Document screen shots that show the relationships between these tables. Make sure that there is evidence of the field names and type of relationships you have created.

[9]

**10** Add a new field called **Contact** to the *Branch* table.

Enter the following telephone numbers into the table:

Branch	Telephone
Mumbai	02266666666
Delhi	01142424242
Bangalore	08055556666
Hyderabad	04004004004
Ahmedabad	07912341234
Chennai	04422224444
Lucknow	05221234567
Kanpur	05121234567
Indore	07311234567
Ghaziabad	01204736200

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

[4]

You are required to produce a list of the members of staff from two southern states.

11 Extract and print a report which lists only the payroll number, name, job description, pay grade, rate and weighting (in this order) of all employees from the southern states of Karnataka and Tamil Nadu.

Add a suitable title to the report in a white sans-serif font on a dark grey background. The page header must contain only your name, Centre number and candidate number, right aligned in a white font on the same dark grey background.

Group this report into ascending order of office name. The group header must be left aligned and contain the:

- office name
- state
- text Tel: and the contact telephone number

Display the text in each group header as a 16 point, bold, sans-serif, black font on a light grey background.

Sort each group into descending order of job description.

The report layout should look like this:

Title in he	ere				Α (	Candidate IN8	88 9999
Bangalo Karnatal Tel: 080							
	BanS10016	Khare: Amish	Studio technician	S2	₹	250900.00	1.1
	BanS10017	Agarwal: Jeevan	Studio technician	S1	₹	300000.00	1.1
	BanS20015	Korpal: Isha	Sales	S2	₹	250900.00	1
	BanS30014	Harjo: Amma	Sales	S3	₹	255080.00	1
	BanS10003	Bhavsar: Sahan	Regional director	S1	₹	300000.00	1
	BanS20004	Magar: Imaran	IT systems	S2	₹	250900.00	1
	BanM10010	Ganaka: Alagan	Admin/clerical	M1	₹	725000.00	1
Chennai Tamil Na Tel: 044							
	CheT30016	Ganjoo: Jatin	Tours/Promotions crew	Т3	₹	450000.00	1

Print this report (in greyscale) which must fit on a single page wide.

[21]

You are required to com	pare data about the	salaries paid to the	emplovees in ea	ch state

12 In a new query, from all the data, create a field calculated at run-time called **Salary** which multiplies the rate by the weighting for each employee.

Place in your Evidence Document screen shots to show:

- your method
- the first 20 calculated records.

[5]

13 Extract and print a report which gives summary data on the maximum, minimum, average and total of the salaries paid in each state.

Add the title:

## **Confidential: Managers only**

Below this add another title explaining what the report is for.

On a third line add the text

#### Report presented by:

followed by a space, your name, Centre number and candidate number.

Group this report into ascending order of state, then ascending order of office. The group header for each office must contain only the office name and contact telephone number. Sort each group into ascending order of pay grade, then ascending order of the employee's name.

Each office should show the name, pay grade, job description and salary of each employee.

Add appropriate labels to the summary data to explain what each value is.

Save and print this report which must fit on a single page wide.

[21]

14 Using the data you saved in step 13, create an appropriate graph or chart to display, for each state, the average salary.

Place this in your Evidence Document.

[5]

**15** Save and print your Evidence Document.

### Write today's date in the box below

Date

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8

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