CANDIDATE
NAME

CENTRE
NUMBER

CANDIDATE
NUMBER

APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY   **9713/02**

Paper 2 Practical Test   **May/June 2013**

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.
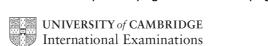
DO **NOT** WRITE IN ANY BARCODES.

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 for the University of Tawara. You are going to develop a database to record and extract information regarding the students, their courses and their personal tutors.

1   You must provide evidence of your work, including screenshots 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 **J13STUDENT.TXT**, **J13COURSE.TXT** and **J13TUTOR.TXT**

Design your database structure with appropriate field names, key fields and data types. Some of this information is shown below.

	J13STUDENT			**J13COURSE**	
	Field name	**Type**		**Field name**	**Type**
🔑	Student_ID			Code	
	First_Name			Course_Title	
				Faculty	
		Alphanumeric		Level	
		Alphanumeric		Full_Time	Boolean
		Alphanumeric			
	Zip_Code				
	Telephone			**J13TUTOR**	
	Birth_Date			**Field name**	**Type**
	Course_Code			Code	
	Tutor_Code				
				Room	
				Email	
				Salary	Numeric: Currency, $ with 2 decimal places
				Contract	Numeric: Decimal with 1 decimal place
🔑 denotes key field					

3   Using a suitable software package, import the files to create your database.

4   Include in your evidence document screenshots that show the structure of the tables including the field types and key fields.   [37]

5 Establish the following relationship:

J13COURSE.Code   1 — ∞   J13STUDENT.Course_Code [2]

6 Establish an appropriate relationship to link the table J13TUTOR 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 The *Contract* field contains the portion of the week that each tutor works. This value must be greater than 0 and the maximum value that can be stored is 1.

Make sure that the database checks this data as it is entered, allowing only valid entries. If the data entered is rejected, a message should be displayed explaining the range of acceptable values.

In your evidence document show clearly how you have restricted the data entry and any text displayed to the user. [6]

9 Examine the data in the *Level* field. Extract a list of the levels and place this in your evidence document sorted into alphabetical order. Ensure there are no duplicate entries. No other data is allowed in this field.

Make sure the database checks this data as it is entered, allowing only valid entries. If the data entered is rejected, a message should be displayed explaining the list of acceptable values.

In your evidence document show clearly how you have restricted the data entry and any text displayed to the user. [9]

10 Save and print your evidence document.

11 Create a new document named:

CentreNumber_CandidateNumber_Testing.rtf

e.g. ZZ999_99_Testing.rtf

12 Set this into landscape orientation. [1]

13 In the footer of this document place:

- your name, Centre number and candidate number on the left
- an automated filename with the full file path on the right.

Make sure that these align to the page margins. [2]

14 Enter the text **Testing the data entered is valid** as a heading in a bold, 32 point, centre aligned, sans-serif font. [5]

15 Below the heading create a test table that will be used for 5 pieces of test data, and looks like this:

Fieldname			
Test type	*Range check*		
Data chosen	Type of data	Expected outcome	Actual outcome

[3]

16 Add a second test table that looks like this:

Fieldname			
Test type	*Lookup check*		
Data chosen	Type of data	Expected outcome	Actual outcome

[4]

17 Complete the test tables for the Tutor.Contract and Course.Level fields.

If the actual outcome of the test is an error message, take a screenshot of this message and place it in the correct cell of the table. [14]

18 Save and print this document.

19 Rooms 2 to 10 are going to be closed and all students using them need to be contacted.

Extract and print a report grouped by room number, then tutor names. Apart from these two fields, include only the students' names, course titles and telephone numbers, sorted into ascending order on the second name, then first name.

Ensure that it is clear which names belong to the tutors and which belong to the students. Add a suitable title to the report. Ensure that your name, Centre number and candidate number are added to the header of the report before you print it.

Ensure the report fits on a single page wide. Print the report.   [9]

20 Calculate the number of students enrolled in each Faculty area. Only include Faculties where students have enrolled. Sort this data alphabetically by Faculty. Display this data as a table in your evidence document.   [8]

21 Create a chart that shows the number of students enrolled in each Faculty area. Do not include a Faculty if less than 20 students have been enrolled. Fully label your chart and add your chart to your evidence document.   [7]

22 One document is held on a shared network drive within the University. You will manage this document, but other users will also work on it.

In your evidence document, explain how you can control this document so that it can be edited by the multiple users.   [10]

23 Save and print your evidence document.

Write today's date in the box below.

Date

BLANK PAGE

BLANK PAGE

8

BLANK PAGE