

# **Cambridge International Examinations**

Cambridge International Advanced Subsidiary and Advanced Level

CANDIDATE NAME			
CENTRE NUMBER		CANDIDATE NUMBER	

# 8 4 2 1 9 1 9 6 2 8

## APPLIED INFORMATION AND COMMUNICATION TECHNOLOGY

9713/02

Paper 2 Practical Test May/June 2015

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 Airlines and will create a database to analyse data about their flights.

Dates are to be displayed in dd/mm/yyyy format.

All times are to be displayed in hh:mm format and are set to GMT (Greenwich Mean Time).

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

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** Examine the data in the files:

J15CrewLeaders.csv J15Flight.csv J15FlightCode.csv J15FlightCrew.csv

Create a new database and import these files.

Tawara Airlines have decided that all field names must be short, meaningful, consistent in style and contain no spaces.

Some table names, field names, key fields and data types are shown below. Where they are not given, choose your own.

Use this information to help you create the tables:

[42]

	FlightCode		Flight	
	Field name	Data type	Field nam	e Data type
9	Flight_No	Alphanumeric	Flight_No	
	D_Code	Alphanumeric	Depart_Da	ate
	A_Code			
	Depart	Alphanumeric	Arrive_Dat	te
		Alphanumeric		
			Crew	
Cre	w			
Fiel	d name	Data type		
			CrewLead	lers
Fore	ename	Alphanumeric	Field nam	e Data type
			Crew	
			adenotes primary	key

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- 3 Place in your Evidence Document screenshots to show the structure of the four tables, including the field names, data types and key fields.
- **4** Establish appropriate relationships to link the four tables to create a relational database.

Place in your Evidence Document screenshots to show the relationships between these tables and each relationship type. [9]

5 Create a report of all Tawara Airways flights in and out of Paris between the 5<sup>th</sup> January 2015 and the 25<sup>th</sup> January 2015. Do **not** include these dates. Display only the flight numbers, airport names, dates and times for both the departures and arrivals of these flights.

Add a suitable title to the report. Make sure that your name, Centre number and candidate number are placed in the footer.

Place in your Evidence Document screenshots that show how you extracted this data.

Print this report. [11]

6 Your manager wants a list of full names of all flight crews who have flown into **or** out of Hong Kong.

Create a report which lists the names of these crew members as well as their Payroll number and the flight numbers of both their flights into and out of Hong Kong.

Group this report by the crew code (which is a single letter) and include the payroll number of crew leader in the group header. Within each crew code, group the report by the flights showing the departure airport code and arrival airport code.

Please note: crew members may appear more than once on this list.

Add a suitable title to the report. Make sure that the text **Report prepared by:** followed by your name, Centre number and candidate number are added to the header.

Prepare this report so that it fits on a single portrait page wide and that the details of each crew do not split over two pages. Where possible, fit more than one crew on a single page. Print this report.

[15]

7 Create a report to be presented to your manager. This must count the number of flights between each of the airports.

Display the codes for the departure airports as row headings, and codes for the destination airports as column headings. Do **not** include the total number of flights to and from each airport.

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

Print this report on a single portrait page, showing gridlines in the table. [8]

**8** Refine the results of your search in step 6 to create a chart showing how many times each of these crew members visited Hong Kong. Crew members who have visited Hong Kong have flown in to and out from this airport.

Show in your Evidence Document:

- how you calculated this data
- the results displayed as a table
- the results displayed as a chart.

[12]

Tawara Airlines classes any flight that takes longer than 7 hours 30 minutes as a Long Haul flight.

9 Using an appropriate software package and the file J15Flight.csv calculate the duration of each flight.

Extract all long haul flights with a departure date between the 16<sup>th</sup> and 25<sup>th</sup> January 2015. Do **not** include these dates.

Sort this extract into ascending order of departure date then into descending order of duration.

Add an appropriate image and title to your extract. Make sure that your name, Centre number and candidate number are in the header.

Print on a single page, evidence of how you calculated the duration of each flight.

Print on a single page, this extract displayed as a table.

[23]

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

# Write today's date in the box below

Date			

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