



FINAL
Examination Paper
(COVER PAGE)

Session : August 2014

Programme : Diploma In Information And Communication Technology (DICTN)

Course : ICT1104 : Database Management

Date of Examination : December 5, 2014

Time : 8:00am – 10:00am Reading Time: Nil

Duration : 2 Hours

Special Instructions :

Answer any **FOUR (4)** questions.

Materials permitted : Nil

Materials provided : Nil

Examiner (s) : Ms. Light Lau Teng Lye, Leong Siok Jen.

Moderator : Ms. Noor Hasrina

This paper consists of 4 printed pages, including the cover page.

INTI INTERNATIONAL COLLEGE PENANG
 DIPLOMA IN COMMUNICATION AND TECHNOLOGY
 ICT 1104: DATABASE MANAGEMENT
 FINAL EXAMINATION: AUGUST 2014 SESSION

This paper consists of **SIX (6)** questions. Answer any **FOUR (4)** questions in the answer booklet provided. All questions carry equal marks.

Question 1

(a) Briefly explain **Cardinality** and **Participation** in database relationship.

(5 marks)

(b)

staffNo	fName	lName	position	sex	DOB	salary	branchNo
SA9	Mary	Howe	Assistant	F	19-Feb-70	\$9,000.00	B007
SG14	David	Ford	Supervisor	M	24-Mar-58	\$18,000.00	B003
SG37	Ann	Beech	Assistant	F	10-Nov-60	\$12,000.00	B003
SG5	Susan	Brand	Manager	F	03-Jun-40	\$24,000.00	B003
SL21	John	White	Manager	M	01-Oct-45	\$30,000.00	B005
SL41	Julie	Lee	Assistant	F	13-Jun-65	\$9,000.00	B005

Explain **FOUR (4)** components of the data hierarchy based on above diagram. For each component, provide an appropriate example based on the above diagram.

(10 marks)

(c) Explain **FIVE (5)** types of Form Control in Microsoft Access.

(10 marks)

Question 2

(a) Write SQL command that will create **Sales** table which have the following items: custID, custName, salesValue, dateSales as shown below.

Sales

custID	custName	salesValue	dateSales
20	Johnny	4,000	25/10/2010

(5 marks)

- (b) Write SQL command to insert the following information into question 2(a) table: customer ID = 38, customer name = Peter, date sales = 11th December 2014, sales value = \$5,000. (5 marks)
- (c) Write SQL command to give Cindy 20% discount per month. (5 marks)
- (d) Write SQL command to update Sam record as follows: customer ID = 37 and date sales = 20th October 2010. (5 marks)
- (e) Write SQL command to remove Peter's record. (5 marks)

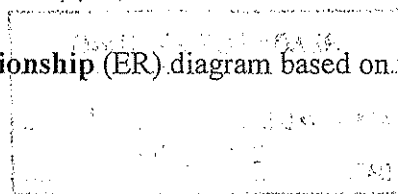
Question 3

- (a) Differentiate between **Primary Key** and **Foreign Key** in Entity Relationship Diagram. (5 marks)
- (b) Identify and explain **FIVE (5)** users who are using Database Management Systems. (15 marks)
- (c) With an aid of diagram, define what is Recursive Relationship. (5 marks)

Question 4

- (a) List **FIVE (5)** business applications that use Database in our daily life. (5 marks)
- (b) Explain **FIVE (5)** data types used in attributes structure. Provide appropriate example for each data types. (10 marks)
- (c) The following attributes have been identified in a database:
- AssignmentName
 - StudentID
 - AssignmentGrade
 - StudentName
 - SubjectCode
 - AssignmentCode
 - SubjectName
 - Gender
 - Birthday

Draw the **Entity Relationship (ER)** diagram based on the above information.



(10 marks)

Question 5

(a)

pack_id	pack_desc	cust_ic	cust_name	cust_telno	staff_id	staff_name	staff_telno

The table above represent local excursion packages that customer can book from the staff from the company. Normalize the above UNF table to 3NF.

(15 marks)

(b) Discuss the **FIVE (5)** components of a database system?

(10 marks)

Question 6

(a) Question 6 (a) is to be based on the following SQL command:

```
SELECT branch_no, branch_postcode, branch_city;
FROM Branch
WHERE branch city = Georgetown OR branch_postcode = '11900'
ORDER BY branch_name
```

Identify and correct **FIVE (5)** mistakes from the above SQL command.

(10 marks)

(b) Question 6 (b) is to be based on the following SQL command:

```
SELECT branchLocation, COUNTER(staffNo), SUM(salary) AS total
FROM Staff
ORDER BY branchLocation;
```

Identify and correct **FIVE (5)** mistakes of the above SQL command in order to produce the output as appeared in the query table:

branchLocation	count	sum
Sarawak	34	2100
Melaka	4	5172
Johor	122	4187

(10 marks)

(c) What is the difference between SQL commands **ANY** and **ALL**?

(5 marks)

-- END --

