

**FINAL
ALTERNATIVE ASSESSMENT**

(COVER PAGE)

Session : April 2021

Programme : Diploma in Information Technology (DITN)
Diploma in Computer Science (DCS)

Course : **ICT1104: Database Management**

Date of Examination : 31 July 2021 (Saturday)

Time : 12.00noon – 2.30pm Reading Time : Nil

Duration : 2 Hours 30 Minutes

Special Instructions :

Answer ALL questions.

Material permitted : Non-Programmable Scientific Calculator

Materials provided : Nil

Examiner(s) : **Light Lau Teng Lye, Mahaletchumy**

Chief Moderator : Nursyarizan Mohd Akbar

This paper consists of 3 printed pages, including the cover page

DIPLOMA IN INFORMATION TECHNOLOGY PROGRAMME (DITN)
 DIPLOMA IN COMPUTER SCIENCE PROGRAMME (DCS)
 ICT1104: DATABASE MANAGEMENT
 FINAL ALTERNATIVE ASSESSMENT: APRIL 2021 SESSION

Answer ALL questions.

- 1 Suppose you are involved in developing a database system for the Insurance company database of ABC company. The operation of the company can be described as follows.

They have a file of purchasing policy that they provide to their customers. Each type of policy has a unique policy number, a cost, and duration.

They have a file of customers. Each customer is given a unique customer number. This file also contains customer names, and total number of customers.

A customer may make zero, one or more purchasing at a time, and a purchasing is always placed by one customer alone. Information as to purchasing includes the purchasing date, the total price, quantity and the cost. The purchasing total price is quantity multiplied by the cost.

A purchasing may consist one or more than one type of policy, and a type of policy may be consisted in more than one purchasing.

Given this information, draw an ER diagram for this Company. Identify and label the primary key(s) of each entity, relationships and the foreign keys required for creating the relational model.

(40 marks)

- 2 Luxury Restaurant Sdn Bhd, was set-up in Jan 2019. The retail outlet was conveniently located in Paragon Mall, Penang to offer a complete range of local and western food. Below form shows the examples of bookings form record which requires normalization process. You as the database administrator, normalize the below information from Unnormalized Form (UNF), First Normal Form (1NF), Second Normal Form (2NF) and Third Normal Form (3NF).

Booking Form		
Staff No:	P123	Date: 28th Dec 2018
Staff Name:	Amy	Payment: Cash
Customer ID:	C223	
Customer Name	Candy	
Table No	Type	Quantity
T11	Birthday	10
T20	Wedding	100

(30 marks)

- 3a) Write an SQL command that will create **Policies** table which shown in below.

Policies

PolCode	PolName	PolUnit	PolCost
11223	Life insurance	3	1500.50

(5 marks)

- 3b) Write an SQL command to insert the following information into the Question 3(a) table:
policy code = 5054, policy name = Saving, policy unit = 8, policy cost = 2000.15.
(5 marks)
- 3c) Write an SQL command to give Life insurance policy name 20% discount.
(5 marks)
- 3d) Write an SQL command to update policy name Senior saving record as follows:
PolCode = 1318 and PolUnit = 10 units.
(5 marks)
- 3e) Write an SQL command to remove policy code 11223 record.
(5 marks)
- 3f) List out how many policies are available in this company.
(5 marks)

(30 marks)

~THE END~

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