

**FINAL
ALTERNATIVE ASSESSMENT**

(COVER PAGE)

Session : April 2022

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

Course : ICT1104: Database Management

Date of Examination : 02 August 2022(Tuesday)

Time : 04.00pm-06.30pm 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.Melisa Kaur,Mahaletchumy

Chief Moderator : Siti Hajar

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 2022 SESSION

Answer ALL questions

Question 1

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

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

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 orders at a time, and a order is always placed by one customer alone. Information as to order includes the order date, the order total price, quantity and the cost. The order total price is quantity multiplied by the cost.

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

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)

Question 2

Hilltop Animal Hospital, was set-up in Jan 2019. The hospital outlet was conveniently located in Ontario, Canada to offer a complete range of service for pets. Below form shows the examples of invoice form record which requires normalization process. You as the database administrator, According to the invoice below, identify normalization process from 1 Normal Form (1NF), 2NF and 3NF.

(30 marks)

INVOICE		
HILLTOP ANIMAL HOSPITAL		DATE: JAN 13/2002
INVOICE # 987		
MR. RICHARD COOK		
123 THIS STREET		
MY CITY, ONTARIO		
Z5Z 6G6		
PET	PROCEDURE	AMOUNT
ROVER	RABIES VACCINATION	30.00
MORRIS	RABIES VACCINATION	24.00
	TOTAL	54.00
	TAX (8%)	4.32
	AMOUNT OWING	58.32

Question 3

- (a) Write an SQL command that will create **Programs** table as shown in below.

Programs

ProCode	ProName	ProUnit	ProCost
2345	Database Management	3	3000.00

(5 marks)

- (b) Write an SQL command to insert the following information into Question 3(a) table: program code = 2369, program name = C++, program unit = 4, program cost = 3000.15.

(5 marks)

- (c) Write an SQL command to give Business Intelligence program name 10% discount.

(5 marks)

- (d) Write an SQL command to update program name Networking record as follows: ProCode = 1917 and ProUnit = 5 units.

(5 marks)

- (e) Write an SQL command to remove program code 2341 record.

(5 marks)

- (f) List out how many programs are available in this company with descending order in program name.

(5 marks)

~THE END~*ICT1104 (F)/ April2022 Session/ formatted*