## **QUESTION 4: (25 MARKS)**

Using the tables provided below, express the following queries in **SQL USING ORACLE SYNTAX**.

Consider the following database snapshot about a bank:

Table : Customer						
AccountNo	Name	Email	Address	DoB		
1232	Toma	t.toma@gmail.com	Rose-Hill	12-Jan-90		
1233	Soma	s.soma@hotmail.com	Port-Louis	10-Mar-81		
1234	Dil	deal@shadi.com	Curepipe	31-Dec-95		

Table : AccountType					
AccID	AccName	Description			
101	Current	Low interest			
102	Saving	High interest			
103	Credit	Short term loan			

Table : CustAcc							
AccNo	AccID	DateCreated	CurrentBalance				
1232	101	23-Apr-2009	10000				
1232	103	25-Jun-2009	-500				
1233	102	10-Jan-2010	1200				
1234	102	15-Feb-2010	5000				

(a) Write the SQL code that will create the table structure for the Customer table specifying **NULL constraints** where necessary (but <u>without specifying any primary or foreign keys</u>).

## [3 marks]

(b) Having created the table Customer in question (a) above, write the SQL code that will enter the first data row into the Customer table.

## [4 marks]

(c) Add a PRIMARY KEY constraint to make the AccountNumber the primary key of the Customer table

## 2 marks]

(d) Add a FOREIGN KEY constraint to make the AccNo the foreign key in the CustAcc table.

[3 marks]

(e) Add a new column in the Customer table with the following data definition (Column Name COMPANY of Varchar2 data type and field size of 25, and contains a constraint that data cannot be NULL)

[2 marks]

(f) Write the SQL code to delete the row in the Customer table for the Customer whose name is 'Dil'.

[2 marks]

(g) The Address of the Customer 'Dil' in the Customer table has been recently changed to 'Vacoas'. Write SQL code to update the address of this customer table.

[3 marks]

(h) Write SQL code to display the Customer name with the highest CurrentBalance.

[6 marks]