1. Draw an EER diagram for the following given information and obtain the database schema.

   A bank is organized into branches. Each branch is located in a particular city and is identified by a unique name. Each branch maintains its assets.

   Bank customers are identified by a unique customer Identification Number. The branch stores each customer's Name, Address and Telephone number. Customers may have accounts and can take loans. A customer may be associated with an employee, who may act as a loan officer or personal banker for that customer.
   Employees are identified by their Employee Numbers. The branch stores the Employee Number, name, address and telephone no of each employee. The branch also keeps track of the employee's start date and the length of the employment.

   Each branch offers two types of Accounts: Savings and Current Accounts. Each account is assigned a unique Account Number. An account can be held by more than one customer, and a customer can have more than one account. The branch maintains a record of each customer's balance and the most Recent Date on which the account was accessed. Savings Accounts are having an Interest Rate and Current Accounts are having Overdrafts.

   A loan is given at a particular branch. A loan is granted to one or more customers and a customer can get more than one loan. A loan has a number. For each loan, the bank keeps track of the Loan Amount and the Loan Payments. The Date and the Payment is recorded for each payment.

   (State your own assumptions if any)

2.

   a. Briefly explain what a view is.
   b. Write the General format of view with Explanations ?
   c. Consider the following table 'employee_info'. Write a view to display the emp_name, telephone, and the email of all employees

Emp_ID	Emp_Name	Address	Telephone	email
SR123	Suresh	Colombo	01121234567	smith@gmail.com

3.

a. Consider the following tables of an insurance database. Construct the following SQL queries for this relational database.

person (driver-id, name, address)
car (license, model, year)
accident (report-number, date, location)
owns (driver-id, license)
participated (driver-id, car, report-number, damage-amount)

i) Find the total number of people who owned cars that were involved in accidents in 2004.

ii) Find the number of accidents in which the cars belonging to “Tharaka” were involved.

iii) Delete the Mazda belonging to “S Khan”.

b. A schema describing Theatres, Cities (where they are located) and the Shows are defined as follows:

CITY (Name, State, Country)

THEATRE (Name, City, State, Capacity)

SHOW (Title, Artist, Hall, Attendance)

Write the following queries in SQL

i. Find the names of the artists who performed before at least 5000 people, together with the cities where those performances took place.
ii. Find all states in India where Mr. X has performed.
iii. List all the artists who never played in Colombo.
iv. Find the name of theatres in Kandy whose capacity exceeds 5000.

4.

a. Create a Stored procedure to Display the Record of a Given SNO ?

Student

SNO	Name	Marks

b) Using the Oracle function calculate the average marks of the above table?

c) Create a Package with a function to delete a specific record from the above table (With argument) and include a procedure to insert record?

d) Create a trigger to display message when the student table encounters with an Update?