

# School of Computer Science Engineering & Information Systems

### FALL Semester 2024-2025

### Midterm Lab

## L3 + L4 - PMCA503P - Database Systems

# $Q_{uestion:}$ P

**Instruction**: Take screen shots of create table statements, Constraint Statements, data present in each table using select statement and 5 SQL queries along with their output.

## I. Consider the following relational database schema.

[5 Marks]

PRODUCT(Prod\_code, Name, Description, Vendor\_id)

VENDOR(Vendor\_id, Name, Email, Address)

II. Write appropriate SQL statements for creating the above tables with necessary primary key and foreign key. Ensure that the address of the vendor can only come from Chennai, Delhi, Cochin, and Hyderabad. [5 Marks]

## III. Implement SQL statement for the following questions.

[10 Marks]

- 1. Display information about vendors located in Cochin.
- 2. Ensure that the email-id of the vendor is having '@' symbol.
- 3. Find the product which has no description for its product and also no vendor.
- 4. List out the product which has been supplied to vendor who has located in 'Delhi'.
- 5. Count that how many products has been supplied to each vendor.



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Question: Q

**Instruction**: Take screen shots of create table statements, Constraint Statements, data present in each table using select statement and 5 SQL queries along with their output.

## I. Consider the following relational database schema.

[5 Marks]

EMPLOYEE(Emp\_id, Emp\_name, Email, Office\_code)

OFFICE(Office\_code, City, Phone, State, Country)

II. Write appropriate SQL statements for creating the above tables with necessary primary key and foreign key. Ensure that the employee can only come from the country India, USA, Germany, France, Italy, and Britain. [5 Marks]

## III. Implement SQL statement for the following questions.

[10 Marks]

- 1. Display the employee detail whose name starts with an A.
- 2. Display information about all offices situated in USA.
- 3. One of Office located in 'Chennai' is now decided to shifted its office to 'Bangalore and hence the phone number of the office is also get changed accordingly. Kindly do the necessary changes in the appropriate table.
- 4. List out how many employees' works in each company.
- 5. Find the employee who works in the city as the employee 'Sachin' works.



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# Question: R

**Instruction**: Take screen shots of create table statements, Constraint Statements, data present in each table using select statement and 5 SQL queries along with their output.

## I. Consider the following relational database schema.

[5 Marks]

CUSTOMER(Cus\_id, Cus\_name, Cus\_address, Cus\_phone)

ORDERS(Order\_id, Order\_date, Bill\_amount, Cus\_id)

II. Write appropriate SQL statements for creating the above tables with necessary primary key and foreign key. Make it certain that mobile number of the customer is exactly 10 digits. [5 Marks]

## III. Implement SQL statement for the following questions.

[10 Marks]

- 1. List the name and phone number of customers who live in Vellore area.
- 2. Change the bill amount to zero if it is null.
- 3. Display the order-id if the order was purchased on the month 'August'.
- 4. Find the customer who has not placed any order thus far.
- 5. Which customer has purchased for maximum amount.