**DEPARTMENT OF COMPUTER APPLICATIONS**

**MCA DEGREE FIRST SEMESTER – 2021 Admissions**

**LAB Cycle for Continuous Assessment**

**I)**

1. Create table CLIENT\_MASTER with attributes Client\_No as primary key, Name, City, Pincode and Bal\_due.
2. Create table SALE\_ORDER with attributes Order\_No, Order\_Date, Client\_No, Order\_Status and Dely\_Date
3. List all details from the client\_master table for clients whose Bal\_due = 0.
4. Update table client\_master, Change city of Client\_no C00004 to Jaipur.
5. Retrieve records of clients residing in Mumbai.
6. Find the name and address of customer who has placed Order\_no 'O19003' and 'O19002' respectively.
7. List the client\_no, name, city and pincode of clients whose Order\_status is "In process".5

**Submit on or before 27/11/21**

**II)**

1. Create table supplier with attributes supplier number as primary key, supplier name and city.
2. Create a table parts with attributes partno as primary key, partname, color, weight and city.
3. Create a table shipment with attributes sno as references supplier number of supplier table, pno references partnumber of parts table, quantity, sno and pno as primary key.
4. Insert values into 3 tables.
5. Change the city of suppliers whose sno is S1 to Hyderabad.
6. Update the quantity of all parts in the shipment table to quantity +10.
7. Get supplier name for all suppliers who supply part p1.
8. Get supplier number for suppliers who are located in same city as sno=S1.
9. Get supplier number for suppliers who supply at least one part supplied by sno=S2.
10. Get Sno’s for suppliers who do not supply any part supplied by sno=S2.

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**NOTE:** Enter supplier number as S1, S2,… and part number as P1,P2,….

**III)**

1. Create a table employee with attributes Employee\_id, First\_name, last\_name, email,phone number, hire\_date,job\_id, salary,manager\_id,department\_id.
2. Insert five rows to employee table.
3. Change the phone number of employee whose employee\_id is 3.
4. Write a query to display the name (first name and last name) for those employees who gets more salary than the employee whose ID is 163.
5. Write a query to display the name (first name and last name), salary, department id, job id for those employees who works in the same designation as the employee works whose id is 169.

**Submit on or before 7/12/2021**

**IV)**

1. Consider the following relations
2. Product (P\_code, Description, Stocking\_date, QtyOnHand, MinQty, Prices, Discount, V\_code) .
3. Vendor (V\_code, Name, Address, Phone).
4. **Here a vendor can supply more than one product but a product is supplied by only one vendor. (NOTE:** Identify the primary keys and foreign key from this statement**)**
5. Write SQL queries for the following:
   * List the names of all the vendors who supply more than one product.
   * List the details of the products whose prices exceed the average product price.
   * List the Name, Address and Phone of the vendors who are currently not supplying any product.

**Submit on or before 11/12/2021**

**V)**

1. Student(snum: integer, sname: string, major: string, level: string, age: integer)
2. Class(name: string, meets at: time, room: string, fid: integer)
3. Enrolled(snum: integer, cname: string)
4. Faculty(fid: integer, fname: string, deptid: integer)
5. The meaning of these relations is straightforward; for example, Enrolled has one record per student-class pair such that the student is enrolled in the class.
6. Write the following queries in SQL. No duplicates should be printed in any of the answers.
7. Find the names of all Juniors (Level = JR) who are enrolled in a class taught by I. Teach.
8. Find the age of the oldest student who is either a History major or is enrolled in a course taught by I. Teach.
9. Find the names of all classes that either meet in room R128 or have five or more students enrolled.
10. Find the names of all students who are enrolled in two classes that meet at the same time.
11. Find the names of faculty members who teach in every room in which some class is taught.

**Submit on or before 14/12/2021**

**VI) Application of Views:**

1. Create a view of the table supplier with Supplier Number, Supplier Name and city.
2. Display the view.
3. Update the value of Supplier Name on view.
4. Display the supplier table.
5. Drop the view.

**Submit on or before 17/12/2021**

**VII) Application of index and sequence:**

1. Create a table employee with attributes employee number, name, designation,salary,date of birth,date of joining,depno
2. Insert values into table employee
3. Create an index on name of employee table
4. Select the details from the table using name
5. Drop the index
6. Delete all rows from employee table
7. Create a sequence on employee number of employee table.
8. Insert value into employee table.
9. Display the details of employee table.

**Submit on or before 19/12/2021**

**VIII) Trigger for loan generation:**

* Create a table account with attributes customerid, name and balance
* Create another loan with attributes cusid and amount.
* Insert values into account table.
* Create a trigger to check if the balance has gone below 0 , if so make necessary conditions.

**Submit on or before 21/12/2021**