

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**LIST OF EXPERIMENTS**

| Course Code | CSA0522 | Course title | Database Management Systems for MongoDB | |
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| Course Type | Progam Core | | Branch /SLOT | CSE / Slot C |
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| Exam | University Exam | | Date | 01.10.2022 |

| **EX. No.** | **EXPERIMENTS** |
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| **1** | **DDL Commands** – CREATE, ALTER, DROP, TRUNCATE  Create a Table as Workerswith the fields S\_No, Name, Designation, and Branch. Alter the Table by adding a column Branch. Drop the table. |
| **2** | **DML Commands** – INSERT, SELECT, UPDATE, DELETE  Create a table Bank with the fields S\_No , Cust\_Name, Acc\_No,Balance, cus\_Branch. Insert five rows into the table. Give a select statement using Simple Select \* for selecting all fields in the table. Then **Update** theCus\_Branchin the second row asPondicherr**y.** SELECT with various clause. |
| **3** | DDL Commands with Constraints – PRIMARY, FOREIGN KEY, UNIQUE, CHECK  Create a Table Employee with fields S\_No, name, Designation Branch with primary key as S\_No. Create a table Workers with the same fields and make the field S\_No as foreign key. |
| **4** | **DCL and TCL Commands**  Create a Table Book with the fields S\_No, B\_Name, Author, Price, and Publisher. Create a **save point** for the table **book** as **B . Rollback** the table **book** after inserting four and five rows respectively. Execute the commands Grant & Revoke and finally Commit the table. |
| **5** | **SELECT with various clause** – WHERE, BETWEEN, IN and pattern matching Commands  Create a table bank with fields S\_No, Cust\_Name, Acc\_No , Balance, cas\_Branch. Give the select statement with Simple Select \* with where clause for the field name Acc\_No. |
| **6** | SELECT with various clause – GROUP BY, HAVING, ORDER BY  Create table Project with the fields S\_No, P\_Name, Coordinators, P\_Price, and Location. Select the rows in the table using Group by clause for Location. Select the rows in the table order by Coordinators. |
| **7** | **Sub Query**  Create a Table Employee with fields S\_No, name, Designation Branch. Select employee’s names whose designation is manager and working in the branch Chennai. |
| **8** | **Indexing & View**  Create a view table with the same fields S\_No, name, Designation, Branch in the Employee table and insert more records in the table. |
| **9** | **Procedures and Functions**  Crearte a recursive MySQL computing the factorial of a given number using high level programing Extension with Functions.  Create a simple **procedure** to get all the records from the table ‘Employee’ and List out the name, department, salary where salary > 20000 in the Table. |
| **10** | Cursor – Implicit and Explicit  Create a table employee and insert 30 records and implement the above cursor concepts with example. |
| **11** | **Trigger**  Create a trigger in MySQL to log the changes of the EMPLOYEES table with fields ID, Name and Email. Also create a new table named EMPLOYEES\_AUDIT to keep the changes of the employee table. Create a BEFORE UPDATE trigger that is invoked before a change is made to the employees table. |
| **12** | Database Connectivity Application use Java or PHP / MYSQL |
| **13** | Simple programming exercise using (REPEAT, WHILE) Write a function to build a string repeatedly until the value of the variable becomes greater than 5. Then, we display the final string using a SELECT statement. |
| **14** | Simple programming exercise using(CASE and LOOP) Write a function that uses CASE statement where if monthly\_value is equal to or less than 4000, then income\_level will be set to ‘Low Income’. If monthly\_value is equal to or less than 5000, then income\_level will be set to 'Avg Income'. Otherwise, income\_levelwill be set to 'High Income'. |
| **15** | High level programming extensions (procedures)  Create a simple procedure to get all the records from the table ‘student\_info’ which have the following data: mysql> select \* from student\_info;  + + +- + +  | id | Name| Address | Subject |  + + +- + +  | 100 | Aarav | Delhi | Computers |  | 101 | YashPal | Amritsar | History |  | 105 | Gaurav | Jaipur | Literature |  | 110 | Rahul | Chandigarh | History |  + + +- + + |
| **16** | Create a stored procedure GetCustomerLevel() that accepts two parameters customer number and customer level.  First, it gets the credit limit from the customers table. Then, based on the credit limit, it determines the customer level: PLATINUM , GOLD , an SILVER. The parameter p\_customerlevel stores the level of the customer and is used by the calling program. |
| **17** | High level language extension with cursors Write a Cursor program using MySQL to retrieve the email-ids(build an email list) of employees from employees table. |
| **18** | Create a function that returns the level of a customer based on credit limit.(Use the IF statement to determine the credit limit). |
| **19** | Create a Table as **workers** and the details are   | S.No | Name | Designation | Branch | | --- | --- | --- | --- | | 1 | Martin | Manager | Chennai | | 2 | Sopna | Supervisor | Madurai | | 3 | Hunter | Assistant | Trichy |   Perform the following:   * + Alter the table by adding a column **Salary \***Alter the table by modifying the column **Name**   + Describe the table **worker \***Copy the table worker as trainee   + Delete the Second row from the table \*Drop the table |
| **20** | Create a Table a **bank** and the details are   | S.No | Cust\_Name | Acc\_no | Balance | Cus\_Branch | | --- | --- | --- | --- | --- | | 1 | Ramesh | 12378 | 100000 | Adyar | | 2 | Samran | 12367 | 152500 | Mylapore | | 3 | Hari | 12345 | 250000 | Anna Salai |   Perform the following:   * + Simple Select \*Select with **where** clause \*Select with **comparison operator >**   + Select with **between** in the field **Balance \***Update the **Cus\_Branch** in the second row as **Pon \*** find out the maximum balance \* Drop the table |
| **21** | Create a Table Employee with fields S\_No, name, Designation Branch with primary key as S\_No. Create a table Workers with the same fields and make the field S\_No as foreign key. |
| **22** | . Create a view with name ‘std\_view’ using STUDENT table which holds the value of the following :   | Reg\_No | Stu\_Name | Department | DBMS Mark | | --- | --- | --- | --- | | ECE0023 | Reddy | Electronics | 56 | | CSE0024 | Sandy | Computer\_Science | 86 | | ECE0040 | Hajira | Electronics | 40 |   Perform the following  \* which of the student scored low mark \* List the stu\_Name in Ascending Order  \* Display the names Group by Department \* list the students having the dept as “Electronics”  \* List the students whose name ends with the substring “dy” \* Find the students whose mark >50  \* Drop the table |
| **23** | Write a recursive MySQL computing the factorial of a given number using high level programing Extension with **Functions.** |
| **24** | Create a Table as **workers** and the details are  Perform the following:   * + Alter the table by adding a column **Salary \***Alter the table by modifying the column **Name**   + Describe the table **worker \***Copy the table worker as trainee   + Delete the Second row from the table \*Drop the table |
| **25** | Using database connectivity in java or php to connect my sql database for student’s performance report preparation. |

**INTERNAL EXAMINER EXTERNAL EXAMINER**