M.Sc. (Computer Science)

Semester-1

MSCS-1-02P: Data Base Management System (DBMS) Lab

Total Marks: 50
External Marks: 15
Internal Marks: 35
Credits: 2
Pass Percentage: 40%

Course: DBMS Lab	
Course Code: MSCS-1-02P	
Course Outcomes (COs) After the completion of this course, the students will be able to:	
CO1	Implement Basic DDL, DML and DCL commands.
CO2	Understand Data selection and operators used in queries and restrict data retrieval and control the display order.
CO3	Use Aggregate and group functions to summarize data.
CO4	Join multiple tables using different types of joins.
CO5	Understand the PL/SQL architecture and write PL/SQL code for procedures, triggers, cursors, exception handling etc.

Detailed List of Programs: Detailed List of Programs:

Programme No.	Name of Program
P1	Implementation of DDL commands of SQL with suitable examples • Create table • Alter table • Drop Table
P2	Implementation of DML commands of SQL with suitable examples • Insert • Update • Delete
P3	Implementation of different types of function with suitable examples • Number function • Aggregate Function • Character Function • Conversion Function • Date Function
P4	Implementation of different types of operators in SQL

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	• Arithmetic Operators • Logical Operators • Comparison Operator • Special Operator • Set Operation
P5	Implementation of different types of Joins • Inner Join • Outer Join • Natural Join etc.
P6	Implementation of • Group by & having clause • Order by clause • Indexing
P7	Implementation of • Sub queries • Views
P8	Study & Implementation of different types of constraints.
P9	Study & Implementation of Database Backup & Recovery commands.
P10	Study & Implementation of Rollback, Commit, Save point
P11	Creating Database /Table Space • Managing Users: Create User, Delete User • Managing roles:-Grant, Revoke
P12	Study & Implementation of PL/SQL.
P13	Write a PL/SQL program to find the factorial of a given number.
P14	Calculate the net salary and year salary if DA is 30% of Basic, HRA is 10% of Basic and PF is 7% if Basic Salary is less than 8000, PF is 10% if Basic Salary between 8000 to160000.
P15	Study & Implementation of SQL Triggers.
P16	Create a row level trigger for the customers table that would fire for INSERT or UPDATE or DELETE operations performed on the CUSTOMERS table. This trigger will display the salary difference between the old values and new values
P17	Convert employee name into uppercase whenever an employee record is inserted or updated. Trigger to fire before the insert or update.

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