

**NIRMA UNIVERSITY**

<b>Institute:</b>	Institute of Technology
<b>Name of Programme:</b>	Integrated B.Tech.(CSE)-MBA
<b>Course Code:</b>	CSI0505
<b>Course Title:</b>	PL-SQL Programming
<b>Course Type:</b>	Core
<b>Year of Introduction:</b>	2021-22

**Credit Scheme**

L	T	Practical Component				C
		LPW	PW	W	S	
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**Course Learning Outcomes (CLO):**

At the end of the course, students will be able to –

1. demonstrate database design using SQL
2. apply suitable query processing to access the database
3. develop efficient PL/SQL programs to access the database

**Syllabus:** Laboratory work will be based on following concepts with minimum 10 experiments:

SQL queries to store and access a data using join, scalar and aggregate functions, PL/SQL blocks, using variables with different scope and data types, program structures to control execution flow using conditional constructs and loop constructs, incorporating SQL statements in PL/SQL blocks with and without cursors, exception handling, using and managing functions, procedures and triggers.

Self-Study: -NA-

Suggested Readings/  
References:

1. Ivan Bayross, SQL, PL/SQL, BPB Publications
2. Scott Urman, Oracle9i PL/SQL programming, McGraw-Hill

Suggested List of Experiments:	Sr. No.	Title	Hours
	1.	To realize the SQL concepts with DML and DDL commands.	04
		To create a Table, add columns, and perform unconditional search operations	
	2.	To create a Table, add columns, and perform conditional search operations	04
	3.	To use PL/SQL Basic Blocks	04
	4.	To explore the use of control structures in PL/SQL	04
	5.	To embed SQL in PL/SQL	04
	6.	To handle exceptions using PL/SQL	04
	7.	To write PL/SQL program using procedures	04
	8.	To write PL/SQL program using functions	04
	9.	To grant execution privileges using PL/SQL programming	04
	10.	To create and update object Triggers using PL/SQL.	04

Suggested Case List: -NA-