NIRMA UNIVERSITY

Institute:	Institute of Technology
Name of Programme:	Integrated B.Tech.(CSE)-MBA
Course Code:	CSI0505
Course Title:	PL-SQL Programming
Course Type:	Core
Year of Introduction:	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. To create a Table, add columns, and perform unconditional search operations	04
	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-		