

Name of the Course: PLSQL Practical

Sr.No.	Heading	Particulars
1	Description the course : Including but Not limited to:	PL/SQL ,Oracle's procedural extension language for SQL, allows developers to include procedural language components such as loops, conditional statements and functions. The course enables students with practical experience in using PL/SQL for effective database programming and development.
2	Vertical :	Skill Enhancement Course(SEC)
3	Type :	Practical
4	Credits :	2 credits
5	Hours Allotted :	60 Hours
6	Marks Allotted:	50 Marks
7	Course Objectives(CO):	
	CO 1. Comprehend the basics of PL/SQL and gain knowledge about control and conditional statement in PL/SQL.	
	CO 2. Understand working with cursors,collections and composite data types in PL/SQL.	
	CO 3. Develop expertise in creating stored procedures and functions.	
	CO 4. Explore the use of triggers to automate responses to events within the database.	
	CO 5. Understand the concept of Exception handling.	
	CO 6. Design modular applications using packages.	
8	Course Outcomes (OC):	
	OC 1. Use PL/SQL variables ,data types, control and conditional statement.	
	OC 2. Apply sequences and cursor in PL/SQL.	
	OC 3. Work with Collection and Composite Data Types.	
	OC 4. Develop PL/SQL structures like functions, procedures and triggers for database applications.	
	OC 5. Handle errors and exceptions in PL/SQL programs.	
	OC 6. Develop PL/SQL packages.	
9	Modules:-	
	Module 1:	
	1. PL/SQL Basics- Use of variables, Write executable statement, Interacting with Oracle Server, Create anonymous PL/SQL block,Sequences	30 Hrs
	2. Control Structure in PL/SQL- Using while loop, Do loop, For loop, Use of GOTO statement	
	3. Create conditional statement using PL/SQL- Using if statement, Using if else statement, Using elsif ladder, Using case expression.	
	4. Create cursor in PL/SQL- Implicit cursor, Explicit cursor, Parameterized cursor	
	5. Collection and Composite Data Types - Working with Collections,Working with Composite Data Types	

	Module 2:	
	1. Creation of Procedures in PL/SQL 2. Functions in PL/SQL 3. Creation of Trigger – Create Row level trigger, Create Statement level trigger, Create instead of trigger 4. Handling exceptions- Creation of user defined exception, Creation of system defined exception 5. Creation of Package in PL/SQL	30 Hrs
10	Text Books	
	1. Programming with PL/SQL for Beginners , H. Dand, R. Patil and T. Sambare, X –Team 2. Oracle pl/sql Programming ,Feuerstein, S., & Pribyl, B. ," O'Reilly Media, Inc.".	
11	Reference Books	
	1. Oracle Database PL/SQL Language Reference, 12c Release 1 (12.1) E50727-04 , Alpern, D., Belden, E., Agrawal, S., Baer, H., Castledine, S., Chang, T., & Yang, M. 2. Oracle PL/SQL for dummies , Rosenblum, M., & Dorsey, P. (2006), John Wiley & Sons. 3. PL/SQL Programming ,Ivan Bayross, BPB	
12	Internal Continuous Assessment: 40%	Semester End Examination: 60%
13	Continuous Evaluation through: Students are expected to attend each practical and submit the written practical of the previous session. Performing Practical and writeup submission will be continuous internal evaluation. 2.5 marks can be awarded for each practical performance and writeup submission totalling to 50 marks and can be converted to 20 marks.	30 marks practical exam of 2 hours duration
14	Format of Question Paper: Duration 2 hours. Certified copy of Journal is compulsory to appear for the practical examination	
	Practical Slip: Q1. From Module 1 13 marks Q2. From Module 2 12marks Q3. Journal and Viva 05 marks	