**Data Retrieval Techniques**

1. How to use select statement in different ways to retrieve records?
2. Working with Column alias
3. Working with Table alias
4. Data filtering and sorting with in single table
5. Clauses and its types in oracle
6. Where clause
7. Having clause
8. From clause
9. Group by clause
10. Order by clause
11. Using clause
12. Constraint clause
13. For update clause

**Working With DDL Commands**

1. Table creation using CREATE statement
2. Creating table from another table
3. Dropping a table using DROP command
4. Altering the column of a table
5. Modifying the column datatype in a table
6. Renaming the column of a table
7. Renaming an entire table
8. Using truncate command
9. Difference between Delete and Truncate command

**Working With DML Commands**

1. How to copy data from one table to another table?
2. How to copy the structure alone from a table?
3. Different types of inserting row to an existing table
4. Updating any value of with in a record using UPDATE command
5. Deleting a particular record from a table
6. Using merge & insert all command [Implementation of Project 1 ]

**Integrity Constraints**

1. How to declare column level constraints?
2. How to declare row level constraints ?
3. How to add constraints to an existing table?
4. Types of integrity constraints
   * Not null
   * Unique key
   * Primary key
   * Referential integrity
   * Check integrity
5. How to enable and disable constraints?
6. How to get information about constraints?

**Built In Functions**

1. Understanding Single row functions
2. How to use single row functions using dummy table?
3. Types of single row functions
   * String functions
   * Date functions
   * Mathematical functions
   * Conversion functions
   * Special functions
   * Analytical functions
4. Working with multi row functions [Implementation of Project 2]

**Data Aggregation**

1. Working with aggregate function
   * Count()
   * Sum()
   * Max()
   * Min()
   * Avg()
2. Working with group by clause
3. Working with having clause
4. Difference between WHERE and HAVING clause

**Importance Of JOIN**

1. Understanding joins and its uses
2. Types of joins
   * Equi join
   * Non – equi join
   * Self join
   * Outer join
   * Left & Right outer join
   * Full outer join
   * Cross join [Implementation of Project 3]

**Set Operators And Pseudo Columns**

* How to use set operators in a single table content?
* Working with set operator types
  + UNION
  + UNION ALL
  + INTERSECT
  + MINUS
* Working with pseudo columns using the following
  + ROWID
  + ROWNUM

**Sub Queries**

1. Importance of sub queries
2. Using different types of sub queries
   * Single row sub queries
   * Multi row sub queries
   * Nested queries
   * Multi column sub queries
   * Correlated sub queries
3. Using inline views and scalar queries [ Implementation of Project 4]

**Database Transaction And Security**

1. Working with data query language using TCL
2. Working with data control language commands
3. Use of commit and rollback
4. Use of savepoint and set transaction
5. How to give system privileges to an user?
6. How to invoke and revoke object privileges?
7. How to create users and roles?

**Introduction To PL/SQL**

1. Informal introduction to PL/SQL
2. Advantages of PL/SQL
3. Datatypes in PL/SQL
4. Program structure of PL/SQL
5. Embedding SQL statements
6. Using conditional statements and loops

**Creating And Using Cursors**

1. What is cursor?
2. How to create cursor?
3. Using cursors in PL/SQL
4. How to create explicit cursor?
5. Creation of for loop cursor
6. What are cursor parameters?
7. How to use for update clause?
8. What is ref cursors?
9. How to use implicit cursors?

**Understanding Exception Handling**

1. What is an Exception?
2. Describing Exception types
3. Handling system defined exceptions
4. Handling user defined exceptions?
5. Sql code vs Sql errm
6. Pragma exception\_init

**Creation Of Stored Procedures**

* Creating procedures in Pl/SQL
* Working with procedure parameters
  + IN parameter
  + OUT parameter
  + INOUT parameter
* How to create procedures with cursors
* How procedures return records?
* What is Pragma autonomous transaction?

**Creating & Using Functions**

1. Importance of function
2. How to create functions?
3. Difference between procedures and functions
4. How to use inline functions?

**Creating & Using Packages**

1. What is a Package?
2. Reasons to use packages
3. What is package specification?
4. What is package body?
5. How to instantiate package?
6. How to initialize instantiated package?
7. What are all the package state?

**Triggers In PL/SQL**

1. How to create triggers?
2. Benefits of trigger
3. How to trigger a trigger?
4. Using DML trigger & DDL trigger
5. How to audit database using triggers?
6. What are database level trigger?

**Collections In PL/SQL**

1. What is collection?
2. How to use arrays?
3. Using nested tables