

**B.Sc. VI Sem (Computer Science)
RDBMS (Oracle) & Numerical Analysis**

Max Marks: 85

UNIT-I

min marks:- 28

Oracle Philosophy, Oracle DBA, Introduction Of SQL : Involving SQL Plus, The Oracle Data Types, Creating a Table, Inserting , Updating Data into a Table, Deletion Operation, The Many Faces of the Select Command, Modifying the Structure of Table, Removing Table, Data Constraints, Define Integrity Constraint in the Alter table Command, Dropping Integrity Constraints, Using Logical Operations, Range Search, Pattern Matching, Oracle Function, Grouping Data form Table on SQL, Joins, Sub Query, Using Union, Intersect, Minus, Indexes, Views.

UNIT-II

Permission of the Object Created by the User, Granting Permission using GRANT Statement, Object Privileges with Grant Option, Referencing a Table belonging to another User, Revoking the Permission given PL / SQL : PLSQL Data types, Control Structures, The PLSQL Execution Environment, The PLSQL SYNTAX: The Character set understanding the PLSQL, Block Structure, Cursor & Attributes, Error Handling in PLSQL.

UNIT-III

STORAGE PROCEDRES: how Oracle creates a Procedure, Executes Procedures, Advantages of Procedures Creation of Stored Procedure, An Application using a Procedure Deleting a Stored Procedure, STORED FUNCTIONS : What are Function, where Function Resides, How Oracle Generate a Function , How Oracle Executed a Function , Advantages of Functions, creation of stored Function, An application using a Function, Deleting a Stored Function.

UNIT - IV

Binary Arithmetic, Number Systems and its conversions, Floating Point Arithmetic, Concept of errors and their type, Solution of Equation: Bisection method, Regula-Falsi position method, Secant Method, Newton Raphson method, Roots of polynomials: Multiple roots, Muller's method, Lin-Bairstow's method, Solution of System of Linear Equation , Direct Method, Gauss Elimination Method, LU Decomposition Method, Gauss-Jordan Method.

UNIT-V

Interpolation: Linear Interpolation , Hermite Interpolation, Newton's Divided Difference Formulas, Difference Schemes, Interpolation Formulas Using Differences, Lagrange Interpolation Formula, Numerical Integration : Concept of Numerical Integration , Trapezoidal Rule, Simpson 1/3 Rules, Simpson 3/8 Rules, Numerical Differentiation: Methods Based on: Interpolation, Finite Difference Operators.

BOOKS RECOMMENDED:

1. Ivan Bayross, "SQL, PL/SQL"
2. Prateek Bhatia, Sanjiv Datta, Ranjit Singh." Simplified Approach to Oracle"
3. E. Balaguruswamy, Numerical method.
4. S.S Shastri, Computer Oriented Numerical Method
5. E. S. Garewal Numerical Analysis
6. Dr. D.C. Agrawal & Pooja Agrawat." Numerical Methods & Analysis"

