B. Sc. (IT) Part II Semester -IV
Paper IV
Oracle

Unit I

Introduction to Oracle - Relational database management system (RDBMS), Codd's Rules for RDBMS, Oracle as multiuser system, Logging and Logging out of Oracle, Database Administrator (DBA) and its Role, Creation of user and Password. Introduction to Structured Query language (SQL) – History and standardization of SQL, benefits of SQL, elements of SQL, Languages, Database objects, Reserve words, Keywords. Data types – Char, Varchar, Date, Number, Long, Raw and Long raw.

Unit II

SQL Command – DDL command, DML command, DRL command, Aggregate function, Clauses, Set operator, Predicates, Join, Sub queries, Views. Simple reports commands. PL/SQL - Introduction to PL/SQL, Advantages of PL/SQL, PL/SQL block structure, Character Set, Literals, PL/SQL data type, Variables, Control and loop statements, Loops and Labels.

Unit III

Cursor – PL/SQL Cursor, Explicit Cursors, Implicit Cursors. Exception Management - User defined, predefined exceptions, subprograms and packages - procedures, functions, package specification, body, calling sub programs, advantages of packages, cursers in packages.

Unit IV

Database Triggers & Built in Packages - Database triggers-syntax, parts, statement, body, restriction, types. Built in packages – DBMS standard. DBMS OUTPUT - Collection, member functions and procedures, PL/SQL table and records, declaration, referring, maintaining row count, insertions, deletions, nested tables, varying, arrays, initialization, declaration, varrays, member functions and procedures.