**Course- DBMS**

**Course Code: 22CS007**

**ST-1 SYLLABUS**

**Date of Exam: September 2, 2023**

**Lecture: 1-36**

**Introduction to Databases:**

Overview of Database, Database Management System (DBMS), DBMS Architecture, Data Independence, Integrity Constraints

**Data Models:**

Data Models, Relational Model, ER Model, ER Diagram, Relational Model

**Functional Dependencies and Normalization:**

Functional Dependencies, Normalization: Functional Dependencies, Decomposition Full Functional Dependency (FFD), Transitive Dependency, Normal Forms: 1NF, 2NF Normal Forms: 3NF, BCNF, De-Normalization

**SQL Queries:**

DDL statements Create, Alter, Drop, DML statements Insert, Update, Delete, Simple queries WHERE Clause, Compound WHERE Clause with multiple AND & OR Conditions Joins, Sub-queries - Simple & Correlated Using IN, EXISTS, NOT EXISTS, DCL statement Grant, Revoke

**Database Security:**

Database Security: Introduction, Threats, Counter Measures

**Control Structures:**

Control Structures: Introduction to Conditional statement, Iterative Control Sequential Control Statements, Cursors, Views