SYLLABUS for QUIZ (Theory)

Introduction: Data, data processing requirement, desirable characteristics of an ideal data processing system, traditional file-based system, its drawbacks, concept of data dependency, Definition of database, database management system, 3-schema architecture, database terminology, benefits of DBMS.

Relational Database: Relational data model: Introduction to relational database theory: Definition of relation, keys, relational model integrity rules.

Database Analysis: Conceptual data modeling using E-R data model -entities, attributes, relationships, generalization, specialization, specifying constraints, Conversion of ER Models to Tables, Practical problems based on E-R data model.

Database Implementation: Introduction to SQL, DDL aspect of SQL, DML aspect of SQL – update, insert, delete & various forms of SELECT- simple, using special operators, aggregate functions, group by clause, subquery, joins, co-related sub query, union clause, exist operator.