

Data Base Management System

Code: **BCA 401**

CONTACTS: 3L + 1 T

**CREDITS: 4**

Introduction to DBMS, architecture, administration roles, data dictionary

Traditional models, three-level architecture, hierarchical model, network model and relational model, File organization , Security.

Relational model – definitions and properties, keys , integrity rules, relational algebra, joins, set operations, Tuple relational calculus

SQL constructs, embedded SQL , Query & Query Optimisation Techniques.

Database design, conceptual, logical and physical models, ER diagram and model,

Functional Dependency ( Armstrong's Axioms), Normal forms( 1NF, 2NF, 3NF, BCNF)

Indexing- Primary, Secondary, Multilevel