Syllabus for 2nd Internal Exam of 1st Semester, M.Sc.(CS/IT) for the subject Advanced Database Management System (CSC1056/INF1056)

Unit-1II: Introduction to ER-Diagram Introduction, Components of ER, Database Modeling using ER diagram, Concepts of Entity, Entity Sets, Attributes sets, Relationship in ER diagram, Types of Relationships (Unary, Binary, Ternary, Recursive, N-ary), Types of Entities (Strong and Weak), Types of Attributes (Simple, Composite, Single Valued, Multi-valued, Derived, Stored, Key or Unique attributes), Constraints on Binary Relationships: Cardinality ratio and Participation Constrains), Mapping Cardinalities (One to One, One to Many, Many to One, Many to Many), Participation Constraints (Total and Partial), **Conversion of ER model into Relational Tables**

Unit-IV: Introduction to Functional Dependency, Amrstrong's Axiom of FDs, Closure of attribute, Finding out Candidate keys from a given FD set, Equivalent set of Functional Dependency Sets with more Examples, Irreducible set of functional dependencies, **Cannonical Covers of a FD set**

Unit-V: Transaction Processing- Transaction and System Concepts, Desirable properties, Schedules and recoverability

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