

**VEER NARMAD SOUTH GUJARAT UNIVERSITY, SURAT**  
**M.Sc. (I.T.) [Five Year Integrated Course]**  
**B.Sc. (Information Technology)**  
**Semester III**

Effective from July 2004

**Paper No : 302**  
**Paper Title : Database Management System-II**

**L: 4, T:0, P:0 Hrs**

**1. Basic Concepts of Database Systems**

Purpose of Database Systems, Data Abstraction

Data Models

Object-Based Data Models, Record-Based Data Models, Physical Data Models

Instances and Schemas, Data Independence, DDL, DML, Database Manager & Database Administrator

**2. Structure Query Language ( SQL )**

**3. Integrity Constraints**

Domain Integrity, Referential Integrity, Entity Integrity

**4. Relational Database Design**

Functional Dependencies

Normalization

First Normal Form, Second Normal Form, Third Normal Form, Forth Normal Form, Fifth Normal Form

**Main Readings :**

1. Database System Concepts - Henry F. Korth & Abraham Silberschatz – TMH
2. An introduction to Database Systems - C.J.Date - Addison-Wesley

**Supplementary Readings :**

1. Principles of Database Systems - Jeffery Ullman - Galgotia Publication
2. Introduction to Database Management - Navin Prakash – TMH
3. Introduction to Database System - Bipin C. Desai - Galgotia