

**SARDAR PATEL UNIVERSITY**  
**Programme: BBA (Information Systems Management)**  
**Semester: IV**  
**Syllabus with effect from: December 2013**

<b>Paper Code:</b> UM04CBBS09	<b>Total Credits: 3</b>
<b>Title Of Paper:</b> Data Base Management System (Effective from: December 2013) (Revised)	

Unit	Description in detail	Weightage (%)
<b>1</b>	<b>Database Management System:</b> Basic concepts, Data, Information, Field, Record, Database File, Advantages and Disadvantages of DBMS, Organization of DBMS, Components of DBMS, Structure of DBMS, Database Life Cycle Primary Key , Foreign Key	<b>25 %</b>
<b>2</b>	<b>Data Models &amp; Relational Database:</b> Data Model, E-R Modeling Entity, Attribute, Relationship & Types, Mapping cardinality, Membership class of the entity type, Rules of Drawing ER Model Relational Data Model: Concept, Example, Advantages, Disadvantages Normalization: 1NF, 2NF, 3NF Difference between Conventional DBMS and RDBMS, Codd Rules.	<b>25 %</b>
<b>3</b>	<b>SQL:</b> Introduction to SQL, Data Types Built in Char, Varchar, Varchar2, number, date, raw, long, lob, etc. CREATE TABLE (without constraints), INSERT, UPDATE, DELETE SELECT (simple, with form & where clause), DROP table SELECT * from Tab, DESC ALTER TABLE (add/modify columns), SPOOL, NULL values, Primary Key, Foreign Key Unique Constraint, Check Constraint Use of USER_CONSTRAINTS, Constraints in CREATE TABLE ALTER TABLE to add/remove constraints	<b>25 %</b>
<b>4</b>	<b>SQL Functions and Pattern Matching:</b> Range Searching and Pattern Matching, Arithmetic Operators, Relational operators Logical Operators, IN, LIKE , BETWEEN, Group functions: Having Group By Clause: AVG, MIN, MAX, COUNT, SUM - Numeric Functions ABS, POWER, ROUND, TRUNC, SQRT - Character Functions UPPER, LOWER, INITCAP, LENGTH, SUBSTR, LPAD, RPAD, LTRIM, RTRIM - Date Functions ADD_MONTHS, LAST_DAY, MONTHS_BETWEEN - Addition and Subtraction of dates, - Conversion Functions TO_NUMBER, TO_CHAR, TO_DATE - Number and date format models	<b>25 %</b>

**Basic Text & Reference Books:**

- Oracle Developer 2000 by Ivan Bayross, BPB Publishers.

