Bachelor of Business Administration
B.B.A (ISM) Semester-IV

Course Code	UM04CBBS73	Title of the Course	**Database Management System**
Total Credits of the Course	03	Hours per Week	03 Hours

Course Objectives:	1. To understand the different issues involved in the design and implementation of a database system. 2. To study the physical and logical database designs, database modelling, relational, hierarchical, and network models. 3. To understand and use data manipulation language to query, update, and manage a database. 4. To develop an understanding of essential DBMS concepts such as: database security, integrity, concurrency, 5. To design and build a simple database system and demonstrate competence with the fundamental tasks involved with modelling, designing, and implementing a DBMS.

Course Content		
Unit	Description	Weight age* (%)
1.	Database Management System -Basic concepts. -Data, Information, Field, Record, Database File. -Advantages and Disadvantages of DBMS. -Organization of DBMS. -Components of DBMS. -Structure of DBMS.	25 %
2.	Data Models & Relational Database -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	25 %

	and RDBMS -Codd Rules	
3.	SQL -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	25 %
4.	SQL Functions and Pattern Matching Range Searching and Pattern Matching -Arithmetic Operators -Relational operators -Logical Operators -IN, LIKE , BETWEEN -Group functions -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	25 %
...		

Teaching-Learning Methodology	➢ White Board ➢ Presentation ➢ Video ➢ Practical LAB (Live Demo)

Evaluation Pattern		
Sr. No.	Details of the Evaluation	Weight age
1.	Internal Written Examination (As per CBCS R.6.8.3)	15%
2.	Internal Continuous Assessment in the form of Practical, Viva-voce, Quizzes, Seminars, Assignments, Attendance (As per CBCS R.6.8.3)	15%
3.	University Examination	70%

Course Outcomes: Having completed this course, the learner will be able to
1. Define program-data independence, data models for database systems, database Schema and database instances. 2. Recall Relational Algebra concepts, and use it to translate queries to Relational Algebra statements and vice versa. 3. Identify Structure Query Language statements used in creation and manipulation of Database 4. Identify the methodology of conceptual modelling through Entity Relationship model 5 .Identify the methodology of logical model 6. Identify the methodology of physical model

Suggested References:	
Sr. No.	References
1.	Oracle Developer 2000 by Ivan Bayross, BPB Publishers
On-line resources to be used if available as reference material	
On-line Resources	
http://pdfcarebook.blogspot.com/2012/03/ivan-bayross-pl-sql.html	
http://techeduhry.nic.in/syllabus/COMPUTER%20ENGG/5Comp.pdf	