

Ramakrishna Mission Vivekananda College (Autonomous) , Evening College  
Mylapore, Chennai. – 4  
Department of Commerce – Information Systems Management  
Curriculum for B.Com (I.S.M) from Academic Year 2017 -2018

Subject	RELATIONAL DATABASE MANAGEMENT SYSTEM		
Batch Code	17		
Subject Code	UISAE02	Credits: 4	
Major/ Allied / Elective	Elective	Instruction Hours/ Weeks: 5	
Maximum Marks	100	(Internal Marks : 25 External Marks : 75)	

Unit - I

**Introduction:** Database Systems Applications-Data View-Data Model-Entity Relationship Model: Constraints-Keys-E-R Diagram-Weak Entity Set-Extended E-R Features.

Unit - II

**Relational Model:** Definition-Relational Algebra - Extended Relational Algebra Operations-Modification of Database.

Unit - III

**Normalization:** Introduction-Functional Dependency-First Normal Form- Second Normal Form- Third Normal Form- Boyce Codd Normal Form-Multivalued Dependency- Fourth Normal Form-Good and Bad Decomposition.

Unit - IV

**ORACLE:** Introduction-SQL: SQL Commands-DDL Commands- DML Commands- TCL Commands-Operators.

Functions: Single row numeric functions- Single row date functions- Single row conversion functions- Other Single row functions-Aggregate Functions.

Unit - V

**Joins:** Simple Joins - Complex Joins- Multi Table Joins- Cartesian Joins- Outer Joins.  
Sub Queries: Single Row Sub Queries- Multi Row Sub Queries- Correlated Sub Queries- Scalar Sub Queries- Multi Column Sub Queries.

End Semester Question Paper Pattern

Part	Theory	Problems	Total Questions	To Answer	Marks per Question	Total Marks
Section A	12	0	12	10	2	20
Section B	7	0	7	5	5	25
Section C	4	0	4	2	15	30

Text & Reference Books:

1. Database Management System Concepts-4<sup>th</sup> Edition-Silberschatz,Korth,Sudharshan-Tata McGraw Hill.
2. Introduction to Oracle9i-Chip Thomas,Biju Thomas-BPB Publications.
3. An introduction to database systems, Bipin C. Desai, Galgotia Publications Pvt Ltd, 1991.
4. An Introduction to Database Systems, C.J. Date, Third Edition Addison Wesley 1983.