

SARDAR PATEL UNIVERSITY
Programme: BBA (Information Technology Management)
Semester: III
Syllabus with effect from: June-2012

Paper Code: UM03CBBIO5	Total Credit:3
Title of Paper: Relational Database Management Systems	

Unit	Description in detail	Weighting (%)
I	Introduction To Rdbms And Sql The Relational Data Model: Concepts And Terminology, Normalization (1nf, 2nf, 3nf), Sql - Introduction, Data Types – Built-In (Number, Char, Varchar2, Date), Types Of Sql Statements : Ddl (Data Definition Language), Dml (Data Manipulation Language), Dcl (Data Control Language), Tcl (Transaction Control Language), Working With Sql*Plus – Overview And Basic Commands Like Ed, Get, Save, Exit, Connect, Set Linesize, Set Pagesize, Creating Table And Inserting Data - Create Table, Insert, Retrieving Data Using Query – Select, Manipulating Data – Delete And Update, Modifying And Removing Table – Alter Table And Drop Table.	25%
II	Data Constraints And Functions Pseudo Columns – Rowid, Rownum, User, Sysdate, Null Values, Tab Table, Dual Table, Operators – Arithmetic, Relational, Logical, Range Searching, Pattern Matching And Set, Data Constraints – Introduction, Type Of Data Constraints – Not Null, Unique, Primary Key, Foreign Key And Check, Alter Table To Add/Remove Constraints Functions: Scalar : Numeric Functions (Abs, Floor, Mod, Power, Round, Sign, Sqrt And Trunc), Character Functions (Chr, Ascii, Concat, Initcap, Lower, Substr, Trim, Upper), Date Functions (Add_Months, Last_Day, Next_Day, Months_Between), Conversion Functions (To_Number, To_Char And To_Date) Aggregate Functions : Avg, Count, Max, Min, Sum Miscellaneous Functions – Nvl, Decode	25 %
III	Query, Subquery, VIEW and Joins Query and subquery, IN, ANY and ALL operators, Joining tables, types of joins (cross join, natural join, inner join, equijoin, outer joins, and self join), Views – advantages and disadvantages of View. Creating, dropping, use and characteristics of updateable and non-updateable views, Transaction Processing commands (commit, rollback and savepoint)	25 %
IV	Basics Of Pl/Sql Understanding Pl/Sql Block Structure, Fundamentals Of Pl/Sql Language - Data Types (Boolean, Char, Number, Date, Varchar2), Variables, Constants, Dbms_Output.Put_Line, %Type And %Rowtype, Conditional Statement – If End If Statements	25%

Basic Text & Reference Books:

- Developing client server applications using Oracle Developer 2000 by Ivan Bayross, 1997
- Oracle Complete reference by Kevin Lonely and George Koch, TMH



- Oracle DBA Guide
- Database Management Systems by Arun K Majmudar, Pritimoy Bhattacharyya
- An introduction to database management systems by Bipin C Desai

Books for Additional Reading:

- Understanding Database Management Systems : S. Parthsarthy and B.W.Khalkar, First edition – 2007, Master Academy
- P. S. Deshpande : SQL/PLSQL for Oracle9i, dreamtech press, reprint edition 2009

