

SARDAR PATEL UNIVERSITY
Programme & Subject: Master of E-Business (M.Eb)
Semester: II
Syllabus with Effect from: June-2010

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| Paper Code: PM02EMEB07 | Total Credit: 4 |
| Title Of Paper: Client-Server Systems | |

| Unit | Description in Detail | Weightage (%) |
|------|---|---------------|
| I | Traditional systems and problems, Database and DBMS, Advantages and Disadvantages of DBMS, Data Modeling: Overview, ER Modeling, Definition : Entity, Attribute, Relationship, and types, E-R diagram, What is the relational data model, Introduction to RDBMS, Differences between the conventional DBMS and RDBMS, Normalization (1NF, 2NF, 3NF), Client-server systems, application architecture (2 & 3 tier), Distributed databases, | 25% |
| II | Data types available in Oracle, CREATE TABLE (without constraints), INSERT, UPDATE, DELETE, SELECT (Simple, with from & where clause), DROP TABLE, SELECT * FROM tab, DESCRIBE, CONNECT, DISCONNECT, EXIT, ALTER TABLE add/modify columns, Substitution variables (&), SPOOL, SAVE | 25% |
| III | Null values, Primary key, Foreign key, Unique constraint, Check constraint, Use of USER_CONSTRAINTS, Constraints in CREATE TABLE, ALTER TABLE to add/remove constraints, Range searching and pattern matching operators, Arithmetic operators, Relational operators, Logical operators | 25% |
| IV | Group functions (AVG, MIN, MAX, COUNT, SUM), Numeric functions (ABS, POWER, ROUND, TRUNC, SQRT), Character functions (UPPER, LOWER, INITCAP, LENGTH, SUBSTR), Date functions (ADD_MONTHS, LAST_DAY, MONTHS_BETWEEN), Conversion functions (TO_NUMBER, TO_CHAR, TO_DATE), Miscellaneous Function, NVL | 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
- Fundamentals of Relational Databases: By Ramon A Mata-Toledo, Pauline K Cushman, Schaum's Outlines, TMH Edition 2001 Chapter 1, 2, 7
- Database Management Systems: By Alexis Leon, Mathews Leon
- Fundamentals of Database Systems: By Remez Elmasri, Shamkant B Navathe
- 4th edition, Pearson Education

