SARDAR PATEL UNIVERSITY Programme: BBA (Information Systems Management) Semester: IV Syllabus with effect from: December 2012

 Paper Code: UM04CBBS03
 Total Credits: 3

 Title Of Paper: Data Base Management System
 Total Credits: 3

Unit	Description in detail	Weightage (%)
1	Database Management System:	25 %
	Basic concepts,	
	Data, Information, Field, Record, Database File,	
	Advantages and Disadvantages of DBMS.	
	Organization of DBMS.	
	Components of DBMS.	
	Structure of DBMS.	
2	Data Models & Relational Database:	25 %
	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	
3	SQL:	25 %
	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	
4	SQL Functions and Pattern Matching:	25 %
	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	
	PRACTICAL BASED ON DATABASE MANGEMENT SYSETEM	
1	Create appropriate tables and insert the data.	
2	Find the names of all the clients.	
3	Retrieve the entire contents of the client _master table.	
4	Retrieve the list of names and the cities of all the clients.	
5	List the various products available from the product master table.	
6	List the clients who are located in Bombay.	
7	Find the names of the salesman who have a salary equal to Rs. 3000.	
8	Change the city of client_no 'C00005' to 'Bombay'.	
9	Selected all salesman from the salesman_master shoes salaries are equal to Rs.	
	3000.	
10	Ad a column called 'telephone' of data type 'number and size = '10' to the	
	client_amster table.	
11	Change the size of sell_ price column in product-master to 10,2.	
12	Destroy the table client_ master along with its data.	
13	Find the names of all clients having 'a' as the second letter in their names.	
14	Find out the clients who stay in a city whose second letter is 'a'.	
15	Find out the list of all clients who stay in 'Bombay' or 'Delhi'.	
16	Print the list of clients whose bal-due is greater than value 10000.	
17	Print the information from sales_ order table for orders placed in the month of	
	January.	
18	Display the order information for client_ no 'C0001' and 'C0002'.	
19	Find products whose selling price is greater than 2000 and less than or equal to	
	5000.	
20	List the names, city and state of clients who are not in the state at 'Maharastra'.	
21	Count the total number of orders.	
22	Calculate the average price of all the products.	
23	Count the number of products having price greater than or equal to 1500.	
24	Find the products whose qty_ on_ hand is les than reorder level.	
25	Find out the sum total of all the billed orders for the month of 'November'.	
26	Display the s_order_date in the format 'dd-month-yy' e.g. 12-February-98.	
27	Find the number of days elapsed between today's date and the delivery date of	
	the orders placed by the clients.	

Basic Text & Reference Books:

> Oracle Developer 2000 by Ivan Bayross, BPB Publishers.

