SARDAR PATEL UNIVERSITY

Programme: B.A.
Syllabus with effect from: June-2018

Choice Based Credit system

First Year B.A.

Semester- II

Core Subject: Computer Technology Paper – IV
Title of Paper: Data Base Management System (DBMS)

Paper Code: UA02CCAP22   **Total Credit: 3**

I	**Introduction DBMS:** Concepts of Data Processing – An Important Aspect of any Business, Data and Information, Data / Information Processing and Databases, Data Types, Data Representation, Data Size, Relationship. **Data Organization and Grouping:** Character, Field, Record, File, Database, Objectives of DBMS, Components of DBMS, Types of Databases.	**25%**
II	**Introduction to DBMS Package (Microsoft Access - 2010):** Introduction of Microsoft Access database, creating a database (Using Wizard, & Design) and Objects, Fields and data types, creating a table, Field Properties, Save and Close a Table, Add and Save Records, Edit Records and Close a Table, modify fields in a Table, Modify Columns and Rows in Data Sheet, Validation Rule to a Field and Its	**25%**
III	**Data Manipulations in DBMS Through SQL:** Introduction of SQL, Creating, Modifying and Saving a Query, Insertion of data into a Table (INSERT), Modify the Contents of a Table (UPDATE), Display Records from a Table (SELECT), Remove Records from a Table (DELETE), Ordering and Filtering Records of a Table, Use of Relational (Comparison), Operators (<,>, <=, >=, #, <>) and Logical Operators (AND, OR, NOT) in Query. **Use of Aggregate (Group) Functions:** AVG(), COUNT(), MAX(), MIN(), SUM(), **Character Functions**: LCASE(), UCASE(), LEN(), STR(), MID(), LEFT(), RIGHT(), **Date Functions**: DATE(), HOUR(), DAY(), MONTH(), YEAR().	**25%**
IV	**Creating and Customizing Forms and Reports** Introduction of Form, Creation with Form Wizard, View, Add, Delete and Save Records, Save and Close a Form, Change Form Design, Select, Resize, Move and Delete controls, Change Fonts, Size and Color of Text, showing data from more than one table, Introduction of Report, create a report, Preview, print and save a report, Report in design view Types of Reports and Forms.	**25%**

Pracitals: Practical in Computer Laboratory on DBMS (Theory 50% + Practical 50%).

Reference Books

- Microsoft Access 2010: Step by Step by Lambert & Cox, PHI
- Microsoft Database Management System, Seema Kedar, Technical Publications
- Database Management System, Gerald V Post, Tata McGraw Hill
- The Essence of Database, F. D. Rolland, Pearson
- Database Management System, Dr. Vimal Pandya, Nirav Prakashan