

Syllabus for B.Sc-IT Course

at S.P. College

SEMESTER -- II

COURSE TITLE :- DATA BASE MANAGMENT COURSE CODEBIT—204
SYSTEM (DBMS)

UNIT-I

Introduction : Traditional file processing system , drawback of traditional file processing system ; evolution of database system , advantages & disadvantages of a DBMS.

Basic concepts , database and database users , characteristics of database , the three level architecture for a DBMS , components of a DBMS, classification of DBMS users , DBMS facilities , structure of a DBMS.

UNIT-- II

Data model classification- Network & Hierarchical Models, data modeling using the entity relationship approach, relational model, relational database, and relational algebra. & Tuple Calculus.

UNIT-- III

Database Decomposition , Lossless join property, Relational database design, functional dependencies, Normalization for relational database, Normal forms (1NF, 2NF, 3NF, 4NF, BCNF, 5NF).

UNIT-IV

Relational database manipulation : SQL:- A relational database language , data definition in SQL , data manipulation in SQL , views and queries in SQL , specifying constraints and indexes in SQL (ORACLE) , Creating Triggers , Stored Procedures , Functions & Cursors in PL / SQL.

Recommended Books:

1. Date, C.J., "An introduction to database Systems", Narosa Publications House, N. Delhi
2. Elmsari and Navathe, "Fundamentals of database system", Addison Wesley, N.Y.
3. Bipin Desai, "An Introduction to database Concepts", Galgotia Publications, N. Delhi