# **Course 4F: Database Management System**

**Unit** Details

## I Overview of Database Management System

Introduction, Data and Information, Database, Database Management System, Objectives of DBMS, Evolution of Database Management System, Classification of Database Management System.

## II File-Based System

File Based System. Drawbacks of File-Based System, DBMS Approach, Advantage of DBMS, Data Models, Components of Database System, Database Architecture, DBMS Vendors and their products.

### **III** Entity-Relationship Model:

Introduction, The Building Blocks of an Entity-Relationship, Classification of Entity Set, Attribute Classification, Relationship Degree, Relationship Classification, Generalization and Specialization, Aggregation and Composition, CODD's Rules, Relational Data Model, Concept of Relational Integrity.

#### IV Structured Ouerv Language

Introduction, History of SQL Standards, Commands in SQL, Data types in SQL, Data Definition Language (DDL), Selection Operation Projection Operation, Aggregate Functions, Data Manipulation Language, Table Modification, Table Truncation, Imposition of Constraints, Set Operations.

#### V PL/SQL:

Introduction, Structure of PL/SQL,PL/SQL Language Elements, Data Types, Control Structure, Steps to Create a PL/SQL Program, Iterative Control Cursors, Steps to Create a Cursor, Procedure, Functions, Packages, Exceptions Handling, Database Triggers, Types of triggers.

**Learning Resources (Course 4F: Database Management System)** 

**References:** 

- 1. Paneerselvam:Database Management system,PHI.
- 2. David Kuklinski, Osborne, Data management system McGraw Hill Publication.
- 3. Shgirley Neal And Kenneth LC Trunik Database management system in Business-PHI.
- 4. Godeon C. EVEREST, Database Management-McGraw Hill Book Company.
- 5. MARTIN, Database Management-Prentice Hall of India, New Delhi.
- 6. Bipin C.Desai , `An Introduction to Database System`, Galgotia Publications
- 7. Korth, Database Management System.
- 8. Navathe, Database Management System.
- S. Sumathi, S. Esakkirajan, Fundamentals of Relational Database Management System

# **Online resources:**

http://

www.onlinegdb.

com/ http://

www.tutorialspo

int.com/

http://learnsql.co

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https://www.codecademy.com/learn/learn-sql/

https://www.w3schools.com/sql/default.asp

# Course 4F – P: Database Management System Lab

Semester	CourseCode	CourseTitle	Hours	Credits
IV	4F - P	Database Management System Lab	30	2