

**Post Graduate Govt. College for Girls, Sector-11, Chandigarh**  
**Department of Computer Applications**

**Teacher: Ms. Ritika Singh**

**Class: PGDCA I Semester**

**Subject: Database Management System**

Sr. No	Week	Topic
1	July 29 to August 3	Data Base Concept:Data Base Vs File Oriented Approach, Basic DBMS terminology, Data Independence, General Architecture of a Data Base Management Software
2	August 5 to August 10	Components of DBMS, Advantages and Disadvantages of DBMS.Distributed Databases, Structure and Design of Distributed Databases.
3	August 12 to August 17	Understanding SQL-1:Data Types, Creating Tables, Creating a Table with data from Another table,
4	August 19 to August 24	Inserting Values into a Table, Updating Column(s) of a Table, Deleting Row(s) from a Table, Dropping a Column, Querying database tables, Conditional retrieval of rows,
5	August 26 to August 31	Data Base Design: Introduction to Data Models, Entity Relationship Model, Entities, Attributes,
6	September 2 to September 7	E-R Diagrams, Conceptual Design of a relational data base model.
7	September 9 to September 14	Relational Model: Storage organization for Relations, Relational Algebra, Relational Calculus , Functional dependencies, multivalued dependencies,
8	September 16 to September 21	Candidate Key and Primary Key in a Relation, Foreign Keys, Normalization - Introduction, 1NF, Partial Dependencies, 2N, data Anomalies in 2NF Relations, Transitive Dependencies 3NF
9	September 23 to September 28	Database Security: Database Security and Integrity: Data security risks, Password-related threats, Protecting the data within the database- database privileges, system privileges and object privileges, granting and revoking privileges and Roles.
10	September 30 to October 5	<b>Mid Semester Exams</b>
11	October 7 to October 12	Concurrency: locking techniques for concurrency control. Recovery: Causes of failures, recovery from failures, Log based recovery, checkpoints Working with Null Values, Matching a pattern from a table
12	October 14 to October 19	Functions: Character Functions, Date Functions, Group Functions,
16	November 11 to November 16	SET Operators:Union, Intersect, Minus; Introduction to Nested Queries, Define Transaction, COMMIT and ROLLBACK,
17	November 18 to November 23	<b>Practicals</b>
18	November 25 to November 30	<b>Practicals</b>