

# **Session Plan (January-May 2018)**

**Semester: Fourth**

**Course Code: 402**

**Paper Code: 6373**

**Name Of Course: Data Base Management System**

**Course Outcomes(Cos)- Students will be able to-**

**CO402.1** Explain DBMS, its application and architecture.

**CO402.2** Represent database design using various data models.

**CO402.3** Represent database operations using Relational Algebra.

**CO402.4** Identify Normal Form of given database and normalize the database further.

**CO402.5** Write SQL Queries for data definition and data manipulation.

**CO402.6** Explain advance database concepts.

## UNIT 1- Database Concepts

S. NO	Topic Name	CO Attempted	Expected Date	Actual Date	Resource Used	Teaching Method	Remark
1.	Introduction to database and database management system	CO 402.1	05/02/2018		Chalk-Board	Lecture	
2.	History of DBMS	CO 402.1	06/02/2018		Chalk-Board	Lecture	
3.	Disadvantages of file system data management	CO 402.1	07/02/2018 08/02/2018		Chalk-Board	Lecture	
4.	Database system applications	CO 402.1	09/02/2018		Computers	Demonstration	
5.	Advantages and disadvantages of DBMS	CO 402.1	09/02/2018 10/02/2018		Chalk-Board	Lecture	
6.	Three level architecture: Mapping between views	CO 402.1	12/02/2018		Chalk-Board	Lecture	
7.	Data independence	CO 402.1	13/02/2018		Chalk-Board	Lecture	
8.	DBMS users and administrators	CO 402.1	15/02/2018		Chalk-Board	Lecture	
9.	DBMS Architecture	CO 402.1	16/02/2018		Chalk-Board	Lecture	
10.	DML, DDL & DCL	CO 402.1	17/02/2018		Chalk-Board	Lecture	

Expected Study Hours: 06 hrs

Actual Study Hours:

Reason for delay:

Signature of Lecturer with Name

## UNIT 2- Data Models

S. N. O.	Topic Name	CO attempted	Expected Date	Actual Date	Resource Used	Teaching Method	Remark
1.	Introduction to data models.	CO402.2	19/02/2018		Chalk-Board	Lecture	
2.	Entities, attributes & association	CO402.2	20/02/2018 21/02/2018		Chalk-Board	Lecture	
3.	Relationship among entities	CO402.2	22/02/2018		Chalk-Board	Lecture	
4.	Representation of association & relationship	CO402.2	23/02/2018		Chalk-Board	Lecture	
5.	Entity-Relationship model: <ul style="list-style-type: none"><li>• Entity sets</li><li>• relationship sets</li><li>• constraints</li><li>• E-R diagram</li></ul>	CO402.2	24/02/2018 26/02/2018 27/02/2018		Chalk-Board	Lecture	
6.	Entity- Relationship design issues	CO402.2	28/02/2018		Chalk-Board	Lecture	
7.	Generalization, Specialization & Aggregation	CO402.2	01/03/2018 03/03/2018		Chalk-Board	Lecture	
8.	Relational Model: <ul style="list-style-type: none"><li>• Attributes and Domains</li><li>• Tuples</li><li>• Relations and their schemas</li><li>• Relation Representation</li><li>• Keys</li><li>• Relationship</li><li>• Integrity Rules</li></ul>	CO402.2	05/03/2018 To 07/03/2018		Chalk-Board	Lecture	
9.	Codd's Relational database rules	CO402.2	08/03/2018		Chalk-Board	Lecture	

Expected Study Hours: 10 hrs

Actual Study Hours:

Reason for delay:

Signature of Lecturer with Name

**UNIT 3- Database Design Concepts & Normalization**

S.NO.	Topic Name	CO Attempted	Expected Date	Actual Date	Resource Used	Teaching Method	Remark
1.	Relational algebra: <ul style="list-style-type: none"><li>• Basic operation - select, join, projection</li><li>• Additional relational algebra</li><li>• Queries</li></ul>	CO402.3	09/03/2018 10/03/2018		Chalk-Board	Lecture	
2.	Functional dependency: Definition, Inference axioms for functional dependency Closure, cover and equivalence of FD Referential integrity	CO402.4	12/03/2018 To 14/03/2018		Chalk-Board	Lecture	
3.	Introduction to Normalization	CO402.4	15/03/2018		Chalk-Board	Lecture	
4.	1 NF, Data anomalies in 1 NF	CO402.4	15/03/2018		Chalk-Board	Lecture	
5.	Partial dependency, 2 NF, Data anomalies in 2 NF	CO402.4	16/03/2018		Chalk-Board	Lecture	
6.	Transitive Dependency, 3NF, Data anomalies in 3 NF	CO402.4	17/03/2018		Chalk-Board	Lecture	
7.	Boyce-Codd Normal Form	CO402.4	20/03/2018		Chalk-Board	Lecture	
8.	Lossless or Lossy Decomposition	CO402.4	21/03/2018		Chalk-Board	Lecture	

Expected Study Hours: 15 hrs

Actual Study Hours:

Reason for delay:

Signature of Lecturer with Name

**UNIT 4- Introduction to SQL**

S.NO.	Topic Name	CO Attempted	Expected Date	Actual Date	Resource Used	Teaching Method	Remark
1.	Introduction to SQL language.	CO402.5	22/03/2018		Chalk-Board	Lecture	
2.	Structure of SQL statements & SQL writing guidelines	CO402.5	22/03/2018		Chalk-Board	Lecture	
3.	Data Definition commands, describing the structure of a table	CO402.5	23/03/2018 24/03/2018		Computers and DBMS	Practical	
4.	Data manipulation commands	CO402.5	26/03/2018 To 28/03/2018		Computers and DBMS	Practical	
5.	Basic structure of SQL queries	CO402.5	31/03/2018		Chalk-Board	Lecture	

Expected Study Hours: 05 hrs

Actual Study Hours:

Reason for delay:

Signature of Lecturer with Name

**UNIT 5- Advanced in SQL**

S.NO.	Topic Name	CO Attempted	Expected Date	Actual Date	Resource Used	Teaching Method	Remark
1.	SQL query structure for selection & join operators	CO402.5	02/04/2018 03/04/2018		Chalk-Board	Lecture	
2.	defining primary keys, foreign keys in a table	CO402.5	04/04/2018		Computer and DBMS	Practical	
3.	CHECK constraints, removing constraints from table	CO402.5	05/04/2018		Computer and DBMS	Practical	
4.	SQL functions: SUM(), AVG(), MAX(), MIN(), COUNT()	CO402.5	06/04/2018 07/04/2018		Computer and DBMS	Practical	
5.	Introduction to Triggers, stored procedures & views	CO402.5	09/04/2018 10/04/2018		Chalk-Board	Lecture	

Expected Study Hours: 15 hrs

Actual Study Hours:

Reason for delay:

Signature of Lecturer with Name

**UNIT 6- Advance Database Concepts**

S.N O.	Topic Name	CO Attempted	Expected Date	Actual Date	Resource Used	Teaching Method	Remark
1.	Introduction to transactions	CO402.6	11/04/2018 To 13/04/2018		Chalk-Board	Lecture	
2.	Introduction to concurrency control.	CO402.6	16/04/2018 17/04/2018		Chalk-Board	Lecture	
3.	Data mining & Data Warehousing.	CO402.6	19/04/2018		Chalk-Board	Lecture	
4.	Distributes & Object based database.	CO402.6	20/04/2018		Chalk-Board	Lecture	
5.	Introduction to Cloud based database.	CO402.6	21/04/2018		Chalk-Board	Lecture	

Expected Study Hours: 09 hrs

Actual Study Hours:

Reason for delay:

Signature of Lecturer with Name