

**ST.ANN'S COLLEGE OF ENGINEERING & TECHNOLOGY**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**LESSON PLAN**

NAME OF THE SUBJECT: DBMS

ACADAMIC YEAR: 2017-18

YEAR-SEM, : III B.TECH- I SEM

BRANCH &SECTION: CSE - C

NAME OF THE FACULTY: CH.RAJU

NO. OF LECTURES PER WEEK : 4+2\* (TUTORIAL)

S.No	Date	UNIT	Topic s to be Covered	
1	06.12.2017	I	<b>Introduction:</b> Database system, Advantages of Data base systems	
2	14/6/2017		Characteristics (Database Vs File System), Database applications	
3	15/6/2017		Database Users(Actors on Scene, Workers behind the scene),	
4	15/6/2017		Cont.. Database Users(Actors on Scene, Workers behind the scene),	
5	16/6/2017		Brief introduction of different Data Models	
6	17/6/2017		Concepts of Schema, Instance and data independence;	
7	19/6/2017		Three tier schema architecture for data independence	
8	21/6/2017		Database system structure,	
9	22/6/2017		Tutorial	
10	22/6/2017		Tutorial	
11	23/6/2017		Db environment ,	
12	24/6/2017		Centralized and Client Server architecture for the database	
13	28/6/2017		Revision through nptel videos / ppts	
14	29/6/2017		Tutorial	
15	29/6/2017		Tutorial	
16	30/6/2017		Slip test on unit-1	
17	07.01.2017	II	<b>OT-1 &amp; RELATIONAL MODEL :</b> Introduction to relational model	
18	07.03.2017		concepts of domain, attribute, tuple, relation, importance of null values,	
19	07.05.2017		constraints Domain, Key constraints, integrity constraints	
20	07.06.2017		Tutorial	
21	07.06.2017		Tutorial	
22	07.07.2017		<b>BASIC SQL :</b> Simple Database schema, data types,	
23	07.10.2017		table definitions, different DML operations (insert, delete, update)	
24	07.12.2017		basic SQL querying (select and project) using where clause,	
25	13/7/2017		Tutorial	
26	13/7/2017		Tutorial	
27	14/7/2017		arithmetic & logical operations,	
28	15/7/2017		SQL functions(Date and Time, Numeric, String conversion).	
29	17/7/2017		Revision through nptel videos / ppts	
30	19/7/2017		slip test on unit-2	
31	20/7/2017	III	<b>OT-2 &amp; Entity Relationship Model:</b> Introduction,	
32	20/7/2017		Tutorial	
33	21/7/2017		Representation of entities, attributes, entity set,	
34	22/7/2017		relationship, relationship set, constraints,	
35	24/7/2017		sub classes, super class, inheritance,	
36	26/7/2017		Specialization, generalization using ER Diagrams.	
37	27/7/2017		Tutorial	
38	27/7/2017		Tutorial	
39	28/7/2017		<b>SQL :</b> Creating tables with relationship,	
40	29/7/2017		implementation of key and integrity constraints,	
41	31/7/2017		nested queries, sub queries, grouping,	
42	08.02.2017		aggregation, ordering,	
43	08.03.2017		Tutorial	
44	08.03.2017		Tutorial	
45	08.04.2017	implementation of different types of joins,		
46	08.05.2017	view(updatable and non-updatable), relational set operations.		
47	08.07.2017	Mid-1	Revision of Unit-3	
48	08.08.2017		Revision of Unit-2	
49	08.09.2017		Revision of Unit-1	
50	08.10.2017		Previous question papers discussion	
51	08.10.2017		Previous question papers discussion	
52	08.11.2017		Previous question papers discussion	
53	08.12.2017		Previous question papers discussion	
54	16/8/2017			<b>SCHEMA REFINEMENT :</b> Purpose of Normalization
55	17/8/2017			Tutorial
56	17/8/2017	Tutorial		
57	18/8/2017	concept of functional dependency		
58	19/8/2017	normal forms based on functional dependency(1NF, 2NF and 3 NF),		
59	21/8/2017	Boyce-codd normal form(BCNF), surrogate key		

60	23/8/2017	IV	Lossless join and dependency preserving decomposition
61	24/8/2017		Tutorial
62	24/8/2017		Tutorial
63	28/8/2017		Fourth normal form(4NF).
64	30/8/2017		Revision through nptel videos / ppts
65	31/8/2017		Tutorial
66	31/8/2017		Slip test on UNIT-4
67	09.01.2017	V	<b>OT-4 &amp; Transaction Management:</b> Transaction, Properties of transaction
68	09.04.2017		transaction management with using commit rollback and save point.
69	09.06.2017		Concurrency control for lost updates, uncommitted data,
70	09.07.2017		inconsistent retrievals and the Scheduler.
71	09.07.2017		Tutorial
72	09.08.2017		Concurrency control with locking methods : lock granularity,
73	09.09.2017		lock types, two phase locking for ensuring serializability
74	09.11.2017		deadlocks, Concurrency control with time stamp ordering
75	13/9/2017		Database Recovery management: Transaction recovery.
76	14/9/2017		Tutorial
77	14/9/2017		Tutorial
78	15/9/2017		SQL constructs that grant access, revoke access from user
79	16/9/2017		Basic PL/SQL procedures
80	18/9/2017		functions, triggers.
81	20/9/2017		Revision through nptel videos / ppts
82	21/9/2017		Tutorial
83	21/9/2017		Tutorial
84	22/9/2017		Slip test on UNIT-5
85	23/9/2017		VI
86	25/9/2017	file organization on disk	
87	27/9/2017	heap files and sorted files, hashing	
88	10.04.2017	single and multi-level indexes,	
89	10.05.2017	dynamic multilevel indexing using B-Tree	
90	10.05.2017	Tutorial	
91	10.06.2017	dynamic multilevel indexing using B+Tree	
92	10.07.2017	index on multiple keys.	
93	10.09.2017	Mid-2	Revision of Unit-6
94	10.10.2017		Revision of Unit-5
95	10.11.2017		Revision of Unit-4
96	10.11.2017		Revision of Unit-4
97	10.12.2017		Previous question papers discussion
98	13/10/2017		Previous question papers discussion
99	14/10/2017		Previous question papers discussion

### Text Books :

1. Database Management Systems, 3/e Raghuram Krishnan, Johannes Gehrke, TMH
2. Database Management System, 6/e Ramez Elmasri, Shamkant B. Navathe, PEA
3. Database Principles Fundamentals of Design Implementation and Management, Carlos Coronel,

### Reference Books :

1. Database System Concepts. 5/e Silberschatz, Korth, TMH
2. Introduction to Database Systems, 8/e C J Date, PEA
3. The Database book principles & practice using Oracle/MySQL Narain Gehani, University Press.

Signature of the Faculty

Signature of the HOD