

WORK PLAN: January-May, 2015

Course: B.Tech Comp Sc

Semester : IV

Paper Code: CSDC1-402

Paper Name: Database System

Faculty: Ritu Singhal

Workplan:

Week	Dates	Topic	Book_topics *(1)
1	5-10 Jan	Database concepts, Characteristics Actors, Workers, Advantages	1.1 to 1.8
2	12-16 Jan.	Data models, Schemas, Instances, 3-tier,Architecture, Data Independence	2.1 to 2.6
3	19-23 Jan.	Data Definition Language, Data Manipulation Language, basics of SQL	8.1, 8.2, 8.4,
4	26-31 Jan	Data modeling using ER model- design, Entity, Relationship, ER-modeling	3.1 to 3.4
5	2-7 Feb	ER- diagrams, database design	3.5- 3.7
6	9-14 Feb	Query designing in SQL using aggregate functions and nested queries.	8.6, 8.9
7	16-21 Feb	EER model- specialization, generalization, constraints and characteristics, Modeling of Union types, University EER	4.1 – 4.5
8	23-28 Feb	Relational model concepts, relational database constraints.	5.1 – 5.4
9	2-7 March	The Relational Algebra , opertions- select, project , join, division	6.1-6.3
10	9-14 March	Aggregate functions , grouping	6.4-6.5
11	16-21 March	Field work	
12	23-28 March	Relational database design by ER and EER-to-Relational Mapping.	7.1 to 7.2
13	30 Mar-3 April	Functional dependencies,	10.1, 10.2.1,

			10.2.2,
14	6- 11 April	Normal forms.	10.3 to 10.5
15	13-18 April	Transaction Processing Theory.	17.1-17.3
16	20- 25 April	Revision	

Recommended Reading Material

*_R. Elmasri, S.B. Navathe, *Fundamentals of Database Systems*, 5th edition, Pearson Education

Reference Books

A. Silberschatz, H. Korth and S. Sudarshan, *Database System Concepts*, 5th Edition, McGraw Hill, 2010.

R. Ramakrishnan, J. Gehrke, *Database Management Systems*, 3rd edition, McGraw Hill International Edition, 2007.