

TEACHING PLAN FOR THEORY

Subject: Advanced DBMS		Class: SYMCA	Branch: Engg	Year 2016-2017	
Lecture No	Scheduled Date	Topics to be covered on the scheduled date		Dates On which Actually covered	Reasons for deviation(if any)
1	15/12/2016	Overview of syllabus, Unit III: Object Based Database Concept of OODBMS			
2	16/12/2016	Need of OODBMS, storing of objects in relational database			
3	19/12/2016	Introduction to OO data mode, Comparison between RDBMS, OODBMS, ORDBMS			
4	20/12/2016	Structure types and inheritance in SQL, Structure types, Examples			
5	21/12/2016	Type inheritance, Table inheritance			
6	22/12/2016	Array and multi set types in SQL, creating and accessing collection values, Querying collection			
7	23/12/2016	Nesting and unnesting, Object identity and reference types in SQL			
8	26/12/2016	implementing object relational features, Persistent programming languages			
9	27/12/2016	Persistent of objects, object identity and pointers			
10	28/12/2016	storage and access of persistent objects			

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11	29/12/2016	persistent systems: C++, JAVA		
12	30/12/2016	object management group object database standard ODMG		
13	02/01/2017	Unit V: XML Databases Relational Database Tables and XML		
14	03/01/2017	Generating XML pages using Basic SQL, Examples		
15	04/01/2017	Generating XML pages using Basic SQL, Examples		
16	05/01/2017	Oracle Database and XML, examples		
17	06/01/2017	Native XML Database, examples		
18	09/01/2017	XML DTD (internal and external) with examples		
19	10/01/2017	XML DTD (internal and external) with examples		
20	11/01/2017	XML Schema with examples		
21	12/01/2017	XML Schema with examples		
22	13/01/2017	XQuery FLOWR Expression with examples		
23	16/01/2017	XQuery FLOWR Expression with examples		
24	17/01/2017	Unit II: Database System Architecture Introduction, centralized & client server architecture		

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25	18/01/2017	centralized systems, Client –server systems		
26	19/01/2017	server system architecture		
27	20/01/2017	Transaction server process structure, Data servers		
28	23/01/2017	Parallel systems: Introduction, I/O Parallelism, speed up and scaleup		
29	24/01/2017	Interconnection Networks, Interquery Parallelism, Intraquery Parallelism		
30	25/01/2017	Parallel database architecture, Intraoperation Parallelism, Interoperation Parallelism		
31	27/01/2017	Unit III: Distributed Systems Introduction, Design issues,		
32	30/01/2017	Distributed DBMS Architecture		
33	31/01/2017	Distributed Database Design, Database Integration		
34	01/02/2017	Data and Access Control		
35	02/02/2017	Introduction to Query Processing Problem		
36	03/02/2017	Unit I: Query Processing Relational Algebra Concepts and Notations		
37	06/02/2017	Relational Algebra Examples		
38	07/02/2017	Introduction to Query processing		

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39	08/02/2017	measures of query cost		
40	09/02/2017	selection operation, Basic Algorithms for selection operation (A1 to A6)		
41	10/02/2017	Basic Algorithms for selection operation (A7 to A11)		
42	13/02/2017	Sorting, Join Operations		
43	14/02/2017	Merge Join Algorithm, Example		
44	15/02/2017	Hash Join Algorithm, Example		
45	16/02/2017	Other Operations		
46	17/02/2017	evaluation of expression		
47	20/02/2017	Unit VI: NoSQL Introduction to Data Models - Graph Databases		
48	21/02/2017	Schema-less Databases		
49	27/02/2017	Introduction to Distribution Models – single server		
50	28/02/2017	sharding, master-slave replication		
51	01/03/2017	peer to peer replication.		

