

## Sardar Patel Institute of Technology

Bhavan's Campus, Munshi Nagar, Andheri (West), Mumbai-400058-India (Autonomous Institute Affiliated to University of Mumbai)

Course	Course Name	Teaching Scheme (Hrs/week)			Credits Assigned			
Code		L	Т	Р	L	Τ	Р	Total
TEITL504	Advanced Database Management Systems Lab			2			1	1
		Examination Scheme						
		ISE		ESE				Total
				Practical		Oral		
		4	0	-		20		60

Pre-requisite Course Codes	s IT43 (Database Management Systems)				
	TEITC504 (Advanced Database Management Systems)				
After successful completion of the course, student will be able to:					
	CO1	Solve complex queries using SQL to retrieve and manipulate			
		information in a database.			
	CO2	Demonstrate Distributed databases concepts and Object			
		oriented database concepts.			
<b>Course Outcomes</b>	CO3	Analyze the importance of enterprise data and be able to			
		organize data to perform analysis on the data and take			
		strategic decisions.			
	CO4	Design and implement real life applications integrated with			
		database systems			

Exp. No.	Experiment Details		Marks
1	Perform practical by using Basic SQL statements and joining tables		5
2	For a given problem implement the Vertical and Horizontal Fragmentation.		5
3	Perform a practical for database security using SQL Injection.		5
4	Demonstrate the Transaction and concurrency control		5
5	Perform Practical using Object oriented queries.	1,2	5
6	Perform practical to understand the concepts of Data Replication	5	5
7	Study of OLAP tools and perform OLAP operations.	3,4	5
8	Mini Projects	1,2,5	5
Total Marks			

## **References:**

- 1. Elmasri and Navathe, "Fundamentals of Database Systems", 6th Edition, PEARSON Education.
- 2. Korth, Slberchatz, Sudarshan, "Database System Concepts", 6th Edition, McGraw Hill
- 3. Theraja Reema, "Data Warehousing", Oxford University Press, 2009
- 4. Ralph Kimball, Margy Ross, "The Data Warehouse Toolkit: The Definitive Guide To Dimensional Modeling", 3rd Edition. Wiley India.
- 5. M. Tamer Ozu "Principles of Distributed Database Systems", Pearson Education