Master of Science (M.Sc.) Semester–I (CBCS) (Computer Science) Examination ADVANCED DBMS AND ADMINISTRATION

Paper—4

Paper—IV

Tim	ne : 7	Three Hours][Maximum Marks]	: 80
N.B	s. :—	(1) All questions are compulsory and carry equal marks.	
		(2) Draw neat and labelled diagrams wherever necessary.	
	EIT	HER	
1.	(a)	What do you mean by Normalisation ? Explain 2NF and 3NF with suitable example.	8
	(b)	Explain any two methods of joining tables.	8
	OR		
	(c)	Write the stages of query processing in detail.	8
	(d)	What is Equivalence of expressions ? Explain different equivalence rules.	8
	EIT	HER	
2.	(a)	Explain database environment for client server computing.	8
	(b)	Discuss concurrency control and time stamp ordering.	8
	OR		
	(c)	Explain deadlocks and its avoidance conditions.	8
	(d)	Explain in detail about Crash Recovery.	8
	EIT	HER	
3.	(a)	Explain :	
		(i) Control files	
		(ii) Redo log files.	8
	(b)	Explain about storage structure relationships. How to manage password security and resources ?	8
	OR		
	(c)	Explain Oracle database architecture.	8
	(d)	What is the difference between complete and incomplete recovery of Oracle database ?	8
	EIT	HER	
4.	(a)	Explain process of database configuration of I/O issues.	8
	(b)	Explain database security issues.	8
	OR		
	(c)	Explain rollback segment tuning.	8
	(d)	Explain procedural integrity constraint of Oracle.	8
5.	(a)	Explain lossless decomposition with example.	4
	(b)	Explain types of failure obtained in DBMS.	4
	(c)	Explain the tablespace and data files.	4
	(d)	What is monitoring and detecting lock contention ?	4