	Envallm	ont No.	Evom Soot No.				
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	C.U.SHAH UNIVERSITY Winter Examination-2015						
	Subject Name: Database Management System						
	Subject	Code: 4TE03DMS1	Branch: B.Tech (CE,IT	.`)			
	Semester		Time: 2:30 To 5:30 Marks: 70				
	(1) U (2) I (3) I	Use of Programmable calcu- instructions written on main	ator & any other electronic instrument is prohibited. answer book are strictly to be obeyed. ares (if necessary) at right places. led.				
Q-1				(14)			
	<b>a</b> )	"A unique key can have NULL value" True or False. Justify your answer.					
	<b>b</b> )	What it the purpose of RE	VOKE command? Give its syntax.				
	<b>c</b> )	nent system?					
	<b>d</b> )	Explain function with example : AVG ( )					
	<b>e</b> )	Explain function with exa					
	f)	Explain function with example : GREATEST( )					
	<b>g</b> )	Explain function with example : MIN()					
	<b>h</b> )	What is the use of ROLLE					
	i) What is the key difference between "DROP" and "DELETE"?						
	<b>j</b> )	What is the use of "TRUN					
	<b>k</b> )	List application of database management system.					
	l)	What is relation in relation	nai modei?				
	m) n)	What is schema? Explain "UNION" operator	or.				
		Cour questions from Q-2 to	Q-8				
Q-2		Attempt all questions					
	<b>(a)</b>		lization? List various type of normalization and explain	<b>(7</b> )			
		any two with example					
	<b>(b)</b>	Explain E-R Diagram with	its notations. Explain weak entity set with example.	<b>(7</b> )			
Q-3		Attempt all questions					
	(a)		erent types of outer join with example.	( <b>7</b> )			
	(b)	List and explain different	· ·	(4)			
	<b>(c)</b>	Explain Domain Constrail	nts with Syntax and Example.	(3)			



**Attempt all questions**Make the comparison of database management system with relational database

**(7**)

Q-4

(a)

	management system.			
	<b>(b)</b>	Explain database system architecture with diagram in detail.		
Q-5		Attempt all questions		
	<b>(a)</b>	Explain Fundamental Operators in Relational Algebra with Syntax	<b>(7)</b>	
	<b>(b)</b>	Explain two-phase commit protocol.	<b>(4)</b>	
	(c)	Consider following schema and write SQL queries for given statements.	(3)	
		Employee(Emp_ID, Name, Age, Gender, City, Salary)		
		Accounts(A ID, Emp ID, Balance)		
		Write a query:		
		1) To create table "Accounts" with constraints.		
		2) To find the "Name(s)" of employee who has balance greater than 50000 in his/her account.		
		3) To find the "Balance" of employees having salary less than 10000		
Q-6		Attempt all questions		
	(a)	What is locking? Explain Two-Phase Locking protocol.	<b>(7)</b>	
	<b>(b)</b>	List and explain DML commands with example.	(7)	
Q-7		Attempt all questions		
	(a)	Explain Transactions with Atomicity, Consistency, Isolation and Durability properties.	(8)	
	<b>(b)</b>	What is trigger? Explain in detail with example.	(6)	
Q-8		Attempt all questions		
-	(a)	What is Query processing? Explain its steps with diagram.	<b>(7)</b>	
	<b>(b)</b>	What is deadlock? Explain deadlock detection and recovery.	(7)	

