

GUJARAT TECHNOLOGICAL UNIVERSITY**DIPLOMA ENGINEERING – SEMESTER –4 • EXAMINATION – WINTER - 2017****Subject Code:340704****Date: 13-11-2017****Subject Name: Relational Database Management System****Time: 02:30 pm to 05:00 pm****Total Marks: 70****Instructions:**

1. Attempt all questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.
4. Each question carry equal marks (14 marks)

Q.1	(a)	What is transaction? Explain ACID properties of transaction.	07
પ્રશ્ન. ૧	અ	Transaction શું છે? Transaction ની ACID properties સમજાવો.	07
	(b)	Explain different types of data encryption.	0૭
	બ	Data encryption ના જુદા જુદા પ્રકાર સમજાવો.	0૭
Q.2	(a)	Explain deadlock in detail.	07
પ્રશ્ન. ૨	અ	Deadlock સમજાવો.	07
	(b)	Explain explicit cursor with example.	0૭
	બ	Explicit cursor ઉદાહરણ આપી સમજાવો.	0૭
OR			
	(b)	Explain different types of triggers. Explain any one of them with example.	07
	બ	જુદા જુદા પ્રકારની triggers સમજાવો. એમાંથી કોઈ એક ઉદાહરણ આપી સમજાવો.	
Q.3	(a)	What is decomposition? Explain non loss decomposition.	07
પ્રશ્ન. ૩	અ	Decomposition શું છે? non loss decomposition સમજાવો.	07
	(b)	Explain 2NF and 3NF with example.	0૭
	બ	2NF અને 3NF ઉદાહરણ આપી સમજાવો.	0૭
OR			
Q.3	(a)	Explain closure of a set of Functional dependencies.	07
પ્રશ્ન. ૩	અ	closure of a set of Functional dependencies સમજાવો.	07
	(b)	What is join dependency? Explain 5NF with example.	0૭
	બ	Join dependency શું છે? 5NF ઉદાહરણ આપી સમજાવો.	0૭
Q.4	(a)	Explain three problems of concurrency control system.	07
પ્રશ્ન. ૪	અ	Concurrency control system ના ત્રણ problems સમજાવો.	07
	(b)	Explain checkpoint method of database recovery.	0૭
	બ	Database recovery ની checkpoint method સમજાવો.	0૭
OR			
Q.4	(a)	Explain transaction log.	07

પ્રશ્ન. ૪	અ	Transaction log સમજાવો.	07
	(b)	Explain shadow paging.	0૭
	બ	Shadow paging સમજાવો.	0૭
Q.5	(a)	Explain CIA property of security.	07
પ્રશ્ન. ૫	અ	Security ની CIA property સમજાવો.	07
	(b)	What is sequence? Explain how to create sequence with example.	0૭
	બ	Sequence શું છે? create sequence ઉદાહરણ આપી સમજાવો.	0૭
		OR	
Q.5	(a)	Explain firewall and digital signature.	07
પ્રશ્ન. ૫	અ	Firewall અને digital signature સમજાવો.	07
	(b)	Explain structure of a PL/SQL block.	0૭
	બ	PL/SQL block નું structure સમજાવો.	0૭
