Seat No.: _____ Enrolment No._____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Engineering - SEMESTER–III • EXAMINATION – WINTER • 2014

Subject Code: 330703 **Date: 03-12-2014**

Subject Name: Data Management System

Time: 10:30 am - 01:00 pm **Total Marks: 70**

Instructions:

1. **Attempt all questions.**
2. **Make suitable assumptions wherever necessary.**
3. **Figures to the right indicate full marks.**
4. **English version is considered to be Authentic.**

Q.1	(a)	Explain integrity constraints with example.	**07**
	(b)	What is Data Independence? Explain types of data independence with example.	**07**
Q.2	(a)	Explain Selection and projection operation of Relational algebra with example.	**07**
	(b)	Describe E-R Diagram symbols with one example.	**07**
		OR	
	(b)	Describe following SQL functions with example. (1) ABS( ) (2)CEIL( ) (3)SQRT( ) (4) INITCAP( ) (5) ROUND( ) (6) LTRIM( ) (7)RTRIM( )	**07**
Q.3	(a)	Explain with example. (1) Primary key (2) NOT NULL (3) Foreign Key (3) Candidate key (4) Unique	**07**
	(b)	Explain with example. (1) Union (2) Intersection	**07**
		OR	
Q.3	(a)	What is a constraint? Explain check and not null constraint of SQL*Plus.	**07**
	(b)	Explain set operation using example.	**07**
Q.4	(a)	Explain different types of join with example..	**07**
	(b)	Discuss following concepts of a relational model with example. (i) Relation (ii) Attribute (iii) Cardinality (iv) Domain (v) Keys	**07**
		OR	
Q. 4	(a)	Explain Generalization and Specialization with example.	**07**
	(b)	Explain Client / Server Database System with example.	**07**
Q.5	(a)	Explain Data Definition Language (DDL): CREATE,ALTER,TRUNCATE, DROP with example.	**07**
	(b)	Explain Data Manipulation Language(DML): INSERT, SELECT, UPDATE, DELETE with example.	**07**
		OR	
Q.5	(a)	Explain queries: Group by, Having, Order by, with an example.	**07**
	(b)	Explain Sub queries with an example.	**07**

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ગુજરાતી

પ્રશ્ન. ૧	અ	Integrity constraints ને ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Data Independence શું છે? data independence ના પ્રકાર ઉદાહરણ સહિત સમજાવો.	૦૭
પ્રશ્ન. ૨	અ	Relational algebra ના Selection અને projection operation ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	E-R Diagram symbols ઉદાહરણ સહિત સમજાવો.	૦૭
		અથવા	
	બ	નીચેના SQL functions વર્ણવો. (1) ABS( )(2)CEIL() (3)SQRT( ) (4) INITCAP( )(5) ROUND( )(6) LTRIM( ) (7)RTRIM( )	૦૭
પ્રશ્ન. ૩	અ	સમજાવો. (1) Primary key (2) NOT NULL (3) Foreign Key (3) Candidate key (4) Check (5) Unique	૦૭
	બ	સમજાવો. (1) Union (2) Intersection	૦૭
		અથવા	
પ્રશ્ન. ૩	અ	constraint શું છે? SQL*Plus ના check and not null constraint સમજાવો.	૦૭
	બ	set operation ઉદાહરણ સહિત સમજાવો.	૦૭
પ્રશ્ન. ૪	અ	જૂદા જૂદા join ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	relational model માટે નીચેના શબ્દો ઉદાહરણ સહિત સમજાવો. (i) Relation (ii) Attribute (iii) Cardinality (iv) Domain (v) Keys	૦૭
		અથવા	
પ્રશ્ન. ૪	અ	Generalization and Specialization ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Client / Server Database System ઉદાહરણ સહિત સમજાવો.	૦૭
પ્રશ્ન. ૫	અ	Data Definition Language (DDL): CREATE,ALTER,TRUNCATE, DROP ને ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Data Manipulation Language(DML): INSERT, SELECT, UPDATE, DELETE ને ઉદાહરણ સહિત સમજાવો.	૦૭
		અથવા	
પ્રશ્ન. ૫	અ	Group by, Having, Order by, queries ઉદાહરણ સહિત સમજાવો.	૦૭
	બ	Sub queries ઉદાહરણ સહિત સમજાવો.	૦૭

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