

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**DIPLOMA ENGINEERING – SEMESTER- IV EXAMINATION –Summer- 2019**

**Subject Code: 3340701****Date: 09-05-2019****Subject Name: Advanced Database Management System****Time: 10:30 AM to 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. Use of programmable & Communication aids are strictly prohibited.
5. Use of only simple calculator is permitted in Mathematics.
6. English version is authentic.

**Q.1**

Answer any seven out of ten. દશમાંથી કોઈપણ સાતના જવાબ આપો.

**14**

1. Explain COMMIT and ROLLBACK COMMAND.
૧. COMMIT and ROLLBACK COMMAND સમજાવો.
2. Explain UNIQUE index with example.
૨. UNIQUE index ઉદાહરણ આપી સમજાવો.
3. What is deadlock?
૩. Deadlock શું છે?
4. What is stored function?
૪. Stored function શું છે?
5. What is user defined exception? Why it is used?
૫. User defined exception શું છે? તે કેમ વપરાય છે?
6. Explain GOTO statement with example.
૬. GOTO statement ઉદાહરણ આપી સમજાવો.
7. What is functional dependency? Give an example.
૭. Functional dependency શું છે? ઉદાહરણ આપો.
8. Trivial v/s nontrivial dependencies.
૮. Trivial v/s nontrivial dependencies.
9. List out problems of concurrency control.
૯. Concurrency control ના problems લખો.
10. Give advantages of PL/SQL block.
૧૦. PL/SQL blocks ના ફાયદા આપો.

**Q.2****પ્રશ્ન. ૨**

- (a) Explain GRANT, REVOKE and SAVEPOINT with example. **03**  
 (અ) GRANT, REVOKE and SAVEPOINT ઉદાહરણ આપી સમજાવો. **૦૩**

OR

- (a) What is LOCK? Explain types of LOCK. **03**  
 (અ) LOCK શું છે? જુદા જુદા પ્રકારના LOCK સમજાવો. **૦૩**
- (b) Give the difference between sorting and indexing. **03**  
 (બ) sorting and indexing વચ્ચેનો તફાવત આપો. **૦૩**

OR

- (b) What is view? Write advantages of view. Which are the restrictions on view. **03**  
 (બ) View શું છે? View ના ફાયદા લખો. View પરના restrictions કયા છે? **૦૩**
- (c) What is Sequence? How can we create sequence? Explain with example. **04**  
 (ક) Sequence શું છે? Sequence કેવી રીતે create કરાય? ઉદાહરણ આપી સમજાવો. **૦૪**

OR

- (c) What is synonym? How can we create synonym? **04**  
 (ક) Synonym શું છે? Synonym કેવી રીતે create કરાય? **૦૪**
- (d) What is ROWID? Explain in detail with example. **04**  
 (ડ) ROWID શું છે? ઉદાહરણ આપી વિસ્તારથી સમજાવો. **૦૪**

OR

- (d) How can we create and destroy view? Explain types of view. **04**  
 (ડ) View ને create and destroy કેવી રીતે કરાય? જુદાજુદા પ્રકારના view સમજાવો. **૦૪**

**Q.3**  
**પ્રશ્ન. 3**

- (a) Differentiate : SQL vs PL/SQL **03**  
 (અ) તફાવત આપો : SQL vs PL/SQL **૦૩**

OR

- (a) Explain WHILE loop with example. **03**  
 (અ) WHILE loop ઉદાહરણ આપી સમજાવો. **૦૩**
- (b) Explain attributes of implicit cursor. **03**  
 (બ) Implicit cursor ની attributes સમજાવો. **૦૩**

OR

- (b) Explain exceptional handling with example. **03**  
 (બ) Exceptional handling ઉદાહરણ આપી સમજાવો. **૦૩**
- (c) Write short note on packages. **04**  
 (ક) ટૂંકનોંધ લખો: packages **૦૪**

OR

- (c) Explain types of trigger with example. **04**  
 (ક) જુદાજુદા પ્રકારના trigger ઉદાહરણ આપી સમજાવો. **૦૪**
- (d) Write short note on stored procedure. **04**  
 (ડ) ટૂંકનોંધ લખો: stored procedure **૦૪**

OR

- (d) What is trigger? How can we create a trigger? Explain with example. **04**  
 (ડ) Trigger શું છે? Trigger કેવી રીતે create થાય? ઉદાહરણ આપી સમજાવો. **૦૪**

**Q.4**  
**પ્રશ્ન. 4**

- (a) Explain deadlock detection and prevention. **03**  
 (અ) Deadlock detection and prevention સમજાવો. **૦૩**

OR

- (a) Write short note on Two phase locking. **03**  
 (અ) ટૂંકનોંધ લખો: Two phase locking **૦૩**
- (b) Explain closures of a set of functional dependencies. **04**  
 (બ) Closures of a set of functional dependencies સમજાવો. **૦૪**

OR

- (b) Explain Armstrong's Axioms for Functional dependencies. **04**  
 (બ) Armstrong's Axioms for Functional dependencies સમજાવો. **૦૪**
- (c) What is Normalization? Explain 1NF and 2 NF with example. **07**  
 (ક) Normalization શું છે? 1NF and 2 NF ઉદાહરણ આપી સમજાવો. **૦૭**

<b>Q.5</b>	(a) Explain Lossy and Nonloss decomposition with example.	<b>04</b>
<b>પ્રશ્ન. ૫</b>	(અ) Lossy and Nonloss decomposition ઉદાહરણ આપી સમજાવો.	<b>૦૪</b>
	(b) Explain ACID properties of transaction.	<b>04</b>
	(બ) ACID properties of transaction સમજાવો.	<b>૦૪</b>
	(c) Explain 3 NF with example.	<b>03</b>
	(ક) 3 NF ઉદાહરણ આપી સમજાવો.	<b>૦૩</b>
	(d) Differentiate procedure and function.	<b>03</b>
	(ડ) Procedure and function વચ્ચે નો તફાવત આપો.	<b>૦૩</b>

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