C. U. SHAH UNIVERSITY
Summer Examination 2019

Subject Name: **Advanced Database Management System**

Subject Code: **4CS05BDB1**   Branch: **B. C. A.**

Semester: **5**   Date: **14/03/2019**   Time: **10:30 To 01:30**   Marks: **70**

Instructions:

(1) Use of Programmable calculator and any other electronic instrument is prohibited.

(2) Instructions written on main answer book are strictly to be obeyed.

(3) Draw neat diagrams and figures (if necessary) at right places.

(4) Assume suitable data if needed.

Q. 1	**Differentiate between below:**	**14**
a)	Varchar and Varchar2	**2**
b)	Truncate and Delete command	**2**
c)	Substr and Instr	**2**
d)	Primary key and Unique Key	**2**
e)	Rename and alias in table	**2**
f)	$ORACLE_BASE and $ORACLE_HOME	**2**
g)	SQL and PL/SQL	**2**

ATTEMPT ANY FOUR QUESTIONS FROM Q. 2 TO Q. 8

Q. 2	**Attempt all questions.**	
a)	What is SQL and also describe types of SQL statements?	**7**
b)	Define the order of precedence used in executing SQL statements.	**7**
Q. 3	**Attempt all questions.**	
a)	Explain below multiple-row and single-row functions:	**7**
	avg, count, max, concat, length, trunk, lower	
b)	What is the difference between count (*), count (expression), count (distinct expression)?	**7**
	(Note: expression is any column name of a table)	
Q. 4	**Attempt all questions.**	
a)	Explain Oracle Database Objects: Index and Cluster.	**7**
b)	Enlist and explain data control and transaction control commands.	**7**
Q. 5	**Attempt all questions.**	
a)	What are Locks? Explain various lock types in detail.	**7**
b)	Write note on Backup & Recovery functionalities of Oracle.	**7**

Q. 6   **Attempt all questions.**

a) Explain PL/SQL block structure. **7**

b) What are the uses of %rowtype and %type in PL/SQL? **7**

Q. 7   **Attempt all questions.**

a) Write note on stored procedures and functions in PL/SQL. **7**

b) What is RDBMS? Explain the importance of E-R diagram in RDBMS. **7**

Q. 8   **Attempt all questions.**

a) What is trigger? Explain two supported types of triggers in detail. **7**

b) How to handle errors in PL/SQL? Discuss. **7**