C.U.SHAH UNIVERSITY
Summer Examination-2019

Subject Name: Advanced Database Management System

Subject Code: 4TE06ADM1   **Branch: B.Tech (IT)**

Semester: 6   **Date: 25/04/2019**   **Time: 10:30 To 01:30**   **Marks: 70**

Instructions:
(1) Use of Programmable calculator & 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 **Attempt the following questions:**   **(14)**
   a) What is candidate key?
   b) What is Dual Table?
   c) Explain Union all operator.
   d) What is functional dependency?
   e) What is the difference between Procedure and Function?
   f) Explain Check constraints.
   g) What is view?
   h) How floor() function is used?
   i) How substring() function is used?
   j) List down various types of query execution plan.
   k) How Between operator is used?
   l) What is query tree?
   m) What do you mean by consistency in database?
   n) How does rtrim() function work?

   Attempt any four questions from Q-2 to Q-8

Q-2   **Attempt all questions**   **(14)**
   (a) Discuss about various differences of DBMS and RDBMS.   **(7)**
   (b) What is join? Explain join with its types and suitable example.   **(7)**

Q-3   **Attempt all questions**   **(14)**
   (a) Explain Query optimization process.   **(7)**
   (b) Explain Security as Database Design Issue.   **(7)**

Q-4		**Attempt all questions**	**(14)**
	(a)	Explain various types of records with example.	**(7)**
	(b)	Explain Database tuning.	**(7)**

Q-5		**Attempt all questions**	**(14)**
	(a)	Explain DML commands with syntax and examples.	**(7)**
	(b)	Explain like, limit, max, as, avg, min and round commands with suitable example.	**(7)**

Q-6		**Attempt all questions**	**(14)**
	(a)	Explain functions in PL/SQL with example.	**(7)**
	(b)	What is trigger? Explain it in detail with example	**(7)**

Q-7		**Attempt all questions**	**(14)**
	(a)	Attempt following questions 1) Explain Web database. 2) Give the differences between Structured data and Unstructured data	**(7)**
	(b)	Create PL/SQL procedure to perform various arithmetic operations.	**(7)**

Q-8		**Attempt all questions**	**(14)**
	(a)	Design PL/SQL Function that computes and returns the factorial of a given number.	**(7)**
	(b)	Design PL/SQL Function that computes and returns the maximum from given two values.	**(7)**