C.U.SHAH UNIVERSITY
Summer Examination-2019

Subject Name : Advanced Database Management System
Subject Code : 4CS06IDB1   **Branch: B.Sc.I.T.**
Semester : 6   Date : 20/04/2019   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)**

  1) **The 'Relational Model' of database was introduced by:**
      a) Dr. E. F. Codd   b) Dr. K. J. Morgan   c) Dr. K. V. Roger   d) Encapsulation

  2) **SQL commands can be written in mixed case (Upper Case + Lower Case)**
      a) True   b) False   c) Always Capital   d) Always Small

  3) **The aggregate function is:**
      a) Min   b) Count   c) Sum   d) All of above

  4) **Which is the DML Statements?**
      a) Create User   b) Create Table   c) Create Database   d) Update

  5) **Total number of Foreign Key in the table:**
      a) 0 (Zero)   b) One   c) More than one   d) All of above

  6) **The constraint that can only be defined at column level only is:**
      a) UNIQUE   b) NOT NULL   c) CHECK   d) All of above

  7) **Two copies of same table is created in memory if the join is:**
      a) Cross Join   b) Left Outer Join   c) Self Join   d) Full Outer Join

  8) **The Sub Query appears usually:**
      a) Inside WHERE clause   b) Inside SELECT clause
      c) Inside FROM clause   d) None of above

  9) **The sequence object always generates:**
      a) Numerical Values   b) Character Value   c) Data Value   d) Any Value

  10) **Role can be assigned with:**
      a) System Privileges   b) Object Privileges   c) Other Roles   d) All of above

  11) **Which part of PL/SQL block is Mandatory?**
      a) Declaration Section   b) Execution Section
      c) Exception Section   d) All of above

  12) **The parameters of Procedure / Function may be of type:**
      a) IN type   b) OUT type   c) IN OUT type   d) All of above

13) Which type of trigger will be fired first – when event occurs?
   a) Before – Statement Level   b) Before – Row Level
   c) Both of above   d) Cannot Say

14) Exception can be raised using:
   a) Raise Statement   b) Raise_Application_Error
   c) None of above   d) Both of above

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

Q-2 Attempt all questions: (14)
   a) Explain any seven Dr. E. F. Codd's rules in DBMS (7)
   b) Explain normalization? Explain 1NF and 2NF with example. (7)

Q-3 Attempt all questions: (14)
   a) Explain any five aggregate functions. (5)
   b) Explain any five string functions (5)
   c) Differentiate: SQL VS SQL*PLUS. (4)

Q-4 Attempt all questions: (14)
   a) Discuss view with suitable example. (5)
   b) Explain DML Locks and DDL Locks. (5)
   c) Explain Transaction control commands. (4)

Q-5 Attempt all questions: (14)
   a) What is Index? Explain its types. (7)
   b) Write a brief note on Cursor. (7)

Q-6 Attempt all questions: (14)
   a) How to create a procedure? Explain procedure with syntax and example. (7)
   b) Explain creating objects and creating Type in PL/SQL with example (7)

Q-7 Attempt all questions: (14)
   a) Explain PL/SQL table with example. (5)
   b) Discuss Trigger with its types. (5)
   c) Explain Nested Tables with example. (4)

Q-8 Attempt all questions: (14)
   a) Explain Oracle Instance Architecture. (5)
   b) What is Net 8? Explain its features. (5)
   c) What is Backup? List and Explain different types of backup. (4)