JAH-003-1033003   Seat No. _____

B. C. A. (Sem. III) (CBCS) Examination

November - 2019

CS-15 : RDBMS Using Oracle

Faculty Code : 003

Subject Code : 1033003

Time : $2\frac{1}{2}$ Hours]   [Total Marks : **70**

1   (a)   Attempt the following objective questions :   4

      (1)   Raw types are used to store which type of data ?

      (2)   A table cannot have one more than one Long data type. (True / False)

      (3)   _____ removes all the rows from table, but its structure and constraints and so on, remains.

      (4)   In SQL, which command is used to select only one copy of each set of duplicate rows ?

    (b)   Attempt any **one** :   2

      (1)   Write a note on E-R Diagram.

      (2)   Differentiate: DBMS v/s RDBMS.

    (c)   Attempt any **one** :   3

      (1)   Explain various components of SQL.

      (2)   What are E-F Codd rules? Explain.

    (d)   Attempt any **one** :   5

      (1)   List out various operators and explain any 2 operators with example.

      (2)   Explain various data types available in SQL.

2 (a) Attempt the following objective questions : **4**

    (1) _____ clause acts like a where clause but is used for groups rather than rows.

    (2) The condition in a where clause can refer to only one value. (True / False)

    (3) Drop table cannot be used to drop a table referenced by a _____ constraints.

    (4) The statement in SQL which allows changing the definition of a table is _____.

(b) Attempt any **one** : **2**

    (1) Explain group by and having clause with suitable example.

    (2) Write a note on set operators.

(c) Attempt any **one** : **3**

    (1) What is join ? Explain its various types.

    (2) What are constraints ? Explain any two constraints with suitable example.

(d) Attempt any **one** : **5**

    (1) Consider these following tables and only solve the query.

       Tables : (1) student : s_id (Primary key), sname, city

            (2) result: r_id (Primary Key), mark1, mark2, s_id (Foreign key)

       Query :-

       – Write a SQL statement to make a list with r_id, s_id, student name and mark1 for those whose marks between 70 and 90.

       – Find out maximum mark2 from result table.

    (2) Table : Employee : Emp_no (primary key), emp_name, city, mgr_no, job, sal, dept_no

       – Display department wise average salary.

3 (a) Attempt the following objective questions : **4**

      (1) A view is a virtual table that can be accessed via SQL commands. (True / False)

      (2) In a _____ two database operations wait for each other to release a lock.

      (3) Oracle uses a method called _____ to implement concurrency control.

      (4) Indexes may be created or dropped at any time. (True / False)

  (b) Attempt any **one** : **2**

      (1) Differentiate: pessimistic lock v/s optimistic lock.

      (2) Define the term: cluster, synonym.

  (c) Attempt any **one** : **3**

      (1) What is view ? Explain in detail.

      (2) Write a note on indexes.

  (d) Attempt any **one** : **5**

      (1) Write a note on sequence.

      (2) What are locks ? Explain its various types.

4 (a) Attempt the following objective questions : **4**

      (1) A _____ is a database object which is used to manipulate data in a row-to-row manner.

      (2) If user defined error condition exists, the call to the user defined exception is made using a _____ statement.

      (3) Which is a database object that allows us to execute a batch of SQL code when a table event occurs ?

      (4) _____ data type is also known as user defined data type.

(b) Attempt any **one** :   2

    (1) Differentiate: %type v/s %rowtype.

    (2) Define the term: varrays, nested table.

(c) Attempt any **one** :   3

    (1) What is cursor ? Explain its various types.

    (2) What is exception ? Differentiate: predefined v/s user defined.

(d) Attempt any **one** :   5

    (1) What is procedure ? Explain with example.

    (2) Consider a student table having fields like seat_no, name, and mark. Develop a trigger on the table for insert or update any records and name should be display into the uppercase.

5 (a) Attempt the following objective questions :   4

    (1) _____ file holds the actual data.

    (2) A _____ is used to logically group data together.

    (3) LGWR stands for _____.

    (4) _____ is a principal scheduler object.

(b) Attempt any **one** :   2

    (1) Differentiate: Data files v/s Redo log files.

    (2) Define the term: oracle blocks, import.

(c) Attempt any **one** :   3

    (1) Write a note on initialization parameter.

    (2) What is memory structure ? Explain in detail.

(d) Attempt any **one** :   5

    (1) Write a note on scheduler.

    (2) What is instance architecture ? Explain.