



**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.