

Dr. Babasaheb Ambedkar Open University
Term End Examination July-2016

Course : BCA
Subject Code : BCA – 303 **Duration** : 03 hours
Subject : Relational Database Management System **Total Marks** : 70
Date : **Time** :

Section A

Attempt any Three of the following:

(30)

1. List and explain any five features of DBMS.
2. List and explain any five relational algebra operations.
3. Write a program in PL/SQL program which takes marks of three subjects as input, calculate total marks and percentage. Based on percentage, the grade of student result will be displayed. The grade is considered as follow:

Percentage	Grade
Greater than or equal to 70.00%	Distinction
Between 60.00% and 69.99%	First Class
Between 50.00% and 59.99%	Second Class
Between 40.00% and 49.99%	Pass Class
Less than 40%	Unsatisfied

4. What is difference between a table and view? Write general syntax to create view. In what conditions, a view can be updated?
5. Explain the following SQL function with example including its output result.
a. ceil b. floor c. Round d. power e. abs

Section B

Attempt the following (any four)

(20)

1. Explain various numeric data types supported by SQL.
2. What do you mean by cursor? List and explain 4 attributes of implicit cursor.
3. Write a trigger which displays total numbers of record available in the table before a record is inserted into the table.
4. Explain primary key and foreign key with appropriate example.
5. List and explain various anomalies with reference to database.
6. List and explain any five advantages of PL/SQL.

Section C

(A) Multiple Choice Questions. (Give Four options for each MCQ)

(10)

1. _____ is one of the most important assets of company
A. Data B. database C. Both a and b D. None of these
2. If R is a set of functional dependencies then the closure of R is denoted as
A. R^- B. R^+ C. R^* D. $R/$

- 3 _____ explains the structure and relationship of tables and other elements within a single relation database.
A. Key B. Schema C. Table D. None of these
- 4 _____ allows you to filter your query.
A. From B. AND C. Where D. Select
- 5 To make copy of an existing table using combination of the create table statement and the _____ statement.
A. Insert B. Update D. Delete D. Select
- 6 The full-form of DDL is
A. Data Definition Language B. Data Distributed Language
B. Database Definition Language D. None of these
- 7 A _____ is a sequence of SQL statements that oracle database treats as a single unit.
A. Function B. Transaction C. Nowait D. None of these
- 8 _____ trigger is executed after the trigger statement is issued.
A. Before B. After C. Both A and B D. None of these
- 9 To handle unnamed exceptions, you must use the _____ handler.
A. INVALID_NUMBER B. INVALID_CURSOR C. OTHERS D. None of these
- 10 Oracle arrays are of variable size, which is why they are called _____.
A. Varray B. Varray C. Array D. None of these

(B) Do as Directed.

(10)

1. State: True or False
Each primary key is also candidate key.
2. State: True or False
A key consist of more than one field to uniquely identify a record is called composite key.
3. What do you mean by prime attribute?
4. To store variable length Unicode characters which data type is used in SQL?
5. What will be output of the following code:
Select substr('Computer',3,3) from dual;
6. Write SQL statement to display current date.
7. To assign value to variable in PL/SQL, which symbol is used?
8. Write the full-form of SGA.
9. State: True or False

It is not compulsory to assign a value to a constant at the time of declaring a constant.

10. To capture query results in a file, which command is used in PL/SQ?

SAMPLE QUESTION PAPER