## B.C.A. DEGREE EXAMINATION - NOVEMBER 2018 <br> THIRD SEMESTER

## COURSE : MAJOR CORE <br> PAPER : DATABASE MANAGEMENT SYSTEMS

MAX. MARKS: 100

## SECTION - A

## ANSWER ALL THE QUESTIONS:

(20x1=20)

## Choose the correct answer:

1. A relational database consists of a collection of $\qquad$
a) Tables
b) Fields
c) Records
d) Keys
2. The term attribute refers to a $\qquad$ of a table.
a) Record
b) Column
c) Tuple
d) Key
3. The $\qquad$ is the one in which the primary key of one relation is used as a normal attribute in another relation.
a) Referential relation
b) Referencing relation
b) Referenced relation
d) Referred relation
4. The $\qquad$ operation allows the combining of two relations by merging pairs of tuples, one from each relation, into a single tuple.
a) Select
b) Join
c) Union
d) Intersection
5. The $\qquad$ operator takes the results of two queries and returns only rows that appear in both result sets.
a) Union
b) Intersect
c) Difference
d) Projection
6. Which one of the following is used to define the structure of the relation, deleting relations and relating schemas?
a) DML(Data Manipulation Language)
b) DDL (Data Definition Language)
c) Query
d) Relational Schema.
7. Insert into instructor values (10211, 'Smith', ‘Biology', 66000); What type of statement is this?
a) Query
b) DML
c) Relational
d) DDL
8. Select $\qquad$ dept_name
from instructor;
Here which of the following displays the unique values of the column?
a) All
b) From
c) Distinct
d) Name
9. In SQL, the spaces at the end of the string are removed by $\qquad$ function.
a) Upper
b) String
c) Trim
d) Lower
10. $\qquad$ operator is used for appending two strings.
a) \&
b) $\%$
c) \|
d)

## Fill in the blanks:

11. $\qquad$ contains the structure of database.
12. $\qquad$ query is used to specify database retrievals and updates.
13. $\qquad$ is an organized collection of facts.
14. $\qquad$ role is responsible for physical design and maintenance of database.
15. Data on a last level of a database tree is called
16. In the relational data model the columns of a table are called
17. The $\qquad$ model is based on the mathematical concept of a relation.
18. Relational database shows relationship between two or more $\qquad$ _.
19. Relational model of data management is based on $\qquad$ structure and table.
20. In a relational database, $\qquad$ fields are not allowed to have null values.

## SECTION - B

Answer all the questions:
21. What is data abstraction?
22. Define referential integrity.
23. Define views.
24. Define cursors.
25. What is data warehouse?
( $5 \times 2=10$ )

## SECTION - C

## Answer any eight of the following:

$(8 \times 5=40)$
26. Explain E-R diagram with example.
27. Discuss about the overall system structure.
28. List any five SQL commands with example.
29. Explain any two group functions.
30. Explain mapping.
31. Give a brief note on relational database design.
32. Write a PL/SQL program to check whether the given number is ODD or EVEN.
33. Write short note on triggers.
34. Explain type constructor.
35. Discuss about the components of data warehousing.

## SECTION - D

Answer any three of the following:
36. Explain data models with an example.
37. Discuss about set operators.
38. Explain BCNF in detail.
39. Briefly explain the various control structure.
40. Explain OLAP operations.

