

B.C.A. Part – I (Semester–II) (CBCS) Examination**2 BCA 2****DATABASE MANAGEMENT SYSTEM**

Time : Three Hours]

[Maximum Marks : 80

Note :— (1) All questions are compulsory.

(2) Draw suitable diagrams wherever necessary.

(3) Assume suitable data wherever necessary.

1. (A) Choose correct alternative :

10×1=10

(1) In order to join N tables, minimum number of join statements required is :

(a) N

(b) N-1

(c) N-2

(d) N+1

(2) In order to prevent multiple records from being returned by the sub query _____ must be used before the sub query.

(a) Many Value Operator

(b) Multiple Value Operators

(c) Single Value Operator

(d) Unique Value Operators

(3) To retrieve records from one or more table, use _____.

(a) CREATE

(b) UPDATE

(c) SELECT

(d) RETRIEVE

(4) To store fixed or floating point numbers use _____.

(a) CHAR

(b) VARCHAR 2

(c) NUMBER (P,S)

(d) All of the above

(5) Processed data called as _____.

(a) Data

(b) Information

(c) Meta Data

(d) Big Data

(6) All loop statements must end with _____.

(a) Semicolon

(b) Full stop

(c) End Loop

(d) Close curly bracket

(7) Which type of cursor is automatically declared by Oracle every time SQL statement is executed ?

(a) An Implicit

(b) An Explicit

(c) Both (a) and (b)

(d) None of the above

(8) The only required section of PL/SQL block are the _____ sections.

- (a) DECLARE & EXCEPTION (b) EXCEPTION & END
- (c) BEGIN & END (d) BEGIN & DECLARE

(9) Advantage of SQL stored procedure :

- (a) Maintainability (b) Reusability
- (c) Security (d) All of the above

(10) In order to undo the work of transaction which one should be used ?

- (a) View (b) Rollback
- (c) Commit (d) Undo

(B) Fill in the Blanks (1 mark each) : 5×1=5

(1) DBMS uses _____ as a data structure to store data.

(2) A set of attributes which is never NULL and are used to uniquely identify tuple is called as _____

(3) In SQL _____ is a virtual table whose contents are based on SQL statement result.

(4) Recovery is done by _____.

(5) When two transactions wait for same object, situation is called as _____.

(C) Answer in **one** sentence (1 mark each) : 5×1=5

(1) What is Trigger ?

(2) What is cursor ?

(3) What is Snapshot ?

(4) What is Relation ?

(5) What is query ?

2. (A) What is Normalization ? Explain types of normalization and advantages as well as disadvantages of Normalization. 8

(B) What is DBMS ? Explain types of DBMS. 4

OR

3. (A) What is DBMS ? Explain Architecture of Database. 8

(B) Explain concept of DBA with its Role and Responsibilities. 4

4. (A) Explain components of SQL with suitable example. 8

(B) Explain Data Types in SQL. 4

OR

5. (A) Explain select statement with its all possible clauses. 8
(B) What are constraints ? Explain any 2 constraints with example. 4
6. (A) What is JOIN ? Explain Inner Join and Outer Join with example. 8
(B) Explain Union with suitable example. 4

OR

7. (A) Explain Data Constraints. State and explain with suitable example. 8
(B) What is Index ? Explain advantages and disadvantages of index. 4
8. (A) What is PL/SQL ? Explain features of PL/SQL. Explain PL/SQL block structure. 8
(B) Explain PL/SQL continue and go to statement with example. 4

OR

9. (A) State and explain PL/SQL operators with suitable examples. 8
(B) Explain Loop control statement in PL/SQL with example. 4
10. (A) Explain ACID Properties of Transaction with example. 8
(B) What is Recursive function ? Explain with suitable example. 4

OR

11. (A) What is transaction control ? Explain types of transaction commands with example. 8
(B) What is Backup, Types of Backup and explain importance of Backup. 4