

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) : $5 \times 1 = 5$
- (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) : $5 \times 1 = 5$
- (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

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| 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

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| 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

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| 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

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| 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 |