

AJ-102

April-2024

B.C.A., Sem.-IV

CC-208 : Database Management System – II (Theory)

Time : 2:30 Hours]

[Max. Marks : 70

1. Write the following :

- (i) Explain Different SQL Constraints with example. 7
- (ii) List and explain all Data Manipulation Language commands with example. 7

OR

- 1. (i) List and explain all Special Operators with example. 7
- (ii) Discuss Aggregate functions in detail with example. 7

2. Write the following :

- (i) What is concurrency control ? Explain the problem of lost updates and inconsistent retrieval. 7
- (ii) Explain two phase locking protocol in detail. 7

OR

- 2. (i) Explain the difference between Binary, Shared and Exclusive locks. 7
- (ii) What is a Transaction ? Explain its properties. 7

3. Write the following :

- (i) Explain the different levels of Data and Process distribution with diagram. 7
- (ii) List and explain different types of Distributed Database Transparency Features. 7

OR

- 3. (i) What are Distributed Database and Distributed Processing ? Explain using proper Diagram. 7
- (ii) Explain Two-Phase Commit Protocol in distributed transaction management. 7

4. Write the following :

- (i) List out the different types of Joins and explain any three in detail with example. 7
- (ii) What is Subquery ? Explain Where, IN and From subqueries with example. 7

OR

- 4. (i) List and explain different types of Set Operators with example. 7
- (ii) List SQL functions and explain Date & Time and Conversion functions in detail with example. 7

5. Attempt any **seven** out of **twelve** :

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- (i) _____ generate a numeric value that can be assigned to any column in any table.
- (a) Autonumber (b) Identity
(c) Sequence (d) Autogenerate
- (ii) The _____ SQL command is used to delete a Table structure.
- (a) DROP (b) FINISH
(c) TRUNCATE (d) DELETE
- (iii) DDL stands for Distributed Database Language. (T/F)
- (iv) Define the monotonicity property of a time stamp.
- (v) Using _____ we can recover our database transaction.
- (a) Transaction Log (b) Checkpoints
(c) Control files (d) Data Files
- (vi) TP stands for _____.
- (a) Transaction Provider (b) Transaction Processor
(c) Transaction Program (d) Transaction Point
- (vii) Transaction can be either completely committed or completely aborted. (T/F)
- (viii) Distributed processing requires distributed database, but distributed database does not require distributed processing. (T/F)
- (ix) _____ function returns current system date in Oracle.
- (a) Sysdate (b) System Date
(c) Now (d) Today
- (x) INTERSECT operator combines two or more queries including duplicate rows. (T/F)
- (xi) The Default order in order by clause is ascending. (T/F)
- (xii) LIKE operators uses _____ and _____ symbols for pattern matching.
- (a) ? and / (b) % and _
(c) * and ? (d) % and *