

1. Which DML operation may cause a phantom read in transactions?

- A) INSERT
- B) UPDATE
- C) DELETE
- D) All of these

Answer: D

2. Which isolation level prevents lost updates but allows phantom reads?

- A) READ UNCOMMITTED
- B) READ COMMITTED
- C) REPEATABLE READ
- D) SERIALIZABLE

Answer: C

3. Which DML command may escalate row locks to table lock under heavy load?

- A) INSERT
- B) UPDATE
- C) DELETE
- D) All of these

Answer: D

4. Which clause can be used to return modified rows in UPDATE?

- A) RETURNING
- B) OUTPUT
- C) BOTH (depends on DBMS)
- D) None

Answer: C

5. Which SQL standard introduced DELETE with WHERE CURRENT OF cursor?

- A) SQL:1992
- B) SQL:1999
- C) SQL:2003
- D) SQL:2011

Answer: A

6. Which operation is affected by deferred constraints?

- A) INSERT
- B) UPDATE
- C) DELETE
- D) All of these

Answer: D

7. Which DBMS feature allows ignoring constraint errors during bulk insert?

- A) IGNORE
- B) EXCEPTIONS INTO
- C) CONTINUE
- D) SKIP CONSTRAINTS

Answer: B

8. Which DML statement can be parallelized for faster execution?

- A) INSERT
- B) UPDATE
- C) DELETE
- D) All of these

Answer: D

9. Which operation may fail under “mutating table” error in Oracle?

- A) INSERT trigger
- B) UPDATE trigger
- C) DELETE trigger
- D) All of these

Answer: D

10. Which DML statement can use WITH CHECK OPTION in views?

- A) INSERT
- B) UPDATE
- C) DELETE
- D) All of these

Answer: D

11. Which keyword allows skipping rows violating constraints in INSERT (MySQL)?

- A) SKIP
- B) IGNORE
- C) CONTINUE
- D) NULL

Answer: B

12. Which DML statement can cause cascading changes with foreign keys?

- A) DELETE
- B) UPDATE

C) Both A and B
D) INSERT
Answer: C

13. Which DML command supports OUTPUT clause in SQL Server?

- A) INSERT
- B) UPDATE
- C) DELETE
- D) All of these

Answer: D

14. Which Oracle feature allows conditional multi-table insert?

- A) INSERT ALL
- B) INSERT FIRST
- C) MERGE
- D) Both A and B

Answer: D

15. Which clause in MERGE decides whether to insert or update?

- A) WHEN MATCHED / WHEN NOT MATCHED
- B) IF/ELSE
- C) CASE
- D) ON DUPLICATE

Answer: A

16. Which MERGE behavior may cause constraint violation?

- A) WHEN MATCHED UPDATE
- B) WHEN NOT MATCHED INSERT
- C) WHEN NOT MATCHED BY SOURCE DELETE
- D) All of these

Answer: D

17. Which DML operation may cause deadlocks most frequently?

- A) UPDATE
- B) DELETE
- C) INSERT
- D) MERGE

Answer: A

18. Which statement can implement UPSERT in Oracle?

- A) MERGE
- B) INSERT ... ON DUPLICATE KEY
- C) UPDATE OR INSERT
- D) Both A and B (depending on DBMS)

Answer: D

19. Which command can perform conditional delete in MERGE?

- A) WHEN MATCHED THEN DELETE
- B) WHEN NOT MATCHED THEN DELETE
- C) DELETE WHERE
- D) Both A and C

Answer: A

20. Which DML may cause ORA-00060 deadlock in Oracle?

- A) UPDATE with joins
- B) DELETE with subquery
- C) INSERT with trigger
- D) All of these

Answer: D

21. Which SQL feature allows auditing DML operations automatically?

- A) Triggers
- B) Views
- C) Indexes
- D) Synonyms

Answer: A

22. Which DML statement can populate multiple tables at once?

- A) INSERT ALL
- B) MERGE
- C) UPDATE with JOIN
- D) DELETE with USING

Answer: A

23. Which is true about TRUNCATE vs DELETE?

- A) TRUNCATE cannot activate triggers
- B) DELETE activates triggers
- C) TRUNCATE is DDL, DELETE is DML
- D) All of these

Answer: D

24. Which DML can use RETURNING clause in Oracle?

- A) INSERT
- B) UPDATE
- C) DELETE
- D) All of these

Answer: D

25. Which clause helps avoid constraint violation in bulk UPDATE?

- A) CASE
- B) CHECK OPTION
- C) SAVE EXCEPTIONS
- D) SKIP

Answer: C

26. Which DML is most likely to cause lost update anomaly?

- A) UPDATE
- B) INSERT
- C) DELETE
- D) MERGE

Answer: A

27. Which command is used to delete duplicate rows while keeping one?

- A) DELETE with ROW_NUMBER()
- B) TRUNCATE
- C) DROP
- D) UPDATE

Answer: A

28. Which join can be used in DELETE to remove orphan rows?

- A) LEFT JOIN
- B) INNER JOIN
- C) FULL JOIN
- D) CROSS JOIN

Answer: A

29. Which join can be used in UPDATE to sync tables?

- A) INNER JOIN
- B) LEFT JOIN
- C) RIGHT JOIN

D) All of these

Answer: D

30. Which clause can help prevent phantom deletes?

A) FOR UPDATE

B) SERIALIZABLE isolation

C) LOCK TABLE

D) All of these

Answer: D

31. Which operation can cause cascading NULLs if foreign keys use SET NULL?

A) DELETE parent row

B) UPDATE parent key

C) Both A and B

D) INSERT

Answer: C

32. Which is true about deferred DML constraints?

A) Checked at transaction commit

B) Can defer foreign key checks

C) Improves performance in batch loads

D) All of these

Answer: D

33. Which DML can use OUTPUT INTO clause in SQL Server?

A) INSERT

B) UPDATE

C) DELETE

D) All of these

Answer: D

34. Which statement can perform conditional update on multiple rows?

A) UPDATE with CASE

B) UPDATE with JOIN

C) UPDATE with subquery

D) All of these

Answer: D

35. Which DML anomaly is prevented by SERIALIZABLE isolation?

A) Dirty reads

- B) Non-repeatable reads
- C) Phantom reads
- D) All of these

Answer: D

36. Which SQL clause allows ignoring errors in multi-row INSERT in Oracle?

- A) LOG ERRORS
- B) SAVE EXCEPTIONS
- C) IGNORE
- D) Both A and B

Answer: D

37. Which Oracle clause allows bulk insert with error logging?

- A) LOG ERRORS
- B) IGNORE
- C) RETURNING
- D) CONTINUE

Answer: A

38. Which DBMS supports ON DUPLICATE KEY UPDATE in INSERT?

- A) MySQL
- B) Oracle
- C) SQL Server
- D) PostgreSQL

Answer: A

39. Which DBMS supports INSERT ... ON CONFLICT DO UPDATE?

- A) PostgreSQL
- B) MySQL
- C) Oracle
- D) SQL Server

Answer: A

40. Which SQL Server command combines insert/update/delete logic?

- A) MERGE
- B) UPSERT
- C) OUTPUT
- D) INSERT ALL

Answer: A

41. Which Oracle feature supports conditional multi-table updates?

- A) MERGE
- B) UPDATE with CASE
- C) Multi-table UPDATE
- D) All of these

Answer: D

42. Which type of locks are acquired by UPDATE?

- A) Exclusive locks
- B) Shared locks
- C) Intent locks
- D) Both A and C

Answer: D

43. Which type of locks are acquired by SELECT FOR UPDATE?

- A) Shared locks
- B) Exclusive row locks
- C) Intent exclusive locks
- D) Both B and C

Answer: D

44. Which DML may trigger ON DELETE CASCADE constraint?

- A) DELETE parent row
- B) DELETE child row
- C) UPDATE child row
- D) INSERT child row

Answer: A

45. Which feature can reduce undo/redo logs in DML-heavy workloads?

- A) Bulk operations
- B) Direct-path insert
- C) Deferred constraints
- D) All of these

Answer: D

46. Which DML may cause ORA-02291 (integrity constraint violation)?

- A) INSERT with invalid foreign key
- B) UPDATE with invalid foreign key
- C) DELETE parent with children
- D) All of these

Answer: D

47. Which DML may cause ORA-01400 (cannot insert NULL)?

- A) INSERT without mandatory column
- B) UPDATE setting column to NULL
- C) Both A and B
- D) DELETE

Answer: C

48. Which command can implement SCD Type 2 in data warehousing?

- A) MERGE
- B) UPDATE with CASE
- C) INSERT with SELECT
- D) DELETE and INSERT

Answer: A

49. Which DBMS supports DELETE ... USING syntax?

- A) PostgreSQL
- B) Oracle
- C) SQL Server
- D) MySQL

Answer: A

50. Which Oracle feature allows updating with subquery factoring?

- A) WITH clause
- B) MERGE
- C) MATERIALIZED VIEW
- D) UPSERT

Answer: A