

1. Which of the following command is used to change data in table?

Answer: UPDATE

Explanation: The UPDATE command is used to modify existing records in a table.

2. What is rows of a relation known as?

Answer: Tuple

Explanation: Each row in a relation (table) is called a tuple.

3. What is the name of the query that is placed within a WHERE or HAVING clause of another query?

Answer: Subquery

Explanation: A subquery is a query nested inside another query.

4. What is the number of tuples of a relation known as?

Answer: Cardinality

Explanation: Cardinality refers to the number of rows in a table.

5. What is the use of COUNT in SQL?

Answer: COUNT

Explanation: The COUNT function returns the number of rows that match a specified criterion.

6. Which command is used to remove a stored function from the database?

Answer: DROP

Explanation: The DROP command is used to delete objects like tables or functions from the database.

7. Which data structure is used in Hierarchical model records?

Answer: Tree

Explanation: Hierarchical databases use a tree-like structure to represent data.

8. Which is AS clause used for?

Answer: Rename

Explanation: The AS clause is used to rename a column or table with an alias.

9. Which is the lowest level of abstraction that describes how the data are actually stored?

Answer: Physical level

Explanation: The physical level describes how data is stored in the database.

10. Which normal form deals with multivalued dependency?

Answer: 4NF

Explanation: Fourth Normal Form (4NF) handles multivalued dependencies.

11. Which normalization form is based on the transitive dependency?

Answer: 3NF

Explanation: Third Normal Form (3NF) removes transitive dependencies.

12. Which of the following allows to uniquely identify a tuple?

Answer: Super Key

Explanation: A super key is a set of attributes that uniquely identifies a tuple.

13. Which of the following can replace the below query?

```
SELECT name, course_id FROM instructor, teaches WHERE instructor_ID= teaches_ID;
```

Answer: JOIN

Explanation: A JOIN can be used to combine rows from two or more tables.

14. What is DBMS?

Answer: Collection of interrelated data

Explanation: DBMS is software that manages and organizes databases.

15. Which of the following is a command of DDL?

Answer: ALTER and CREATE

Explanation: DDL (Data Definition Language) commands define database structure.

16. Which of the following is known as minimal super key?

Answer: Candidate key

Explanation: A candidate key is a minimal set of attributes that can uniquely identify a record.

17. Which of the following is not a SQL command?

Answer: DELETE (Incorrect)

Explanation: DELETE is a valid SQL command; this answer is likely incorrect.

18. Which of the following is preserved in execution of transaction in isolation?

Answer: Consistency

Explanation: Isolation ensures consistency in concurrent transaction execution.

19. Which of the following is the full form of DDL?

Answer: Data Definition Language

20. Which of the following is the full form of NTFS?

Answer: New Technology File System

21. Which of the following is the full form of TCL?

Answer: Transaction Control Language

22. Which of the following is the property of transaction that protects data from system failure?

Answer: Durability

Explanation: Durability ensures changes are permanent after a transaction commits.

23. Which of the following normal forms contains information about a single entity?

Answer: 4NF

Explanation: 4NF eliminates multi-valued dependencies related to a single entity.

24. Which of the following operator is used to compare a value to a list of literals values that have been specified?

Answer: BETWEEN (Incorrect)

Explanation: IN is typically used for list comparisons; BETWEEN is for range.

25. Which of the following SQL command is used for removing (or deleting) a relation from the database?

Answer: DROP

Explanation: DROP removes the entire table structure and its data.

26. Select the correct command to modify a column in a table.

Answer: ALTER

Explanation: ALTER is used to modify existing table structures.

27. After which operation is the modify operation done?

Answer: Lookup

Explanation: Modify is typically done after locating the record.

28. During transaction before commit which of the following statement is done automatically in case of

shutdown?

Answer: ROLLBACK

Explanation: Uncommitted transactions are rolled back automatically during shutdown.

29. For performing tasks like creating the structure of the relations, deleting relation, which of the following is used?

Answer: Data Definition Language

30. How is ER diagram represented?

Answer: Ellipse

Explanation: Ellipse is used to represent attributes in ER diagram.

31. How many levels are there in architecture of database?

Answer: Three

Explanation: Physical, Logical (conceptual), and External (view) levels.

32. Identify the concurrency based protocol?

Answer: All of the above

Explanation: Includes 2PL, Timestamp ordering, etc.

33. Maximum children of a B-tree of order m?

Answer: m

Explanation: A B-tree of order m can have a maximum of m children.

34. NATURAL JOIN can also be termed as -

Answer: Combination of Projection and Cartesian Product

35. Primary key can be?

Answer: NOT NULL

Explanation: Primary key values must be unique and not null.

36. Rectangles in ER diagram represents?

Answer: Entity sets

37. Select the correct advantages of view.

Answer: All of the above

Explanation: Views offer security, simplicity, and modularity.

38. Select the correct command to find the number of values in a column.

Answer: COUNT

39. A relational database developer refers to a record as?

Answer: Tuple

40. Select the correct database object which does not exist physically.

Answer: View

Explanation: Views are virtual tables; they do not store data physically.

41. Select the correct definition of relation.

Answer: Subset of a Cartesian product of list of domains

42. Select the correct definition of Relational calculus?

Answer: Non-procedural language for specifying what to retrieve

43. Select the correct foreign key constraint?

Answer: Referential integrity

44. Select the correct properties of entities?

Answer: Attributes

45. Select the definition of the correct key which is used to represent relation between two tables?

Answer: Foreign Key

46. Select the relational algebra operations.

Answer: Union, Select, Rename

47. Select the valid SQL type.

Answer: All of the above

Explanation: SQL types include CHAR, VARCHAR, INT, DATE, etc.

48. To select some particular columns, which of the following command is used?

Answer: Projection

49. Total view of a database is known as?

Answer: Conceptual view

50. What is a table joined with itself called?

Answer: Self Join