MySQL

MySQL Introduction & Configuration

1. MySQL is a type of:
   a) Programming language
   ✓ b) Database management system
   c) Operating system
   d) Web server
2. MySQL was originally developed by:
   a) Oracle Corporation
   ✓ b) MySQL AB
   c) Microsoft
   d) Google
3. MySQL is written in:
   a) Java
   b) Python
   ✓ c) C and C++
   d) PHP
4. Which of the following is true about MySQL?
   a) It is a NoSQL database
   ✓ b) It is an open-source RDBMS
   c) It is only available for Windows
   d) It cannot handle large data
5. MySQL's default port number is:
   a) 80
   b) 3305
   ✓ c) 3306
   d) 8080
6. To access MySQL from command line, we use:
   ✓ a) mysql
   b) mysqladmin
   c) mysqldump
   d) mysqlquery
7. Which command is used to view all databases?
   a) SHOW TABLES;
   ✓ b) SHOW DATABASES;
   c) LIST DATABASES;
   d) VIEW DATABASES;
8. Default MySQL user with full privileges is:
   ✓ a) root
   b) admin
   c) superuser
   d) guest
9. MySQL data is stored in:
   ✓ a) Data directory
   b) Temp folder
   c) RAM
   d) Cache
10. Which MySQL client provides a GUI interface?
    a) mysql>
    ✓ b) MySQL Workbench
    c) cmd
    d) phpMyCode
11. Configuration file of MySQL on Linux is usually named:
    ✓ a) my.cnf
    b) mysql.ini
    c) config.cnf
    d) db.conf
12. The command to create a database is:
    ✓ a) CREATE DATABASE dbname;
    b) ADD DATABASE dbname;
    c) MAKE DATABASE dbname;
    d) NEW DATABASE dbname;
13. Which keyword is used to delete a database?
    ✓ a) DROP DATABASE
    b) REMOVE DATABASE
    c) DELETE DATABASE
    d) ERASE DATABASE
14. Which storage engine is default in MySQL 5.7+?
    ✓ a) InnoDB
    b) MyISAM
    c) Memory
    d) CSV
15. Which statement is used to view the current user?
    ✓ a) SELECT USER();
    b) SHOW USER;
    c) PRINT USER();
    d) LIST USER;
16. The command used to exit MySQL client is:
    ✓ a) exit
    b) stop
    c) quitmysql
    d) end
17. Which of the following is not a MySQL data type?
    a) INT
    b) VARCHAR

✓ c) TEXTBOX
d) DATE

18. MySQL server is also called:
✓ a) mysqld
b) mysqlsrv
c) dbserve
d) mysqlctl
19. Which statement creates a new user?
✓ a) CREATE USER 'name'@'localhost';
b) ADD USER name;
c) NEW USER name;
d) INSERT USER name;
20. Which command grants privileges to a user?
✓ a) GRANT
b) GIVE
c) ALLOW
d) ENABLE
21. Which of these commands removes user privileges?
✓ a) REVOKE
b) DELETE
c) DROP
d) LIMIT
22. To list all tables of a database, we use:
✓ a) SHOW TABLES;
b) LIST TABLES;
c) TABLES();
d) DISPLAY TABLES;

Descriptive Questions

1. What is MySQL and why is it called a relational database?
2. Explain the purpose of the MySQL Workbench.
3. What is the role of the root user in MySQL?

MySQL Data Types & Storage Engines

1. Which of the following is a numeric data type?
✓ a) INT
b) CHAR
c) TEXT
d) DATE
2. The maximum size of a TINYINT is:
a) 255
✓ b) 127
c) 65,535
d) 4 billion
3. Which of the following stores fractional numbers?
a) INT
✓ b) FLOAT
c) CHAR
d) ENUM
4. Which of the following is a string data type?
✓ a) VARCHAR
b) DECIMAL
c) DATE
d) INT
5. The CHAR data type is:
✓ a) Fixed-length
b) Variable-length
c) Binary-length
d) Text-only
6. The TEXT data type can store up to:
a) 255 characters
✓ b) 65,535 characters
c) 16 characters
d) None
7. The DATE data type format is:
✓ a) 'YYYY-MM-DD'
b) 'DD-MM-YYYY'
c) 'MM/DD/YYYY'
d) Depends on locale
8. Which data type is used for storing large binary files?
✓ a) BLOB
b) CHAR
c) INT
d) TEXT
9. Which type of value is true or false?
✓ a) BOOLEAN
b) ENUM
c) INT
d) CHAR
10. Which statement defines a table column?
✓ a) CREATE TABLE users (id INT, name VARCHAR(50));
b) DEFINE TABLE;
c) TABLE CREATE;
d) NEW TABLE;
11. Which storage engine supports transactions?
✓ a) InnoDB
b) MyISAM
c) Memory
d) CSV
12. Which engine is best for read-only operations?

✓ b) MyISAM
a) InnoDB
c) Archive
d) CSV

13. Which storage engine stores data only in RAM?
✓ c) Memory
a) InnoDB
b) MyISAM
d) Archive
14. Which engine supports foreign keys?
✓ a) InnoDB
b) MyISAM
c) CSV
d) Memory
15. Which command changes a table's storage engine?
✓ a) ALTER TABLE tbl ENGINE=InnoDB;
b) MODIFY ENGINE;
c) CHANGE ENGINE;
d) ALTER ENGINE;
16. Which function returns current date?
✓ a) CURDATE()
b) NOWDATE()
c) SYSDATE
d) DATE()
17. The DECIMAL type stores:
✓ a) Exact numeric values
b) Approximate values
c) Characters
d) Binary only
18. Which storage engine does not support indexes?
✓ d) Archive
a) InnoDB
b) MyISAM
c) Memory
19. To view a table's engine, use:
✓ a) SHOW TABLE STATUS;
b) SHOW ENGINE;
c) TABLE INFO;
d) DESCRIBE ENGINE;
20. Which data type stores multiple predefined values?
✓ a) ENUM
b) SET
c) CHAR
d) TEXT
21. A SET data type can hold:
✓ a) Multiple options
b) Only one option
c) No option
d) Numeric value
22. MyISAM stores table metadata in files with extension:
✓ a) .MYI and .MYD
b) .MDB
c) .DB
d) .IDX

Descriptive Questions

1. **Explain the difference between CHAR and VARCHAR.**
2. **What is a storage engine and why is InnoDB preferred?**
3. **Define ENUM and SET data types with examples.**

MySQL Users, Privileges & Security

1. Which MySQL command is used to create a new user?
✓ a) CREATE USER 'username'@'localhost' IDENTIFIED BY 'password';
b) ADD USER username;
c) INSERT USER username;
d) MAKE USER username;
2. Which command is used to grant privileges to a user?
✓ a) GRANT
b) ALLOW
c) ENABLE
d) PERMIT
3. Which command is used to remove privileges?
✓ a) REVOKE
b) REMOVE
c) DELETE
d) ERASE
4. Which command displays all user accounts?
✓ a) SELECT User, Host FROM mysql.user;
b) SHOW USERS;
c) LIST USERS;
d) DESCRIBE USERS;
5. The MySQL "root" user is also known as:
✓ a) The superuser
b) The guest
c) The local user
d) The default role

6. Which privilege allows users to create databases?
   ✓ a) CREATE
   b) DROP
   c) ALTER
   d) GRANT
7. Which privilege allows modification of table structure?
   ✓ a) ALTER
   b) SELECT
   c) INSERT
   d) CREATE
8. To delete a user account, use:
   ✓ a) DROP USER 'username'@'localhost';
   b) REMOVE USER username;
   c) DELETE USER username;
   d) ERASE USER;
9. Which statement is used to display current privileges?
   ✓ a) SHOW GRANTS;
   b) SELECT PRIVILEGES;
   c) VIEW RIGHTS;
   d) LIST ACCESS;
10. To change a user password, we use:
    ✓ a) ALTER USER 'name'@'localhost' IDENTIFIED BY 'newpass';
    b) CHANGE PASSWORD name;
    c) UPDATE PASSWORD;
    d) MODIFY USER;
11. Which privilege allows data retrieval from tables?
    ✓ a) SELECT
    b) UPDATE
    c) DELETE
    d) INSERT
12. Which privilege allows inserting new rows?
    ✓ a) INSERT
    b) ALTER
    c) CREATE
    d) DROP
13. Which privilege allows deleting table rows?
    ✓ a) DELETE
    b) REMOVE
    c) ERASE
    d) MODIFY
14. Which command reloads privilege tables after manual change?
    ✓ a) FLUSH PRIVILEGES;
    b) RELOAD PRIVILEGES;
    c) UPDATE PRIVILEGES;
    d) RESET PRIVILEGES;
15. Which MySQL system database stores user accounts?
    ✓ a) mysql
    b) information_schema
    c) performance_schema
    d) sys
16. What does the “WITH GRANT OPTION” clause allow?
    ✓ a) Allows a user to grant privileges to others
    b) Locks all privileges
    c) Deletes users
    d) Creates new roles
17. To check which user is connected, use:
    ✓ a) SELECT CURRENT_USER();
    b) SHOW USER;
    c) DISPLAY LOGIN;
    d) USERNAME();
18. Which function displays the MySQL version?
    ✓ a) SELECT VERSION();
    b) SHOW VERSION();
    c) VERSION();
    d) MYSQL_VERSION();
19. Which privilege allows deleting a database?
    ✓ a) DROP
    b) REMOVE
    c) DELETE
    d) CLEAR
20. Which command removes all privileges from a user?
    ✓ a) REVOKE ALL PRIVILEGES ON . FROM 'user'@'localhost';
    b) DELETE ALL FROM USERS;
    c) REMOVE USER PRIVILEGES;
    d) DROP ALL GRANTS;
21. To lock a user account:
    ✓ a) ALTER USER 'name' ACCOUNT LOCK;
    b) ACCOUNT DISABLE;
    c) LOCK USER;
    d) REVOKE LOGIN;
22. The safest way to secure MySQL is to:
    ✓ a) Set strong passwords and proper privileges
    b) Use same password for all
    c) Disable privileges
    d) Delete users

Descriptive Questions

1. **Explain the purpose of user privileges in MySQL.**
2. **What is the difference between GRANT and REVOKE commands?**
3. **Why should the root account be used only for administration?**

MySQL Queries, Filtering & Sorting

1. Which SQL command is used to retrieve data from a table?
   ✓ a) SELECT
   b) INSERT
   c) UPDATE
   d) DELETE
2. Which keyword is used to remove duplicate records from the result set?
   ✓ a) DISTINCT
   b) UNIQUE
   c) DIFFERENT
   d) SINGLE
3. Which clause is used to filter rows?
   ✓ a) WHERE
   b) HAVING
   c) ORDER BY
   d) LIMIT
4. Which operator is used to check multiple values in a list?
   ✓ a) IN
   b) LIKE
   c) ANY
   d) BETWEEN
5. The LIKE operator is used for:
   ✓ a) Pattern matching
   b) Sorting
   c) Joining tables
   d) Numeric comparison
6. The BETWEEN operator is used to:
   ✓ a) Select values within a range
   b) Match text patterns
   c) Sort results
   d) Count records
7. Which operator is used for combining multiple conditions?
   ✓ a) AND / OR
   b) IF / ELSE
   c) WHEN / THEN
   d) TRUE / FALSE
8. To arrange results in ascending order:
   ✓ a) ORDER BY column ASC;
   b) SORT column ASC;
   c) ARRANGE BY column;
   d) LIST ASC;
9. To arrange results in descending order:
   ✓ a) ORDER BY column DESC;
   b) SORT DESC;
   c) DESC ORDER;
   d) REVERSE ORDER;
10. Which clause limits the number of returned rows?
    ✓ a) LIMIT
    b) RANGE
    c) ROWS
    d) TOP
11. Which aggregate function returns the number of rows?
    ✓ a) COUNT()
    b) SUM()
    c) AVG()
    d) LENGTH()
12. Which aggregate function calculates the average value?
    ✓ a) AVG()
    b) MEAN()
    c) COUNT()
    d) SUM()
13. Which clause is used to group rows having the same values?
    ✓ a) GROUP BY
    b) ORDER BY
    c) WHERE
    d) SORT BY
14. Which clause filters the results of GROUP BY?
    ✓ a) HAVING
    b) WHERE
    c) FILTER
    d) CHECK
15. Which function returns the highest value in a column?
    ✓ a) MAX()
    b) TOP()
    c) UPPER()
    d) HIGH()
16. Which function returns the lowest value in a column?
    ✓ a) MIN()
    b) LOW()
    c) LEAST()
    d) SMALL()
17. Which operator is used for pattern matching with wildcard characters?
    ✓ a) LIKE
    b) MATCH

c) SEARCH
d) FIND

18. What symbol represents any sequence of characters in a LIKE pattern?
✓ a) %
b) _
c) *
d) #
19. Which symbol in LIKE represents a single character?
✓ a) _
b) %
c) *
d) ?
20. Which statement updates existing rows?
✓ a) UPDATE table SET column=value;
b) CHANGE table column=value;
c) MODIFY column=value;
d) ALTER table column;
21. Which statement deletes rows from a table?
✓ a) DELETE FROM table WHERE condition;
b) REMOVE ROW table;
c) DROP ROW;
d) ERASE FROM;
22. To retrieve all columns from a table:
✓ a) SELECT * FROM table;
b) SHOW ALL FROM table;
c) GET ALL table;
d) DISPLAY *;

Descriptive Questions

1. **Explain the difference between WHERE and HAVING clauses.**
2. **What is the purpose of the ORDER BY clause?**
3. **Write an example query that selects students with marks between 60 and 80.**

MySQL Joins & Relationships

1. A **JOIN** in MySQL is used to:
✓ a) Combine rows from two or more tables
b) Create new databases
c) Rename tables
d) Delete rows
2. Which JOIN returns all records that have matching values in both tables?
✓ a) INNER JOIN
b) LEFT JOIN
c) RIGHT JOIN
d) FULL JOIN
3. Which JOIN returns all records from the left table and matching ones from the right?
✓ a) LEFT JOIN
b) RIGHT JOIN
c) INNER JOIN
d) OUTER JOIN
4. Which JOIN returns all records from the right table and matching ones from the left?
✓ a) RIGHT JOIN
b) LEFT JOIN
c) CROSS JOIN
d) INNER JOIN
5. Which JOIN returns all rows when there is a match in one of the tables?
✓ a) FULL JOIN
b) LEFT JOIN
c) CROSS JOIN
d) INNER JOIN
6. Which type of JOIN produces the Cartesian product of two tables?
✓ a) CROSS JOIN
b) INNER JOIN
c) LEFT JOIN
d) OUTER JOIN
7. In a JOIN, common columns between tables are usually linked using:
✓ a) Primary key and Foreign key
b) Two text fields
c) Any random columns
d) Auto-increment values
8. The keyword used to combine results of two SELECT statements is:
✓ a) UNION
b) JOIN
c) COMBINE
d) APPEND
9. Which operator ensures no duplicate rows are returned when combining results?
✓ a) UNION
b) UNION ALL
c) JOIN DISTINCT
d) APPEND
10. Which operator includes duplicates when combining results?
✓ a) UNION ALL
b) UNION

c) MERGE
d) JOIN ALL

11. Which JOIN type will exclude rows that do not have matches in both tables?
✓ a) INNER JOIN
b) LEFT JOIN
c) RIGHT JOIN
d) OUTER JOIN
12. A relationship that links one record in a table to many in another is called:
✓ a) One-to-many
b) One-to-one
c) Many-to-many
d) None
13. A relationship that links one record in a table to exactly one in another is:
✓ a) One-to-one
b) One-to-many
c) Many-to-many
d) Simple
14. Which of the following ensures referential integrity?
✓ a) Foreign key
b) Primary key
c) Default value
d) Auto increment
15. A **primary key** must always be:
✓ a) Unique and not null
b) Repeated
c) Nullable
d) Text only
16. Foreign keys are used to:
✓ a) Link related tables
b) Store file paths
c) Generate unique numbers
d) Create backups
17. Which command adds a foreign key constraint?
✓ a) ALTER TABLE child ADD FOREIGN KEY (col) REFERENCES parent(id);
b) ADD FOREIGNKEY;
c) LINK TABLES;
d) CONNECT FOREIGN;
18. Which clause removes a foreign key constraint?
✓ a) ALTER TABLE table DROP FOREIGN KEY fk_name;
b) DELETE FOREIGN;
c) REMOVE LINK;
d) ERASE RELATION;
19. A foreign key must reference:
✓ a) A primary key in another table
b) Any column
c) An index only
d) A constant value
20. Which statement joins three or more tables?
✓ a) Multiple JOIN clauses in one query
b) NESTED SELECT
c) LINK ALL TABLES
d) MULTI CONNECT
21. When two tables have no related columns, you can still combine all rows using:
✓ a) CROSS JOIN
b) INNER JOIN
c) LEFT JOIN
d) FULL JOIN
22. To join table A and B where A.id matches B.aid:
✓ a) SELECT * FROM A INNER JOIN B ON A.id = B.aid;
b) SELECT A=B;
c) JOIN TABLE A WITH B;
d) LINK A AND B;

Descriptive Questions

1. **What is the difference between INNER JOIN and LEFT JOIN?**
2. **Explain the role of primary and foreign keys in relational tables.**
3. **Write a query to display employee names and their department names using a join.**

MySQL Indexes, Searching & Optimization

1. An **index** in MySQL is used to:
✓ a) Speed up data retrieval
b) Store table names
c) Format data
d) Increase file size
2. Which of the following is a valid index type in MySQL?
✓ a) PRIMARY, UNIQUE, INDEX, FULLTEXT
b) ID, NAME, TEXT
c) FAST, SLOW, QUICK
d) TABLE, FIELD, RECORD
3. Which command is used to create an index?
✓ a) CREATE INDEX idx_name ON

table_name(column_name);
b) ADD INDEX table;
c) MAKE INDEX table;
d) NEW INDEX;

4. Which command removes an index?
   ✓ a) DROP INDEX idx_name ON table_name;
   b) DELETE INDEX;
   c) REMOVE INDEX;
   d) ERASE INDEX;
5. Which index type is automatically created for a PRIMARY KEY?
   ✓ a) Unique index
   b) Text index
   c) Composite index
   d) None
6. A **UNIQUE index** ensures that:
   ✓ a) No duplicate values exist in a column
   b) All rows are sorted
   c) The column stores only text
   d) The key repeats
7. Which type of index is best for searching textual data?
   ✓ a) FULLTEXT index
   b) PRIMARY index
   c) NORMAL index
   d) HASH index
8. Which command creates a FULLTEXT index?
   ✓ a) CREATE FULLTEXT INDEX ft_index ON table(column);
   b) CREATE TEXT INDEX;
   c) ADD FULLTEXT;
   d) INDEX TEXT column;
9. Which operator is used with FULLTEXT search?
   ✓ a) MATCH() AGAINST()
   b) FIND()
   c) LIKE
   d) SEARCH()
10. Which clause is used to sort results using an index?
    ✓ a) ORDER BY
    b) SORT BY INDEX
    c) GROUP BY INDEX
    d) KEY ORDER
11. Which index type allows multiple columns in a single index?
    ✓ a) Composite index
    b) Primary index
    c) Normal index
    d) Binary index
12. To see the indexes on a table, use:
    ✓ a) SHOW INDEX FROM table_name;
    b) LIST INDEXES;
    c) VIEW INDEXES;
    d) SHOW KEYS;
13. Indexes generally:
    ✓ a) Speed up SELECT queries but slow down INSERT and UPDATE
    b) Slow down SELECT queries
    c) Only affect DELETE operations
    d) Have no effect on performance
14. Which keyword creates an index automatically?
    ✓ a) PRIMARY KEY
    b) AUTO INDEX
    c) DEFAULT
    d) UNIQUE KEY
15. Which function shows how a query uses indexes?
    ✓ a) EXPLAIN
    b) SHOW PLAN
    c) TRACE
    d) DESCRIBE INDEX
16. Which clause groups results for optimization?
    ✓ a) GROUP BY
    b) HAVING
    c) ORDER BY
    d) LIMIT
17. What does “query optimization” mean?
    ✓ a) Improving query performance
    b) Compressing data
    c) Encrypting queries
    d) Storing large data
18. Which command removes duplicate rows quickly using indexes?
    ✓ a) SELECT DISTINCT
    b) DELETE DUPLICATE
    c) DROP REPEAT
    d) CLEAN TABLE
19. Which of these operations benefits most from an index?
    ✓ a) Searching for a specific record
    b) Inserting a record
    c) Dropping a database
    d) Creating a table
20. When an index is created on multiple columns, it’s called:
    ✓ a) Composite index
    b) Full index
    c) Complex index
    d) Multi-key
21. Which function gives table statistics including index usage?

✓ a) SHOW TABLE STATUS;
b) INDEX INFO;
c) ANALYZE INDEX;
d) EXPLAIN TABLE;

22. Which MySQL command helps optimize a fragmented table?
✓ a) OPTIMIZE TABLE table_name;
b) REPAIR TABLE;
c) CLEAN TABLE;
d) COMPACT DATABASE;

Descriptive Questions

1. **What is an index in MySQL, and why is it important?**
2. **Explain the difference between PRIMARY and UNIQUE indexes.**
3. **What is the purpose of the EXPLAIN command in query optimization?**

MySQL Views, Stored Procedures & Triggers

1. A **view** in MySQL is:
✓ a) A virtual table based on the result of a query
b) A physical copy of a table
c) A backup table
d) A stored file
2. Which command is used to create a view?
✓ a) CREATE VIEW view_name AS SELECT ...;
b) MAKE VIEW;
c) NEW VIEW;
d) BUILD VIEW;
3. Which command removes a view?
✓ a) DROP VIEW view_name;
b) DELETE VIEW;
c) ERASE VIEW;
d) REMOVE VIEW;
4. A view can be based on:
✓ a) One or more tables or views
b) Only one table
c) Only temporary tables
d) Only indexed tables
5. To modify an existing view, use:
✓ a) CREATE OR REPLACE VIEW view_name AS SELECT ...;
b) UPDATE VIEW;
c) EDIT VIEW;
d) RENAME VIEW;
6. A **stored procedure** is:
✓ a) A saved set of SQL statements that can be executed later
b) A type of table
c) An index
d) A function
7. Which keyword is used to create a stored procedure?
✓ a) CREATE PROCEDURE
b) MAKE PROCEDURE
c) DEFINE PROCEDURE
d) ADD PROCEDURE
8. Which keyword is used to call a stored procedure?
✓ a) CALL
b) EXECUTE
c) RUN
d) USE
9. Which statement removes a stored procedure?
✓ a) DROP PROCEDURE proc_name;
b) DELETE PROCEDURE;
c) ERASE PROC;
d) REMOVE PROC;
10. Which keyword defines a stored function?
✓ a) CREATE FUNCTION
b) MAKE FUNCTION
c) ADD FUNCTION
d) DEFINE FUNCTION
11. Stored functions must always include a:
✓ a) RETURN statement
b) PRINT statement
c) EXIT command
d) DISPLAY result
12. Which command shows all stored routines?
✓ a) SHOW PROCEDURE STATUS;
b) LIST ROUTINES;
c) VIEW FUNCTIONS;
d) DESCRIBE PROCEDURES;
13. A **trigger** in MySQL is:
✓ a) A procedure that runs automatically when an event occurs
b) A scheduled job
c) A type of index
d) A manual command
14. Triggers can be set to execute:
✓ a) BEFORE or AFTER an INSERT, UPDATE, or DELETE
b) Only before INSERT
c) Only after DELETE
d) Only on SELECT

15. Which command creates a trigger?
    ✓ a) CREATE TRIGGER trg_name BEFORE INSERT ON table_name FOR EACH ROW ...;
    b) ADD TRIGGER;
    c) NEW TRIGGER;
    d) BUILD TRIGGER;
16. Which command removes a trigger?
    ✓ a) DROP TRIGGER trigger_name;
    b) DELETE TRIGGER;
    c) REMOVE TRIGGER;
    d) ERASE TRIGGER;
17. Which keyword defines statements inside a stored routine?
    ✓ a) BEGIN … END
    b) DO … WHILE
    c) START … STOP
    d) IF … ELSE
18. To display all triggers in a database, use:
    ✓ a) SHOW TRIGGERS;
    b) LIST TRIGGERS;
    c) DESCRIBE TRIGGERS;
    d) TRIGGER INFO;
19. Stored routines help improve:
    ✓ a) Performance and reusability
    b) Query errors
    c) Index corruption
    d) Temporary data
20. Triggers can be used for:
    ✓ a) Enforcing data integrity
    b) Creating indexes
    c) Dropping tables
    d) Restarting servers
21. A stored function differs from a stored procedure because it:
    ✓ a) Returns a value
    b) Executes automatically
    c) Doesn't support parameters
    d) Can't be created manually
22. Which command shows all user-defined functions?
    ✓ a) SHOW FUNCTION STATUS;
    b) LIST FUNCTIONS;
    c) VIEW FUNCTION;
    d) DESCRIBE FUNCTION;

Descriptive Questions

1. **What is a MySQL view, and how does it differ from a table?**
2. **What is the difference between a stored procedure and a stored function?**
3. **Explain how triggers can be used to maintain data consistency.**

MySQL Transactions, Import & Export

1. A **transaction** in MySQL is:
    ✓ a) A sequence of one or more SQL statements executed as a unit
    b) A backup file
    c) A connection log
    d) A trigger
2. Which storage engine supports transactions?
    ✓ a) InnoDB
    b) MyISAM
    c) Memory
    d) CSV
3. Which command starts a transaction?
    ✓ a) START TRANSACTION;
    b) BEGIN TRANSFER;
    c) START QUERY;
    d) OPEN SESSION;
4. Which command permanently saves transaction changes?
    ✓ a) COMMIT;
    b) SAVE;
    c) END;
    d) APPLY;
5. Which command cancels transaction changes?
    ✓ a) ROLLBACK;
    b) DELETE;
    c) STOP;
    d) CANCEL;
6. Which of the following is a **property of a transaction**?
    ✓ a) Atomicity
    b) Duplication
    c) Compression
    d) Encryption
7. The set of ACID properties ensures:
    ✓ a) Reliability and integrity of transactions
    b) Fast query execution only
    c) File compression
    d) Password encryption
8. The "A" in ACID stands for:
    ✓ a) Atomicity
    b) Accuracy
    c) Access
    d) Arrangement

9. The “C” in ACID stands for:
   ✓ a) Consistency
   b) Compilation
   c) Comparison
   d) Connection
10. The “I” in ACID stands for:
   ✓ a) Isolation
   b) Integration
   c) Index
   d) Inheritance
11. The “D” in ACID stands for:
   ✓ a) Durability
   b) Definition
   c) Division
   d) Deletion
12. Which MySQL command sets autocommit off?
   ✓ a) SET autocommit = 0;
   b) TURN OFF COMMIT;
   c) AUTO OFF;
   d) COMMIT OFF;
13. If autocommit is OFF, changes are:
   ✓ a) Not saved until COMMIT is issued
   b) Automatically saved
   c) Deleted
   d) Ignored
14. Which command temporarily saves a transaction point?
   ✓ a) SAVEPOINT point_name;
   b) TEMP SAVE;
   c) HOLD POINT;
   d) SAFEPOINT;
15. To undo changes to a specific savepoint:
   ✓ a) ROLLBACK TO point_name;
   b) DELETE SAVEPOINT;
   c) UNDO SAVEPOINT;
   d) ERASE POINT;
16. To remove a savepoint:
   ✓ a) RELEASE SAVEPOINT point_name;
   b) DROP SAVEPOINT;
   c) DELETE SAVEPOINT;
   d) REMOVE POINT;
17. Which command is used to export a MySQL database?
   ✓ a) mysqldump -u user -p dbname > backup.sql
   b) mysqlexport dbname
   c) dumpmysql dbname
   d) export.sql dbname
18. Which command imports a MySQL database?
   ✓ a) mysql -u user -p dbname < backup.sql
   b) load.sql dbname
   c) dbimport
   d) dataimport dbname
19. What file format is usually used for exporting MySQL data?
   ✓ a) .sql
   b) .csv
   c) .xml
   d) .json
20. Which statement exports a single table structure only?
   ✓ a) mysqldump -d dbname table > table.sql
   b) mysqldump dbname table > table.sql
   c) mysqlsave table.sql
   d) dumpdb structure;
21. Which MySQL command helps recover lost data from a dump file?
   ✓ a) SOURCE filename.sql;
   b) RESTORE DATABASE;
   c) RECOVER FILE;
   d) IMPORT SQL;
22. What is the benefit of transactions?
   ✓ a) Ensures data consistency during multiple changes
   b) Speeds up SELECT queries
   c) Deletes old data
   d) Avoids joins

Descriptive Questions

1. **Explain the ACID properties of a database transaction.**
2. **How can you back up and restore a MySQL database using `mysqldump`?**
3. **What is the purpose of COMMIT and ROLLBACK in transaction managemen**