

## Spring Core

1. **What is the primary role of the ApplicationContext in Spring?**

- a) To manage beans and their dependencies
- b) To handle HTTP requests
- c) To configure AOP proxies
- d) To manage database transactions

**Key:** a

2. **Which annotation is used to define a Spring component?**

- a) @Service
- b) @Component
- c) @Repository
- d) All of the above

**Key:** d

3. **What is the default scope of a Spring bean?**

- a) Singleton
- b) Prototype
- c) Request
- d) Session

**Key:** a

4. **Which of the following is NOT a Spring Core module?**

- a) Beans
- b) ORM
- c) Context
- d) AOP

**Key:** b

5. **Which method is used to explicitly close**

**a ConfigurableApplicationContext?**

- a) close()
- b) shutdown()

- c) destroy()
- d) terminate()

**Key:** a

## **AOP (Aspect-Oriented Programming)**

### **6. What does AOP stand for?**

- a) Application Oriented Programming
- b) Aspect Oriented Programming
- c) Annotation Oriented Programming
- d) Application Object Processing

**Key:** b

### **7. Which of the following is NOT a valid advice type in AOP?**

- a) Before
- b) After Returning
- c) During
- d) Around

**Key:** c

### **8. Which annotation is used to declare an aspect?**

- a) @Aspect
- b) @Component
- c) @Service
- d) @Around

**Key:** a

### **9. Which of these is a valid pointcut expression?**

- a) execution(\* com.example.service..(..))
- b) execution(void com.example.dao..(..))

- c) execution(\* com.example.controller.\*(..))
- d) All of the above

**Key:** d

10. **Which of the following advice types has control over the method execution?**

- a) Before
- b) After Returning
- c) After Throwing
- d) Around

**Key:** d

11. **What does the @Around advice require as its parameter?**

- a) JoinPoint
- b) ProceedingJoinPoint
- c) AspectContext
- d) Pointcut

**Key:** b

## **Spring JDBC**

12. **Which class is typically used to simplify database operations in Spring?**

- a) JdbcTemplate
- b) DriverManager
- c) Statement
- d) PreparedStatement

**Key:** a

13. Which method is used to execute a SELECT query in JdbcTemplate?

- a) queryForObject()
- b) queryForRow()
- c) executeQuery()
- d) select()

**Key:** a

14. What is required for Spring JDBC to connect to a database?

- a) DataSource
- b) EntityManager
- c) JdbcContext
- d) JdbcDriver

**Key:** a

15. Which of these is NOT an exception class in Spring JDBC?

- a) DataAccessException
- b) SQLException
- c) DataIntegrityViolationException
- d) DuplicateKeyException

**Key:** b

16. What does the update() method in JdbcTemplate return?

- a) The SQL query executed
- b) The number of rows affected
- c) A boolean indicating success or failure
- d) The generated primary key

**Key:** b

17. How do you batch multiple SQL queries using JdbcTemplate?

- a) Using batchUpdate()
- b) Using executeBatch()

- c) Using batchExecute()
- d) Using batchQuery()

**Key:** a

## Spring MVC

18. **Which of the following is the central component in Spring MVC?**

- a) DispatcherServlet
- b) ModelAndView
- c) RequestMappingHandler
- d) ViewResolver

**Key:** a

19. **What is the purpose of the @RequestMapping annotation?**

- a) To map URLs to controller methods
- b) To define a service component
- c) To specify database queries
- d) To bind a view to the model

**Key:** a

20. **Which annotation is used to get data from a request parameter in Spring MVC?**

- a) @RequestParam
- b) @PathVariable
- c) @RequestBody
- d) @ModelAttribute

**Key:** a

21. **How do you return JSON data from a Spring MVC controller?**

- a) Return a JSON string
- b) Use `@ResponseBody`
- c) Configure a JSON parser
- d) Use a `JSONViewResolver`

**Key:** b

22. **Which `ViewResolver` is used to map view names to JSP files?**

- a) `InternalResourceViewResolver`
- b) `BeanNameViewResolver`
- c) `XmlViewResolver`
- d) `JsonViewResolver`

**Key:** a

23. **What is the role of `@ModelAttribute` in Spring MVC?**

- a) To bind form data to a model object
- b) To map request parameters
- c) To configure the view resolver
- d) To indicate a required bean

**Key:** a

24. **Which annotation is used to handle exceptions in a Spring MVC controller?**

- a) `@ControllerAdvice`
- b) `@ExceptionHandler`
- c) `@RestController`
- d) `@RequestMapping`

**Key:** b

25. **Which tag library is commonly used in JSP with Spring MVC?**

- a) JSTL

- b) HTML5
- c) SLF4J
- d) JPAQL

**Key:** a

### Mixed Concepts

26. **What is the purpose of the @Transactional annotation?**

- a) To enable transaction management
- b) To create beans
- c) To define aspect-oriented programming
- d) To manage view templates

**Key:** a

27. **Which of these methods is used to configure a DataSource in Spring?**

- a) setDataSource()
- b) configureDataSource()
- c) dataSource()
- d) addDataSource()

**Key:** c

28. **What is the role of Spring ORM?**

- a) To integrate Spring with object-relational mapping tools like Hibernate
- b) To manage transactions
- c) To simplify JDBC code
- d) To configure REST endpoints

**Key:** a

29. **Which annotation is used in Spring Boot to enable Spring MVC?**

- a) @EnableWebMvc
- b) @SpringBootApplication
- c) @ComponentScan
- d) @Configuration

**Key:** a

30. **Which of these is NOT a valid Spring transaction propagation type?**

- a) REQUIRED
- b) MANDATORY
- c) REQUIRES\_NEW
- d) OPTIONAL

**Key:** d

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## **Basics of Java**

1. **What is the default value of a local variable in Java?**

- a) 0
- b) null
- c) Undefined
- d) Empty String

**Key:** c

2. **Which of the following is NOT a Java keyword?**

- a) class
- b) try



- c) include
- d) extends

**Key:** c

3. **Which method is used to print output in Java?**

- a) System.print()
- b) System.out.println()
- c) Console.write()
- d) PrintStream.print()

**Key:** b

4. **What is the size of an int in Java?**

- a) 8 bytes
- b) 4 bytes
- c) 2 bytes
- d) Depends on the system

**Key:** b

5. **Which data type is used to store a single character in Java?**

- a) String
- b) char
- c) Character
- d) Byte

**Key:** b

## **Object-Oriented Programming**

6. **What is encapsulation in Java?**

- a) Binding data and methods together
- b) Inheriting features from another class

- c) Overloading methods
- d) Defining multiple classes

**Key:** a

7. **Which of these access modifiers allows visibility only within the same package?**

- a) private
- b) protected
- c) public
- d) default (no modifier)

**Key:** d

8. **What is the keyword to inherit a class in Java?**

- a) inherit
- b) extends
- c) implements
- d) super

**Key:** b

9. **Which feature of Java allows the implementation of multiple interfaces?**

- a) Inheritance
- b) Polymorphism
- c) Abstraction
- d) Interface

**Key:** d

10. **What happens if a subclass declares a method with the same signature as a method in its superclass?**

- a) Method overloading
- b) Method overriding
- c) Compile-time error
- d) Runtime exception

**Key:** b

## Exception Handling

11. **Which of the following is an unchecked exception?**

- a) IOException
- b) SQLException
- c) ArithmeticException
- d) FileNotFoundException

**Key:** c

12. **What is the superclass of all exceptions in Java?**

- a) Object
- b) Exception
- c) Throwable
- d) RuntimeException

**Key:** c

13. **Which block is always executed in a try-catch-finally structure?**

- a) try
- b) catch
- c) finally
- d) None

**Key:** c

14. **What happens if no exception is thrown in a try block?**

- a) The catch block is executed
- b) The finally block is executed
- c) Both catch and finally are executed
- d) None of the blocks is executed

**Key:** b

15. **What does the throw keyword do?**

- a) Catches an exception
- b) Declares an exception
- c) Throws an exception explicitly
- d) Suppresses an exception

**Key:** c

## **Collections Framework**

16. **Which collection allows duplicates in Java?**

- a) HashSet
- b) ArrayList
- c) TreeSet
- d) None of the above

**Key:** b

17. **Which interface does java.util.HashMap implement?**

- a) List
- b) Map
- c) Set
- d) Queue

**Key:** b

18. **Which of the following is NOT synchronized?**

- a) Hashtable
- b) Vector
- c) ArrayList
- d) StringBuffer

**Key:** c

19. **What is the time complexity of searching in a HashSet?**

- a)  $O(1)$
- b)  $O(\log n)$
- c)  $O(n)$
- d)  $O(n^2)$

**Key:** a

20. **Which of these classes is a legacy class in Java?**

- a) Vector
- b) ArrayList
- c) HashMap
- d) LinkedList

**Key:** a

## **Multithreading**

21. **Which interface must be implemented to create a thread in Java?**

- a) Runnable
- b) Callable
- c) Threadable
- d) Action

**Key:** a

22. **Which method is used to start a thread in Java?**

- a) run()
- b) execute()
- c) start()

d) begin()

**Key:** c

23. **What is the state of a thread after the yield() method is called?**

- a) Running
- b) Blocked
- c) Ready to run
- d) Terminated

**Key:** c

24. **Which of these is NOT a thread-safe class?**

- a) StringBuffer
- b) Hashtable
- c) ConcurrentHashMap
- d) StringBuilder

**Key:** d

25. **Which exception is thrown when a thread is interrupted?**

- a) InterruptedException
- b) IllegalStateException
- c) ThreadException
- d) RuntimeException

**Key:** a

## Advanced Concepts

26. **What does the static keyword denote in Java?**

- a) A class member shared across all instances
- b) A method that cannot be overridden

- c) A variable that can change during runtime
- d) A class that cannot be instantiated

**Key:** a

27. **Which keyword is used to prevent method overriding?**

- a) final
- b) static
- c) abstract
- d) protected

**Key:** a

28. **What happens when a constructor is declared private?**

- a) It cannot be inherited
- b) It restricts object creation outside the class
- c) It automatically becomes static
- d) It throws a compilation error

**Key:** b

29. **Which Java version introduced lambda expressions?**

- a) Java 6
- b) Java 7
- c) Java 8
- d) Java 9

**Key:** c

30. **What is the purpose of the default keyword in interfaces?**

- a) To provide a default implementation for a method
- b) To define a constant in the interface
- c) To declare a method as public
- d) To implement polymorphism

**Key:** a

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## Lambda Expressions

1. **What is a lambda expression in Java?**

- a) A block of code that can be passed around
- b) A replacement for loops
- c) A new type of method
- d) A framework for handling data

**Key:** a

2. **Which of these is a correct syntax for a lambda expression?**

- a) `(x, y) => x + y`
- b) `(x, y) -> { return x + y; }`
- c) `(x, y) => { return x + y; }`
- d) `{ x, y -> x + y }`

**Key:** b

3. **Which Java interface is designed to be used with lambda expressions?**

- a) Serializable
- b) Cloneable
- c) FunctionalInterface
- d) Comparable

**Key:** c

4. **What is the purpose of the `@FunctionalInterface` annotation?**

- a) To define an interface as functional
- b) To allow multiple inheritance in interfaces
- c) To ensure an interface has only one abstract method



d) To make methods static by default

**Key:** c

5. **Which of the following is NOT a characteristic of a lambda expression?**

a) Can access final variables

b) Can modify local variables of the enclosing scope

c) Can implement a single abstract method

d) Can be used to define concise inline implementations

**Key:** b

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## Streams

6. **Which method in the Stream API is used to filter elements based on a condition?**

a) map()

b) filter()

c) collect()

d) reduce()

**Key:** b

7. **What does the map() method in Streams do?**

a) Filters elements based on a condition

b) Applies a function to each element and produces a new stream

c) Collects elements into a list

d) Combines elements into a single result

**Key:** b

8. **Which terminal operation is used to get the count of elements in a stream?**

a) count()

- b) forEach()
- c) collect()
- d) reduce()

**Key:** a

9. **Which of the following operations on streams is lazy?**

- a) forEach()
- b) filter()
- c) collect()
- d) count()

**Key:** b

10. **What is the difference between map() and flatMap() in Streams?**

- a) map() combines streams, while flatMap() processes them sequentially
- b) flatMap() flattens nested structures into a single stream, while map() does not
- c) map() changes elements, while flatMap() filters them
- d) flatMap() is a terminal operation, while map() is not

**Key:** b

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## **Collections Framework MCQs**

1. **What is the root interface of the Java Collections Framework?**

- a) Collection
- b) Iterable
- c) List

d) Map

**Key:** b

2. **Which of these is NOT a part of the Java Collections Framework?**

a) ArrayList

b) HashSet

c) Hashtable

d) Enumeration

**Key:** d

3. **Which class implements the List interface?**

a) HashSet

b) TreeSet

c) ArrayList

d) HashMap

**Key:** c

4. **What is the time complexity of retrieving an element from a HashMap by its key?**

a)  $O(n)$

b)  $O(\log n)$

c)  $O(1)$

d)  $O(n \log n)$

**Key:** c

5. **Which collection type maintains elements in the order they were inserted?**

a) TreeSet

b) HashSet

c) LinkedHashSet

d) PriorityQueue

**Key:** c

6. **Which of the following collections allows duplicate elements?**

- a) TreeSet
- b) HashMap
- c) ArrayList
- d) LinkedHashSet

**Key:** c

7. **What does the Comparator interface do?**

- a) Provides a natural ordering for objects
- b) Allows custom sorting logic
- c) Compares hash codes of objects
- d) Sorts elements in reverse order by default

**Key:** b

8. **Which of the following is a synchronized collection class?**

- a) ArrayList
- b) HashMap
- c) Vector
- d) LinkedList

**Key:** c

9. **Which method is used to sort a list in the Collections class?**

- a) sort()
- b) arrange()
- c) order()
- d) align()

**Key:** a

10. **What happens when you add a duplicate key to a HashMap?**

- a) An exception is thrown
- b) The old value is replaced with the new value

- c) The new key-value pair is added
- d) It allows duplicate keys

**Key:** b

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## Annotation

### Spring Core

1. **What is the purpose of the @Bean annotation in Spring?**

- a) To mark a class as a Spring component
- b) To define a bean in the Java configuration class
- c) To inject dependencies
- d) To declare a transaction

**Key:** b

2. **What does the @Autowired annotation do in Spring?**

- a) Declares a bean
- b) Enables auto-configuration
- c) Injects dependencies automatically
- d) Specifies a configuration class

**Key:** c

3. **Which of the following is NOT a valid Spring bean scope?**

- a) singleton
- b) prototype
- c) request
- d) persistent

**Key:** d

4. **What does the @ComponentScan annotation do?**

- a) Scans and registers beans in a specified package
- b) Configures transaction management
- c) Enables AOP functionality

d) Configures MVC views

**Key:** a

5. **Which of these is used to define a custom initialization method in a Spring bean?**

a) @PostConstruct

b) init-method

c) @Init

d) Both a and b

**Key:** d

## **Spring AOP**

6. **Which annotation is used to declare an aspect in Spring AOP?**

a) @Component

b) @Aspect

c) @Pointcut

d) @Service

**Key:** b

7. **What does the @Before advice do?**

a) Executes after the method returns a result

b) Executes before the advised method is invoked

c) Executes if an exception is thrown

d) Wraps the advised method

**Key:** b

8. **Which is NOT a valid advice type in Spring AOP?**

a) AfterThrowing

b) Before

- c) Around
- d) During

**Key:** d

9. **Which parameter does the @Around advice require?**

- a) JoinPoint
- b) ProceedingJoinPoint
- c) AdviceContext
- d) AspectPoint

**Key:** b

10. **What is the main function of the @Pointcut annotation?**

- a) To specify the location of aspects
- b) To define reusable pointcut expressions
- c) To execute a method conditionally
- d) To initialize an aspect

**Key:** b

## Spring MVC

11. **What is the role of the DispatcherServlet in Spring MVC?**

- a) Handles database operations
- b) Acts as the front controller
- c) Manages AOP aspects
- d) Configures web security

**Key:** b

12. **Which annotation is used to map a method to a URL in Spring MVC?**

- a) @Controller

- b) @RequestMapping
- c) @RestController
- d) @Service

**Key:** b

13. **Which annotation is used to bind request parameters to a method parameter?**

- a) @RequestBody
- b) @RequestParam
- c) @PathVariable
- d) @ModelAttribute

**Key:** b

14. **How can you return JSON data from a Spring MVC controller?**

- a) Use the @RestController annotation
- b) Use the @ResponseBody annotation
- c) Configure a JSON parser in Spring MVC
- d) Both a and b

**Key:** d

15. **What is the role of the @ModelAttribute annotation in Spring MVC?**

- a) Maps URL paths to methods
- b) Binds form data to an object
- c) Declares a request-scoped bean
- d) Configures a view resolver

**Key:** b



## Spring Boot Annotations

16. Which annotation is used to enable Spring Boot auto-configuration?

- a) @SpringBootApplication
- b) @EnableAutoConfiguration
- c) @Configuration
- d) Both a and b

**Key:** a

The correct answer should be **a) @SpringBootApplication**.

Here's why:

### Explanation:

- @SpringBootApplication:
- This is the primary annotation used in Spring Boot to enable auto-configuration, component scanning, and configuration.
- It is a meta-annotation that combines:

**1. @EnableAutoConfiguration**

**2. @ComponentScan**

**3. @Configuration**

- By itself, it enables auto-configuration, so **you don't need @EnableAutoConfiguration separately.**
- @EnableAutoConfiguration:

**Correct Answer:**

## a) @SpringBootApplication

17. **What does the @RestController annotation do?**

- a) Combines @Controller and @ResponseBody annotations
- b) Maps HTTP requests to POJOs
- c) Configures REST endpoints automatically
- d) Acts as a view resolver

**Key:** a

18. **Which annotation specifies that a method runs after the Spring application starts?**

- a) @PostConstruct
- b) @PreDestroy
- c) @EventListener
- d) @SpringBootApplication

**Key:** a

19. **What is the use of the @EnableScheduling annotation in Spring Boot?**

- a) Configures RESTful APIs
- b) Enables support for scheduling tasks
- c) Defines a custom bean lifecycle
- d) Configures database transactions

**Key:** b

20. **What is the purpose of the @ConfigurationProperties annotation in Spring Boot?**

- a) Maps external configuration properties to a Java object
- b) Defines beans in a configuration class
- c) Enables profiles for environment-specific configuration
- d) Configures property placeholders in XML files

**Key:** a

# Hibernate-ORM

## Basics of Hibernate

1. **What does ORM stand for in Hibernate?**

- a) Object Relational Mapping
- b) Object Relationship Model
- c) Object Reference Mapping
- d) Object Rational Management

**Key:** a

2. **What is Hibernate in Java?**

- a) A database management system
- b) An ORM tool
- c) A programming language
- d) A build tool

**Key:** b

3. **Which file is mandatory for Hibernate configuration?**

- a) hibernate.xml
- b) hibernate.cfg.xml
- c) orm.cfg.xml
- d) persistence.xml

**Key:** b

4. **What is the default file format used for Hibernate mappings?**

- a) YAML
- b) JSON
- c) XML
- d) CSV

**Key:** c

5. **Which method is used to save an object in Hibernate?**

- a) saveObject()
- b) persist()
- c) save()
- d) insert()

**Key:** c

## Core Concepts

6. **What is a SessionFactory in Hibernate?**

- a) A factory that creates database connections
- b) A factory for creating Session objects
- c) A caching mechanism
- d) A query optimization tool

**Key:** b

7. **Which of these is a benefit of using Hibernate?**

- a) Automatic table indexing
- b) Database independence
- c) Native SQL optimization
- d) Faster compilation

**Key:** b

8. **Which method is used to update an object in Hibernate?**

- a) updateObject()
- b) saveOrUpdate()
- c) merge()
- d) Both b and c

**Key:** d

9. **What is the use of the @Entity annotation in Hibernate?**

- a) To mark a class as a database entity
- b) To define a SQL query
- c) To specify the database table
- d) To create database relationships

**Key:** a

10. **Which Hibernate interface is used to perform CRUD operations?**

- a) Query
- b) Criteria
- c) Session
- d) Transaction

**Key:** c

## Mappings

11. **Which annotation is used for mapping a primary key in Hibernate?**

- a) @PrimaryKey
- b) @Id
- c) @GeneratedValue
- d) @Column

**Key:** b

12. **Which annotation is used to generate the primary key automatically?**

- a) @GeneratedKey
- b) @AutoKey
- c) @GeneratedValue
- d) @Sequence

**Key:** c

13. **What is a One-to-Many relationship in Hibernate?**

- a) One object can reference multiple objects of another entity
- b) One object can reference only one object of another entity
- c) Many objects reference a single object
- d) None of the above

**Key:** a

14. **Which annotation is used to map a foreign key relationship in Hibernate?**

- a) @ForeignKey
- b) @JoinColumn
- c) @KeyColumn
- d) @RelatedColumn

**Key:** b

15. **What is the purpose of the @Table annotation in Hibernate?**

- a) Maps an entity to a database table
- b) Creates a new table in the database
- c) Defines the table schema
- d) Maps primary keys

**Key:** a

## Querying

16. **What is HQL in Hibernate?**

- a) Hibernate Query Language

- b) Hyper Query Language
- c) High-Level Query Language
- d) Hibernate Query Library

**Key:** a

17. **Which method is used to create HQL queries?**

- a) `createQuery()`
- b) `createSQLQuery()`
- c) `prepareQuery()`
- d) `hqlQuery()`

**Key:** a

18. **What does the `Criteria` API in Hibernate allow?**

- a) Writing SQL queries
- b) Building object-oriented queries
- c) Creating native queries
- d) Managing transactions

**Key:** b

19. **Which keyword is used to fetch all columns in HQL?**

- a) `*`
- b) `all`
- c) `select *`
- d) `fetchAll`

**Key:** a

20. **What is the difference between `get()` and `load()` methods in Hibernate?**

- a) `get()` returns null if the object does not exist, while `load()` throws an exception.
- b) `load()` returns null if the object does not exist, while `get()` throws an exception.
- c) Both retrieve the object lazily.
- d) Both methods are identical.

**Key:** a

## UML& MySQL

**UML (Unified Modeling Language)**

1. **What does UML stand for?**

- a) Unified Modeling Layout
- b) Unified Modeling Language
- c) Unified Markup Language
- d) Unified Mapping Layout

**Key:** b

2. **Which UML diagram represents the static structure of a system?**

- a) Use case diagram
- b) Class diagram
- c) Sequence diagram
- d) State diagram

**Key:** b

3. **Which UML diagram is used to model the interactions between objects over time?**

- a) Class diagram
- b) Sequence diagram
- c) Activity diagram
- d) Deployment diagram

**Key:** b

4. **What does a solid line with a closed arrowhead represent in UML class diagrams?**

- a) Aggregation
- b) Generalization
- c) Dependency
- d) Composition

**Key:** b

5. **In UML, what does a dashed line with an open arrowhead represent?**

- a) Dependency
- b) Realization
- c) Composition
- d) Association

**Key:** a

6. **Which of the following is a behavioral UML diagram?**

- a) Class diagram
- b) Component diagram
- c) Use case diagram
- d) Object diagram

**Key:** c

7. **What does an actor represent in a UML use case diagram?**

- a) A system component
- b) A physical entity
- c) An external entity interacting with the system

d) An internal process

**Key:** c

8. **What is the purpose of a state diagram in UML?**

- a) To model data flows
- b) To represent an object's states and transitions
- c) To define use case scenarios
- d) To show system components

**Key:** b

9. **Which symbol represents a decision node in an activity diagram?**

- a) Circle
- b) Diamond
- c) Rectangle
- d) Arrow

**Key:** b

10. **What is the role of a component diagram in UML?**

- a) To model the internal structure of a class
- b) To represent the physical components of a system
- c) To show interactions between objects
- d) To depict object states

**Key:** b

## MySQL

11. **What type of database is MySQL?**

- a) NoSQL
- b) Relational Database Management System (RDBMS)
- c) File-based database
- d) In-memory database

**Key:** b

12. **Which SQL command is used to create a database?**

- a) CREATE TABLE
- b) CREATE DATABASE
- c) INSERT DATABASE
- d) MAKE DATABASE

**Key:** b



13. **What is the default port number for MySQL?**

- a) 1521
- b) 1433
- c) 3306
- d) 5432

**Key:** c

14. **Which MySQL function is used to count the number of rows in a table?**

- a) COUNT(\*)
- b) SUM()
- c) ROWS()
- d) TOTAL()

**Key:** a

15. **What is the purpose of the PRIMARY KEY constraint in MySQL?**

- a) To allow duplicate rows
- b) To ensure a unique value for each row
- c) To define foreign key relationships
- d) To allow null values

**Key:** b

16. **Which MySQL clause is used to filter rows based on a condition?**

- a) SELECT
- b) WHERE
- c) HAVING
- d) ORDER BY

**Key:** b

17. **What does the JOIN clause do in MySQL?**

- a) Combines data from multiple tables
- b) Deletes duplicate rows
- c) Groups rows based on conditions
- d) Sorts rows in ascending order

**Key:** a

18. **What is the purpose of the GROUP BY clause in MySQL?**

- a) To order rows
- b) To group rows that have the same values in specified columns
- c) To filter rows based on aggregate functions
- d) To combine rows from multiple tables

**Key:** b

19. **Which command is used to grant user privileges in MySQL?**

- a) ALLOW USER
- b) PERMIT
- c) GRANT

d) GIVE ACCESS

**Key:** c

20. **What is the purpose of the `LIMIT` clause in MySQL?**

a) To restrict the number of tables in a database

b) To specify the maximum number of rows to return in a query result

c) To define column constraints

d) To set database size limits

**Key:** b