**What is the main purpose of the Spring Framework?**

1. To provide a comprehensive programming and configuration model for Java-based enterprise applications
2. To provide a comprehensive programming and configuration model for JavaScript-based web applications
3. To provide a comprehensive programming and configuration model for PHP-based web applications
4. To provide a comprehensive programming and configuration model for Python-based web applications

**2. What is the default scope of the Spring Bean?**

1. singleton
2. prototype
3. request
4. session

**3. Different ways to configure Spring-based applications?**

1. XML based configuration
2. Java-based configuration
3. Annotation based configuration
4. All of the above

**4. What is the purpose of the Spring IoC container?**

1. To manage the lifecycle of beans and their dependencies
2. To handle the configuration of the application
3. To provide a caching mechanism for the application
4. To provide a security mechanism for the application

**5. What is the purpose of the Spring MVC module?**

1. To provide a web framework for building web applications
2. To provide a data access framework for accessing databases
3. To provide a caching framework for caching data
4. To provide a security framework for securing web applications

**6. What are Spring stereotype annotations?**

1. @Service
2. @Controller
3. @Repository
4. @Component
5. All of the above

**7. What are two ways to achieve dependency Injection in Spring?**

1. Using Getter and Setter methods
2. Using Setter and Constructor
3. Using Getter and Constructor
4. Using Setter and Factory methods

**8. What is the scope to create a new instance every time the bean is requested from the spring container?**

1. singleton
2. prototype
3. request
4. session

**9. What is the purpose of the Spring MVC module?**

1. To provide a web framework for building web applications
2. To provide a data access framework for accessing databases
3. To provide a caching framework for caching data
4. To provide a security framework for securing web applications

**10. Which is the front controller in Spring MVC?**

1. DispatcherServlet
2. FrontDispatcherServlet
3. FrontControllerService
4. None of the above

**11. Spring MVC Framework is designed based on which Design Pattern?**

 Model-View-Controller (MVC)

 Layered pattern

 Client-server pattern

 None of the aboveClick to View Answer and Explanation

**12. In spring MVC, DispatcherServlet consults \_\_\_\_\_\_\_\_\_\_\_\_ to map the logical view name with the actual view implementation**

1. ViewResolver
2. Handler Mapper
3. Controller
4. Model

**13. In Spring MVC web applications, all the HTTP requests first come to which component?**

1. DispatcherServlet
2. Controller
3. HandlerMapper
4. None of the above

**14. What is the purpose of the Spring JDBC module?**

1. To provide a data access framework for accessing databases
2. To provide a web framework for building web applications
3. To provide aspect-oriented programming functionality
4. To provide caching functionality

**15. Different ways to inject Spring beans in Spring-based applications?**

1. Constructor based
2. Setter based
3. Field-based
4. All of the above

**16. Which Spring annotation is used to create RESTful web services using Spring MVC?**

1. @RestController
2. @Controller
3. @Component
4. @Rest

**17. @RestController annotation is a combination of the below two annotations**

1. @Component and @ResponseBody annotations
2. @Controller and @ResponseBody annotations
3. @Service and @ResponseBody annotations
4. None of the above

**18. Which Spring annotation is used to handle HTTP POST requests?**

1. @GetMapping
2. @PutMapping
3. @CreateMapping

**19. Which Spring annotation is used to handle HTTP GET requests?**

1. @GetMapping
2. @PutMapping
3. @CreateMapping
4. @PostMapping

**20. Which Spring annotation is used to handle HTTP DELETE requests?**

1. @GetMapping
2. @PutMapping
3. @DeleteMapping
4. @PostMapping

**21. Which Spring annotation is used to handle HTTP PUT requests?**

1. @GetMapping
2. @PutMapping
3. @DeleteMapping
4. @PostMapping

**22. Which annotation do we use to mark the class as a Service class/component?**

1. @Component
2. @Service
3. @Controller
4. @Repository

**23. What is the primary use of the Spring Security module?**

1. To provide authentication and authorization for web applications
2. To provide data access and management
3. To provide Model-View-Controller architecture
4. To provide aspect-oriented programming functionality

**24. Which Spring annotation is used to inject the Spring bean?**

1. @Bean
2. @Autowired
3. @Service
4. @Inject

**25. Which Spring annotation is used to extract the URI template variable value?**

1. @PathVariable
2. @ParamRequest
3. @ModelAttribute
4. @RequestMapping

26. Which annotation is used to mark a class as an entity in JPA?  
a. @Entity  
b. @Table  
c. @Column  
d. @Id

27. What is the purpose of the @Id annotation in JPA?  
a. It specifies the name of the primary key column in the database table.  
b. It marks a field or property as the primary key of the entity.  
c. It specifies the mapping of a foreign key in a relationship.  
d. It marks a field or property as nullable in the database table.  
Answer: b. It marks a field or property as the primary key of the entity.  
Explanation: The @Id annotation is used to mark a field or property as the primary key of the entity. The primary key uniquely identifies each record in the database table.\

28. Which of the following is not a valid fetch type in JPA?  
a. EAGER  
b. LAZY  
c. JOIN  
d. FETCH

29. What is the difference between a One-to-One and a Many-to-One relationship in JPA?  
a. A One-to-One relationship is bidirectional, while a Many-to-One relationship is unidirectional.  
b. A One-to-One relationship is unidirectional, while a Many-to-One relationship is bidirectional.  
c. A One-to-One relationship maps to a single foreign key column, while a Many-to-One relationship maps to multiple foreign key columns.  
d. A One-to-One relationship maps to multiple foreign key columns, while a Many-to-One relationship maps to a single foreign key column.

30. Which of the following is true about CascadeType.ALL in JPA?  
a. It specifies that all operations on the parent entity should be cascaded to the child entities.  
b. It specifies that all operations on the child entities should be cascaded to the parent entity.  
c. It specifies that only the CREATE operation should be cascaded to the child entities.  
d. It specifies that only the DELETE operation should be cascaded to the child entities.