

Q1. Which code snippet correctly calls the stored procedure `findResult()` on a database server?

- A) `Statement stmt = conn.createStatement();
stmt.executeQuery("findResult()");`
- B) `CallableStatement cs = conn.prepareCall("{call findResult()}");
cs.executeQuery();`
- C) `PreparedStatement pstmt = conn.prepareStatement("findResult()");
pstmt.execute();`
- D) `Statement stmt = conn.createStatement();
stmt.executeStoredProcedure("findResult()");`

Answer: b

Explanation: Stored procedures require a `CallableStatement` with the `{call ...}` syntax.

Q2. What is the root element in a web-application deployment descriptor (`web.xml`)?

`<web-application>`

`<web>`

`<web-app>`

`<deploy-descriptor>`

Answer: c

Explanation: The Java EE schema defines `<web-app>` as the root of `web.xml`.

Q3. Which JSP tag syntax denotes a directive?

`<%! ... %>`

`<%@ ... %>`

`<% ... %>`

`<%~ ... %>`

Answer: b

Explanation: Directives (page, include, taglib) use `<%@ ... %>`.

Q4. Which of the following is *not* an implicit JSP object?

`response`

`config`

pageContext

system

Answer: d

Explanation: JSP provides objects like request, response, session, application, config, and pageContext—there is no system.

Q5. How does “around” advice work in Spring AOP?

Runs advice before and after method execution regardless of outcome

Runs advice only after a class loads

Runs advice after HTTP response is returned

Runs advice after HTTP request is processed

Answer: a

Explanation: Around advice wraps the target method, allowing code before and after execution (even on exceptions).

Q6. The Spring Context module is used for:

Context creation

Dependency injection

Answer: b

Explanation: It manages bean lifecycles and wires dependencies via DI.

Q7. Which annotation maps a URL to a controller method in Spring MVC?

@Mapping

@Controller

@URL

@RequestMapping

Answer: d

Explanation: @RequestMapping (and its variants) binds HTTP paths to handler methods.

Q8. When injecting a bean in Spring XML, which attribute references another bean?

value

name

type

ref

Answer: d

Explanation: `ref="beanId"` tells Spring to inject the specified bean.

Q9. Which of these is *not* a core Spring Framework module?

Spring AOP

Spring ORM

Spring APO

Spring DAO

Answer: c

Explanation: "Spring APO" is a typo; the correct AOP module is Spring AOP.

Q10. Which XML tag is required to inject a collection of strings into a Spring bean?

`<collection>`

`<string>`

Answer: a

Explanation: `<collection>` groups `<value>` elements for any `Collection`-typed property.

Q11. In Spring MVC, which component handles all incoming requests?

`DispatcherServlet`

`ApplicationContext`

`WebApplicationContext`

`HttpServlet`

Answer: a

Explanation: `DispatcherServlet` is the front controller that routes requests to handlers.

Q12. Which annotation binds a method parameter to the body of an HTTP request in Spring MVC?

`@RequestBody`

`@RequestParam`

`@RequestMapping`

Answer: a

Explanation: `@RequestBody` tells Spring to deserialize the HTTP body into a Java object.

Q13. Which of the following acts as the controller in Struts 2?

`StrutsController`

`StrutsFilter`

`StrutsPrepareFilter`

`StrutsPrepareAndExecuteFilter`

Answer: d

Explanation: Struts 2 uses a filter that prepares and then executes actions.

Q14. Which JSF tag converts a component's value to a number?

`<f:convertNumber>`

`<f:Number>`

`<f:convertInteger>`

Answer: a

Explanation: `<f:convertNumber>` handles locale-sensitive formatting/parsing of numeric input.

Q15. Which of these is *not* a built-in Java SE annotation?

`@FunctionalInterface`

`@ThreadSafe`

`@Override`

`@Native`

Answer: b

Explanation: `@ThreadSafe` comes from external specs (e.g., JSR-305), not the Java SE standard.

Q16. Which statement is *not* correct about Java annotations?

A retention policy determines when an annotation is discarded

An annotation can be a marker (no elements)

An annotation can be declared `private`

`@Repeatable` allows multiple uses of the same annotation

Answer: c

Explanation: Annotation types must be public or package-private—never private.

Q17. Which is *not* true about Apache Maven?

It's a software project-management and comprehension tool

It's not a build tool like Ant

It uses a Project Object Model (POM)

It automates builds for Java projects

Answer: b

Explanation: Maven is both a POM-based project manager and a build tool (like Ant).

Q18. Which statement about cookies is *not* true?

Cookies are used for session tracking

Cookies are generated at the client side

Cookies carry small data pieces

Cookies are stored on the client side

Answer: b

Explanation: Cookies are created by servers and then stored by clients.

Q19. What does JNDI stand for?

Java Network and Directory Implementation

Java Name Directory Interface

Java Network Directory Interface

Java Naming and Directory Interface

Answer: d

Explanation: JNDI = Java Naming and Directory Interface.

Q20. Which design pattern is *not* creational?

Builder

Observer

Singleton

Abstract Factory

Answer: b

Explanation: Observer is a behavioral pattern, not creational.

Q21. Which pattern is used when a change to one object must update others?

State

Observer

Mediator

Answer: b

Explanation: The Observer pattern notifies registered listeners of state changes.

Q22. Which `Locale` constructor does *not* exist?

`Locale(String language)`

`Locale(String country)`

`Locale(String language, String country)`

`Locale(String language, String country, String variant)`

Answer: b

Explanation: There is no single-argument constructor taking only a country code.

Q23. Which of the following is *not* a web-MVC framework?

Struts

JSF

Hibernate

Spring MVC

Answer: c

Explanation: Hibernate is an ORM library, not an MVC web framework.

Q24. What is the correct syntax to declare the JSTL XML taglib with prefix `x`?

`<%@ taglib uri="http://java.sun.com/jsp/jstl/xml" prefix="x" %>`

`<%@ page taglib-uri="http://java.sun.com/jsp/jstl/xml" namespace-prefix="x" %>`

`<%@ page taglib-uri="http://java.sun.com/jsp/jstl/xml" taglib-prefix="x" %>`

`<%@ taglib-uri="http://java.sun.com/jsp/jstl/xml" taglib-prefix="x" %>`

Answer: a

Explanation: Use `taglib uri` and `prefix` attributes in the directive.

Q25. Which attribute is *not* valid on the JSP `page` directive?

`language`

`isThread`

`info`

`Extends`

Answer: b

Explanation: The correct attribute is `isThreadSafe`, not `isThread`.

Q26. Which JSP directive imports the `java.util.*` package?

`<%@ import="java.util" %>`

`<%@ page import="java.util" %>`

`<%@ import="java.util.*" %>`

`<%@ page import="java.util.*" %>`

Answer: d

Explanation: Only `<%@ page import="..." %>` is valid for importing packages in JSP.

Q27. Which of the following is *not* a name for white-box testing?

Conformance testing

Structural testing

Glass-box testing

Clear-box testing

Answer: a

Explanation: Conformance testing is a black-box technique (validating behavior against specifications), whereas “glass-box,” “clear-box,” and “structural” all refer to white-box approaches that inspect internal code structures.

Q29. This final phase of testing where the customer tests before accepting the product is called:

Unit testing

Acceptance testing

System testing

None of the above

Answer: b

Explanation: Acceptance testing is performed by the end-user or customer to validate the system meets their business requirements prior to sign-off.

Q30. The types of performance testing include:

Top-down approach testing

Alpha testing

Load & stress testing

None of the above

Answer: c

Explanation: Load testing measures performance under expected peak loads; stress testing pushes the system beyond normal limits to observe breaking points.

Q35. Which type of maintenance happens after a fault is discovered?

Adaptive maintenance

Corrective maintenance

Perfective maintenance

Preventive maintenance

Answer: b

Explanation: Corrective maintenance involves fixing defects after they are detected in production or testing.

Q36. Social bookmarking is:

Saving web addresses of useful content

Subscribing to “feeds” from favorite sites

A security option

None of the above

Answer: a

Explanation: Social-bookmarking services let users store, tag, and share URLs of valuable web pages.

Q37. Examples of rapid-delivery methods are:

Iterative & incremental methodologies

Scrum and XP

Web 2.0 and Web 3.0

All of the above

Answer: d

Explanation: Iterative/incremental, Scrum, and XP all promote fast, frequent releases and continuous feedback. (Web 2.0/3.0 is included here to represent evolving web-delivery paradigms.)

Q38. Simple Object Access Protocol (SOAP) is:

Used to exchange messages via HTTP, SMTP, and SIP

A wireless protocol

A 5G protocol

None of the above

Answer: a

Explanation: SOAP is an XML-based messaging protocol that can operate over HTTP, SMTP, SIP, and other transports.

Q39. Identify which is *not* a feature of Aspect-Oriented Software Development (AOSD):

It complements, rather than replaces, existing modularization

Improves separation of cross-cutting concerns

No provision for modularization

Better software-design support

Answer: c

Explanation: AOSD explicitly introduces modularization of cross-cutting concerns—claiming “no provision” is the opposite of its purpose.

Q40. Who is responsible for enacting Agile values and practices in an Agile project?

Scrum Master

Customer

End user

Project team member

Answer: a

Explanation: The Scrum Master (or Agile coach) facilitates Agile ceremonies, enforces practices, and helps the team internalize Agile values.