



**PUNE VIDYARTHI GRIHA'S
COLLEGE OF SCIENCE AND TECHNOLOGY
Affiliated to University of Mumbai**

Question Bank

Class: T.Y.B. Sc.IT
Subject: Enterprise Java

Semester: V

Enterprise Java Unit 1

1. What is the Latest Version of JDK?
 - a)JDK 8
 - b)JDK 7
 - c)JDK 12
 - d)JDK 14
2. What does EE Stands for _____
 - a)Enterprise Edition
 - b)Edition Enterprise
 - c)Easter Egg
 - d)Electrically Erasable
3. J2EE is an extended version of:
 - a)J2SE
 - b)J2ME
 - c)J2SM
 - d)J2SS
4. The _____ defines an API for communication between the Web server and the application program.
 - a) Servlet
 - b) Server
 - c) Program
 - d) Randomize
5. How many JDBC driver types does Sun define?
 - a) One
 - b) Two
 - c) Three
 - d) Four

6. Which interface is used for Request and Response from the following and it should be protocol specific.

- a)HttpServletRequest and HttpServletResponse
- b)HttpRequest and HttpResponse
- c)ServletRequest and ServletResponse
- d)Request and Response

7. Which html tag can be used to send the request to the servlet?

- a)<action>
- b)<form>
- c)<input>
- d)<a>

8. Which packages provide different interfaces and classes for servlet API which should be protocol specific?

- a)javax.servlet
- b)javax.servlet.http
- c)java.servlet
- d)java.servlet.*

9. Which class is protocol-independent in Servlet API?

- a)GenericServlet
- b)HttpServlet
- c)HttpServletRequest
- d)HttpServletResponse

10. Which one is correct for the lifecycle of a servlet?

- a. Servlet class is loaded
- b. Servlet instance is created
- c. loading, creation, init,Service,destroy method is invoked
- d. Loading, creation

11. Which of the following methods is used to accept an attribute in servlets using HTTP Session object?

- a) getAttribute
- b) alterAttribute
- c) updateAttribute
- d) setAttribute

12. Which method is valid from the following to establish the connection with the specific url, username and password in a Driver Manager class?

- a. public static void registerDriver(Driver driver)
- b. public static void deregisterDriver(Driver driver)
- c. public static Connection getConnection(String url)
- d. public static Connection getConnection(String url,String userName,String password)

13. What does JDBC stand for?

- a. Java database connectivity
- b. Java database concept
- c. Java database communications
- d. Java DB Connectivity

14. Which of the following are the type of Editions for MP3 Player?

- a. Standard Edition
- b. Micro Edition
- c. Enterprise Edition
- d. Mobile Edition

15. Enterprise Application is a _____ tier/layer architecture.

- a. 1
- b. 4
- c. 3
- d. 2

16. Java Servlet is _____ programming.

- a. Client
- b. Server
- c. Desktop
- d. Network

17. Thin Driver is _____ type from JDBC Driver Types.

- a. Type 1
- b. Type 4
- c. Type 3
- d. Type 2

18. What is the following package used for importing sql?

- a. `import java.sql.http*`
- b. `import javax.sql.*`
- c. `import java.sql.*`
- d. `import javax.servlet.sql.*`

19. Which JDBC driver Type is JDBC-ODBC bridge?

- a. Type 1
- b. Type 2
- c. Type 3
- d. Type 4

20. To implement Servlet, which class is been used from the following:

- a. `ServletRequest`
- b. `ServletResponse`

- c. HttpServlet
- d. Servlet

21. _____ is a standard JAVA API for database-independent connectivity between the Java programming language and a wide range of databases.

- a. RDBMS
- b. JDBC
- c. MySQL
- d. MangoDB

22. The JDBC Architecture consists of how many layers?

- a. 2
- b. 3
- c. 4
- d. 1

23. The _____ supports the JDBC Manager-to- Driver Connection.

- a. JDBC Driver API
- b. JDBC API
- c. JSP
- d. None

24. The _____ uses a driver manager and database-specific drivers to provide transparent connectivity to heterogeneous databases.

- a. JDBC Driver API
- b. JDBC API
- c. JSP
- d. None

25. _____ is not a feature of Enterprise Application.

- a. Powerful
- b. Secure
- c. Not reliable
- d. Complex

26. What packages are used for creating servlets?

- a. javax.servlet
- b. javax.servlet.http
- c. java.servlet
- d. java.servlet.http

27. Which of the following methods is called first on a server ?

- a. start()
- b. init()
- c. initialize()
- d. doinit()

28. The servlet calls _____ method to process a client's request.

- a. init()

- b. service()
- c. destroy()
- d. None

29. The servlet is terminated by calling the ____ method.

- a. delete()
- b. destroy()
- c. bin()
- d. end()

30. Which of the following is not a benefit of using JDBC?

- a. JDBC Programs are tightly integrated with the server operating system.
- b. Systems built with the JDBC are relatively easy to move to different platforms.
- c. JDBC programs can be written to connect with the wide variety of databases.
- d. JDBC programs are largely independent of the database to which they are connected.

31. Which of the following layer does the JDBC-ODBC bridge resides?

- a. database layer
- b. client program layer
- c. both
- d. JDBC layer

32. _____ is not a Web Application Technology.

- a. Java Servlet
- b. Java Server Pages
- c. Java Server Faces
- d. Enterprise Java Bean

33. A Servlet is initiated when

- a. a client makes a request for the first time.
- b. a web server starts up
- c. client makes a request
- d. the source code is compiled

34. Only ____ arguments can be taken by the service() method

- a. 1
- b. 2
- c. 3
- d. 4

35. Which of the following methods used to retrieve the value of a specific parameter?

- a. getParameter()
- b. retrieveParameter()
- c. parameter()
- d. getParam()

36. JDBC is a interface, which means that it is used to invoke SQL commands directly

- a. low-level
- b. middle-level
- c. higher-level
- d.. User

37. _____ manages the life cycle of a servlet.

- a. The Servlet Context
- b. Servlet Itself
- c. Servlet Container
- d. The supporting protocol (http & https)

38. Which of the following are correct in terms JDBC?

- a. JDBC stands for Java Database Connectivity.
- b. JDBC is an API to access relational databases.
- c. It is used to bridge the object-relational mismatch between OOP Programs and the relational databases.
- d. Used to connect the relational object and the XML data sources.

39. Which one of the following is a open source DBMS product that runs on UNIX, LINUX and Windows?

- a. MySQL
- b. JSP
- c. JDBC
- d. SunACCESS

40. What are the differences between the servlets and applets?

- a. Servlets have no GUI/ Applets have GUI.
- b. Servlets execute on server/ Applets execute on browser.
- c. Servlets can handle only single request/ Applets can handle multiple requests.
- d. Servlets creates static web pages. Applets create dynamic web pages.

41. _____ is not a Enterprise Application Technology.

- a. Java Persistence API
- b. Java Message Service API
- c. Java Servlet
- d. Enterprise Java Bean

42. _____ is a Web Services Technology.

- a. JAX-RS
- b. EJB
- c. JSP
- d. JSF

43. Container services are configured via _____.

- a. special configuration methods in Java Access Beans
- b. deployment descriptors and/or annotations
- c. .resource property files
- d. application server administration configuration

44. Where can we put jar file?

- a. Classes
- b. Library
- c. Lib
- d. WEB-INF

45. Which elements is not part of the Java EE specification?

- (a) Java FX
- (b) Java Mail
- (c) JTA
- (d) Unified Expression Language

46. In which folder we can put web.xml?

- a. Class
- b. Package
- c. WEB-INF
- d. Webapps

47. Which of the following are interfaces?

- 1. ServletContext
- 2. Servlet
- 3. GenericServlet
- 4. HttpServlet

a. 1,2,3,4

b. 1,2

c. 1,3,4

d. 1,4

48. Which is not a life cycle method of Servlet ?

- a. service ()
- b. delete ()
- c. init ()
- d. doPost ()

49. All information send from web client is available in _____ object .

- a. ServletRequest
- b. ServletResponse
- c. ServletOutputStream
- d. ServletContext

50. Which protocol is used to interact with Web Client by Servlet?
- HTTP
 - FTP
 - HLTP
 - SMTP

Enterprise Java Unit 2

1. RequestDispatcher presents the _____ package.
- javax.servlet.http.*
 - javax.servlet.*
 - java.servlet.*
 - java.servlet.http.*
2. When the control is passed from one servlet to another servlet without coming back to the server and involving a network is known as _____
- Servlet Request
 - Servlet Response
 - Servlet Chaining
 - Servlet Session
3. When RequestDispatcher interface exchange the information among different servlets over the network within a Java application is known as _____
- Servlet Collaboration
 - Servlet Chaining
 - Servlet Dispatching
 - Servlet Request
4. Which of the following methods, forwards a request from a one servlet to another resource on the server.
- public void forward(ServletRequest request, ServletResponse response)
 - public void include(ServletRequest request, ServletResponse response)
 - public void send(ServletRequest request, ServletResponse response)
 - public void receive(ServletRequest request, ServletResponse response)
5. How to get the object of RequestDispatcher, which of the following is correct?
- getRequest()
 - getResponse()
 - getRequestDispatcher()
 - getInclude()
6. _____ are text files placed on the client computer by the application which is meant for keeping various information used for tracking reasons by the server.
- Cookies.
 - Session
 - URL Rewriting
 - XML Format

7. _____ type of Cookie is valid for only a single session.
- Persistent Cookie
 - Non Persistent Cookie
 - Session
 - URL Rewriting
8. _____ package can be used to access various functionalities of cookies.
- javax.servlet.http.*
 - javax.servlet.*
 - java.servlet.http.*
 - java.servlet.*
9. _____ will create a cookie with a specific name and value.
- Cookie(String name, String value)
 - Cookie()
 - Cookie(String name=value)
 - Cookie(String value=name)
10. Give method to set maximum age of Cookie from the following:
- public void setMaxAge(int expiry)
 - public void setMaxAge()
 - public void setMax(int expiry)
 - public void setMax()
11. HTTP and Web Servers are both considered as_____.
- Stateful
 - Stateless
 - URL Rewriting
 - Hidden form fields
12. Not more than _____ of data can be contained by a single cookie.
- 4kb
 - 8kb
 - 16 kb
 - 32 kb
13. Which of the following is correct from the given statements for getSession(boolean) method:
- Returns the current HttpSession associated with this request or, if there is no current session and create is true, returns a new session.
 - Returns the current session associated with this request, or if the request does not have a session, creates one.
 - Returns the past HttpSession associated with this request or, if there is no current session and create is true, returns a new session.
 - Returns the past session associated with this request, or if the request does not have a session, creates one.

14. _____ is a technique used to maintain the state of a user.
- Http Protocol
 - Session Tracking
 - Servlet Request
 - Servlet Response
15. _____ is the package used to create a session in Servlets.
- javax.servlet.http.*
 - java.servlet.http.*
 - java.servlet.*
 - javax.servlet.*
16. _____ type of IO will be waiting for the data to be read or written before returning back to the client.
- Non-Blocking IO
 - Server Socket
 - Socket
 - Blocking IO
17. _____ type of IO will not be waiting for the data to be read or written before returning back to the client.
- Non-Blocking IO
 - Server Socket
 - Socket
 - Blocking IO
18. _____ is a medium through which the data can be transferred efficiently between the Client and Buffer.
- ServerSocket
 - Socket
 - Channel
 - Selectors
19. The _____ is used for handling the multiple channels using a single thread.
- Socket
 - Selectors
 - Channels
 - Server Socket
20. A Java Non Blocking IO _____ is used for building the one-way data connection between two threads.
- Selectors
 - Channel
 - Socket
 - Pipe

21. Why is RequestDispatcher more efficient than sendRedirect?
- Redirects are no longer supported in the current servlet API
 - Redirects are not a cross-platform portable mechanism
 - The RequestDispatcher does not use the reflection API
 - The RequestDispatcher does not require a round trip to the client, and thus is more efficient and allows the server to maintain request state.
22. What is the use of the include() method of the RequestDispatcher?
- Appends the request object to the current servlet.
 - Sends a request to another resource like servlet, jsp, or html
 - Appends the response object to the current servlet.
 - Includes the resource file like servlet.jsp/html.
23. What are methods of request dispatcher?
- Include()
 - forward()
 - Include() and forward()
 - feedforward()
24. _____ object contains requests from clients and transfers control to other web components.
- Cookies
 - include
 - Request dispatcher
 - forward
25. Which of the following code is used to delete a HTTP Session object in servlets?
- session.invalidate()
 - response.deleteSession()
 - request.deleteSession()
 - request.session()
26. Where are cookies placed on the computer?
- Browser
 - Array
 - List
 - Folder
27. Which of the following is true about session?
- All users connect to the same session
 - All users have same session variable
 - Default timeout value for session variable is 20 minutes
 - New session cannot be created for a new user
28. Which of the following is used to add the cookie to response?
- addCookie()
 - installCookie()

- c. sendCookie()
- d. insertCookie()

29. What is the maximum size of cookie?

- a. 4 bytes
- b. 4 mb
- c. 4 kb
- d. 40mb

30. which attribute is used to extend the lifetime of a cookie?

- a. Name
- b. MaxAge
- c. Path
- d. Value

31. Syntax for creating a cookie

- a. Cookies ck= new cookies(" name" , " value");
- b. cookie ck = new cookies(" name");
- c. cookie ck= new cookie(" name");
- d. Cookie ck = new Cookie(" name", " value");

32. Which of these packages contain class and interface for input and output operations of a program?

- a. java.util.io
- b. java.io
- c. java.lang.io
- d. java.lang

33. Which of these is not a member of JAva.io package?

- a. DataInput
- b. ObjectFilter
- c. ObjectInput
- d. FileFilter

34. What is a DatInput?

- a. interface that defines methods to read data.
- b. an abstract class defined in java.io
- c. class used to read data.
- d. interface with methods to open files.

35. The ___ method can be used to create a File.

- a. newFile()
- b. createFile()
- c. addFile()
- d. add()

36. ____ is used to read a character in a file.

- a. FileReader
- b. FileWriter
- c. FileInputStream
- d. InputStreamReader

37. ____ input stream uses character array as a source.

- a. BufferedReader
- b. FileReader
- c. CharArrayReader
- d. FileArrayReader

38. ____ class is used to increase the efficiency of input operations.

- a. FileInputStream
- b. BufferedInputStream
- c. DataInputStream
- d. OutputStream Reader

39. ____ is used for writing in an outputstream.

- a. put()
- b. printf()
- c. print()
- d. write()

40. HTTP is a ____ protocol.

- a. stateless
- b. stateful
- c. transfer protocol
- d. information protocol.

41. If you set the expiration time to ____ then the cookie will be removed from the browser.

- a. 1
- b. -1
- c. 0
- d. 2

42. How can you set cookie visibility scope to local storage?

- a. %
- b. *
- c. +
- d. /

43. Which version of Servlets introduced asynchronous request access for promoting Non-blocking I/O

- a. Servlet 3.0
- b. Servlet 3.1
- c. Servlet 4.0

- d. Servlet 4.1
44. Blocking operations that limit scalability of web operations include except
- a. Waiting for a resource to be free before creating a response
 - b. Application might need to query a database before generating a response
 - c. Application might need to request data from a remote web service.
 - d. Providing asynchronous access to the thread as soon as it is free
45. Which Interface has to be used to ensure non-blocking I/O in an application
- a. Prepared and Callable statement interface
 - b. Statement Interface
 - c. ReadListener and WriteListener Interface
 - d. Connection Interface
46. The import required to run non-blocking I/O is
- a. `javax.servlet.AsyncContext`
 - b. `java.sql`
 - c. `java.sql.connection`
 - d. `java.sql.statement`
47. When the ReadListener Interface is implemented the following methods must be overridden except
- a. `onDataAvailable()`
 - b. `onAllDataRead()`
 - c. `onError()`
 - d. `Class.forName()`
48. To create the Server Path for the file to be read in non-blocking mode the following get methods are called except
- a. `getServerName()`
 - b. `getServerPort()`
 - c. `getContextPath()`
 - d. `getConnection()`
49. The connection variable is set of type
- a. `HttpSession`
 - b. `HttpServletRequest`
 - c. `HttpURLConnection`
 - d. `HttpServletResponse`
50. The status on a non-blocking read can be checked by calling
- a. `ServletInputStream.isReady()`
 - b. `ServletOutputStream()`
 - c. `DoPost()`
 - d. `DoGet()`

Enterprise Java Unit 3

1. _____ is a technology to Servlet which allows the mixing of dynamic and static web contents.
 - a. Servlet
 - b. JSP
 - c. EJB
 - d. JSF

2. JSP technology is consisting of the following feature _____
 - a. WORA
 - b. Platform Dependent
 - c. Inefficient
 - d. Inconvenient

3. In MVC Architecture, JSP work as:
 - a. Model
 - b. Controller
 - c. View
 - d. Presentation Layer

4. In JSP, Initialization is done by calling the _____ method.
 - a. jspDestroy()
 - b. jspInit()
 - c. jspService()
 - d. jspInitialization

5. A server side comments is of the form:
 - a. `<%-- comments --%>`
 - b. `<!-- comments ...`
 - c. `<%= ----- %>`
 - d. `<%@ directive attribute="value" %>`

6. Identify the Scripting element for replacing out.print statement in JSP from the following:
 - a. JSP Scriptlet tag
 - b. JSP Expression tag
 - c. JSP Declaration tag
 - d. JSP Comment tag

7. `<%= statement %>` is the following tag:
 - a. Scriptlet tag
 - b. Declarative tag
 - c. Expression tag
 - d. Comment tag

8. Identify the type of Directive is used for importing java statements in JSP from the given following options:

- a. Scriptlet
- b. Include
- c. Page
- d. Taglib

9. The _____ attribute from JSP Directive is used to declare that the current page is the error page.

- a. Errorpage
- b. isErrorPage
- c. errorPage
- d. ErrorPage

10. Standard JSP tags begin with the _____ prefix

- a. Jsp:
- b. Jsp:forward
- c. Jsp:include
- d. jsp:start

11. The _____ action tag is used to include the content of another resource, it may be jsp, html or servlet.

- a. Jsp:include
- b. Jsp:forward
- c. jsp:useBean
- d. Jsp:fallback

12. Java Objects can be represented as a sequence of bytes known as _____

- a. InputStream
- b. OutputStream
- c. Serialization
- d. BinaryStream

13. Which one is the right method for writing various data types of ObjectOutputStream class?

- a. writeObject(Object x)
- b. write(Object x)
- c. writeObject()
- d. write()

14. Give Syntax of jsp:useBean action tag

- a. `<jsp:useBean id= "instanceName" scope= "page | request | session | application" />`
- b. `<jsp:useBean name="instanceOfBean" property= "*" | />`
- c. `<jsp:useBean name="obj" property="xyz" />`
- d. `<jsp:useBean type= "applet | bean" code= "nameOfClassFile" codebase= "directoryNameOfClassFile" />+`

15. JSP Implicit Object 'Out' is object of javax.servlet.jsp._____ class
- jspWriter
 - jspPrinter
 - jspWrite
 - jspPrint
16. In JSP, _____ is used for accessing implicit objects and Java classes for simplifying java expressions.
- Expression Language
 - JNDI
 - Formatting tags
 - XML tag
17. Which of the following is the Syntax for Expression Language :
- `{ expression }`
 - `%{ expression }`
 - `&{ expression }`
 - `@{ expression }`
18. Which of the following is used for variable support:
- Core Tag
 - Function Tag
 - Formatting Tag
 - XML tag
19. The URL format for JSTL formatting tag is:
- <http://java.sun.com/jsp/jstl/format>
 - <http://java.sun.com/jsp/jstl/fmt>.
 - <http://java.sun.com/jsp/jstl/formatting>.
 - <http://java.sun.com/jsp/jstl/functions>
20. Which directive is used for creating a jstl tag?
- Include
 - Page
 - Taglib
 - Scriptlet
21. What is the full form of JSP?
- Java Servlet Pages.
 - Java Server Pages.
 - Java Small Pages.
 - Java Special Pages.
22. Which one is not a JSP Engine.

- a. Tomcat
- b. Java Web Server
- c. WebLogic
- d. Apache James.

23. Which scope of JSP objects can be served for more than one page?

- a. page
- b. request
- c. session
- d. application.

24. the JSP declaration can be done using

- a. <% declaration %>
- b. <# declaration#>
- c. <* declaration*>
- d. <\$ declaration\$>

25. Which of the following do not supports JSP directly?

- a. Weblogic Server
- b. WebSphere Server
- c. Tomcat Server
- d. Apache HTTP Server

26. How many Implicit objects are present in JSP?

- a. 7
- b. 8
- c. 9
- d. 10

27. The JSP Page is translated into

- a. CGI
- b. Applet
- c. Servlet
- d. JavaBean

28. Which of the following is used for expressions?

- a. <%= %>
- b. <% %>
- c. <%@ %>
- d. <%1 %>

29. Which of the following is not a JSP Implicit objects?

- a. request
- b. response
- c. in
- d. out

30. The ___ action is used to include a file into another file.
- a. <jsp: get>
 - b. <jsp: read>
 - c. <jsp: import>
 - d. <jsp: include>
31. Which one of the following is not a method of JSP Servlet?
- a. _jspService()
 - b. _jspDestroy()
 - c. _jspInit()
 - d. jspService()
32. What is the syntax of scriptlet tag?
- a) <%-- --%>
 - b) <% %>
 - c) <%= %>
 - d) <%! %>
33. Which page directive should be used in JSP to generate a PDF page?
- a.contentType
 - b. generatePdf
 - c. typePDF
 - d. contentPDF
34. Which attribute specifies a JSP page that should process any exceptions thrown but not caught in the current page?
- a. The ErrorPage Attribute
 - b. The IsErrorPage Attribute
 - c. Both A & B
 - d. None of the above
35. What is the main purpose of Expression Language?
- a. To remove WML form JSP Pages.
 - b. To remove standard actions
 - c. To remove JAVA Syntax
 - d. To remove complexity from JSP Pages.
36. How many jsp implicit objects are there and these objects are created by the web container that are available to all the jsp pages?
- a. 8
 - b. 9
 - c. 10
 - d. 7
37. The difference between Servlets and JSP is the
- a. Translation

- b. compilation
- c. syntax
- d. Initialization

38. Which of the following is an invalid EL identifier?

- a.amy1
- b.\$amy1
- c.*amy1
- d._amy1

39. Which one of the following cannot be used as EL Identifier?

- a.empty
- b.erase
- c.error
- d.evoke

40. Which of the following is not true about Java beans?

- a) Implements java.io.Serializable interface
- b) Extends java.io.Serializable class
- c) Provides no argument constructor
- d) Provides setter and getter methods for its properties

41. Which of the following are the valid scopes in JSP?

- a. request, page, session, application
- b. request, page, session, global
- c. response, page, session, application
- d. request, page, context, application

42. Which of the following is not a jsp directive?

- a. include
- b. page
- c. scriptlet
- d. useBean

43. Which one is the correct order of phases in JSP life cycle?

- a. Initialization, Cleanup, Compilation, Execution
- b. Initialization, Compilation, Cleanup, Execution
- c. Compilation, Initialization, Execution, Cleanup
- d. Cleanup, Compilation, Initialization, Execution

44. Which tag should be used to pass information from JSP to included JSP?

- a. Using <%jsp:page> tag
- b. Using <%jsp:param> tag
- c. Using <%jsp:import> tag
- d. Using <%jsp:useBean> tag

45. What will be output of the JSP code? `#{101 % 10}`
- a. 1
 - b. 10
 - c. 1001
 - d. 101%10
46. Which is not a directive?
- a) include
 - b) page
 - c) export
 - d) taglib
47. Which attribute defines the MIME type of the HTTP response?
- a) ContentType
 - b) language
 - c) PageEncoding
 - d) isELIgnored
48. How can one JSP Communicate with Java file?
- a) `<%@ page extends="....." %>`
 - b) `<%@ page import="....." %>`
 - c) `<%@ page info="....." %>`
 - d) `<% @ page isELIgnored="....." %>`
49. What is the need of a tag library?
- a) JSP tag libraries are used by Web application designers who can focus on presentation
 - b) JSP tag libraries are used by Web application designers who can focus on presentation and the database access.
 - c) JSP tag libraries are used by Web application designers who can focus on presentation and other enterprise services.
 - d) Is used to declare that the current page is the error page.
50. How to query and update database transactions in JSTL?
- a) `<Sql:transact>`
 - b) `<Sql:query>`
 - c) `<sql:update>`
 - d) `<sql:transaction>`

Enterprise Java Unit 4

1. _____ is the java API for SOAP web services.
- a. JAX-WS
 - b. JAX-RS
 - c. JAX-RW
 - d. JAX-WR

2. EJB applications utilize the _____ to look up for references to utilize all EJB-based functionality.

- a. JNDI
- b. Remote EJB interfaces
- c. Home EJB interfaces
- d. EJB JavaBeans

3. Contract the term JMS?

- a. Java Message Service
- b. Java Monitor Service
- c. Java Message Session
- d. Java Monitor Session

4. Which module does the Entity bean represent the persistent data that is available in the database?

- a. Server-side component
- b. Client-side component
- c. Home Interface
- d. Remote Interface

5. Which of the following is responsible to maintain the state of Session Beans:

- a. Stateless
- b. Stateful
- c. Singleton
- d. Message Driven

6. The whole life cycle of session bean is maintained by the _____

- a. EJB Server
- b. EJB Container
- c. EJB Interfaces
- d. EJB Bean

7. Which middleware administrations are given by EJB?

- a. Security
- b. Efficiency
- c. Consistency
- d. Performance

8. _____ method is invoked for each message that is consumed by the bean.

- a. onMessage(Message)
- b. onMessage()
- c. Message(Message)
- d. Message()

9. At the end of the JSP MessageDriven Bean lifecycle, the container calls the method denoted as

_____ for garbage collection

- a. @PreDestroy
- b. @Destroy
- c. @PostDestroy
- d. @Destroy

10. _____ helps to inject custom logics into the request processing pipeline

- a. Interceptors
- b. Struts
- c. JSP
- d. JSF

11. Which of the following is correct about EJB?

- a. EJB released in J2EE5
- b. EJB Client doesn't need web services for native languages
- c. EJB stands for Enormous JavaBeans.
- d. EJB Container contains Home and Remote Interfaces

12. Choose types of enterprise beans which is working JMS service in EJB from the following:

- a. Session beans.
- b. Entity beans.
- c. Message-driven beans.
- d. Stateless

13. Abbreviation of the term COM?

- a. Component Object Model
- b. Component Oriented Model
- c. Common Object Model
- d. Common Oriented Model

14. A _____ type of session bean does not maintain a communication state with the client.

- a. Stateless
- b. Stateful
- c. Message Driven
- d. Singleton

15. A _____ type of session bean is created once per application and it is present for the complete lifecycle of the application.

- a. Stateless
- b. Stateful
- c. Message Driven
- d. Singleton

16. How to implement EJB in a program?

- a. javax.ejb.EJB

- b. javax.ejb
- c. javax.EJB
- d. java.ejb.EJB

17. Which of the following is the life cycle of Stateful Session Bean:

- a. Does not exist, Ready state, Passive state
- b. Passive state, Ready state, Does not exist
- c. Ready state, Does not exist, Passive state
- d. Passive state, Does not exist, Ready state

18. Which of the following EJB follows:

- a. Continual revisions of the specifications
- b. large specification
- c. Component architecture to encapsulate business logic
- d. Increased time of development

19. Which level of N-tier enterprise application contains EJB modulest?

- a. Application Server
- b. Web Server
- c. Database Server
- d. Thin Client

20. From the EJB transaction, which of the following is not a property of it?

- a. Atomicity
- b. Consistency
- c. Isolation
- d. Distributed

21. What does JNDI stands for?

- a. Java Naming and Directory Interface
- b. Joint Naming and Directory Interface
- c. Java Naming and Directory Intelligence
- d. None of the Above

22. Which of the following is not an example of naming service?

- a. DNS
- b. File System
- c. rmiregistry
- d. HTTP

23. Enterprise Bean Architecture consists of-

- a. Enterprise Bean Server, Enterprise Bean, Enterprise Bean Clients, and Other services like JNDI and JTS

- b. Enterprise Bean Server, Enterprise Bean Containers, Enterprise Bean, Enterprise Bean Clients
 - c. Enterprise Bean Server, Enterprise Bean Containers, Enterprise Bean, Enterprise Bean Clients, and Other services like JNDI and JTS
 - d. Enterprise Bean Server, Enterprise Bean, Enterprise Bean Clients, and Other services like JNDI and JTS
24. ____ method is used to resolve a name.
- a. lookup()
 - b. find()
 - c. resolve()
 - d. search()
25. ____ used to for bindings
- a. bind()
 - b. list()
 - c. renew()
 - d. rename()
26. What is the full form of DNS?
- a. Directory and Naming Service
 - b. Dynamic Name System.
 - c. Dynamic Native System
 - d. Domain Name system.
27. ____ is association of object with name
- a. associating
 - b. assigning
 - c. binding
 - d. referencing
28. The procedure of finding an object by name :
- a. search
 - b. lookup
 - c. find
 - d. look for
29. JavaBean Methods are all
- a. properties
 - b. event listeners
 - c. identical to methods of other java classes.
 - d. Events
30. Business Components developed using EJB Architecture are called as-
- a. Java Beans
 - b. Enterprise Java Beans Components

- c. Enterprise Modules
- d. Connection Pooling

31. ____ is used to discover beans properties, methods and events
- a. Persistence
 - b. Customization
 - c. Introspection
 - d. Event Delegation
32. Which of the following executes EJB components?
- a. Web Server
 - b. Web Browser
 - c. EJB Container
 - d. Database Server.
33. ____ receives events generated by the source beans.
- a. EventHandler Bean
 - b. Receiver Bean
 - c. Acceptor Bean
 - d. Listener Bean
34. _____ is responsible for managing the active state for object, for each enterprise bean.
- a. Container
 - b. Server
 - c. Client
 - d. JNDI
35. EJB Architecture defines __ types of Enterprise Beans.
- a. 4
 - b. 2
 - c. 3
 - d. 5
36. _____ bean can implement web service, but other types of Enterprise Beans cannot.
- a. Stateful
 - b. Singleton
 - c. MessageDriven
 - d. Stateless
37. Which of the following is true?
- a. Preserving of any state across method calls does not performed by Stateless session beans
 - b. Multiple users can access Stateful session beans at the same time
 - c. The method << remove >> in the component interface can be accessed only by the remote clients
 - d. In both stateless and stateful session classes, the bean provider must write the method `public void remove()`

38. Which statement about session beans is true?
- In both stateless and stateful session classes, the bean provider must write the method `public void remove()`
 - The method `<< remove >>` in the component interface can be accessed only by the remote clients
 - The bean's handle must be provided by the client, in order to ask the EJBHome for removing a session bean
 - Multiple users can access Stateful session beans at the same time
39. Which component does the Entity bean represent the persistent data stored in the database?
- Server-side component
 - Client-side component
 - Server and client side component
 - None of the above
40. Which of the following is correct about the Persistence unit in EJB persistence API?
- It is a persistent object representing the data-store record. It is good to be serializable.
 - It is an interface to do data operations like add/delete/update/find on persistent object. It also helps to execute queries using the Query interface.
 - It describes the properties of the persistence mechanism.
 - It describes the data-store related properties like connection url, user-name, password etc.
41. Only a single client can use _____ session bean at a time.
- Stateful
 - Singleton
 - MessageDriven
 - Stateless
42. What is considered as the simplest way of obtaining an Enterprise Bean reference?
- JNDI lookup
 - JAX-RS
 - Dependency Injection
 - JSF
43. Singleton session bean was introduced to share _____
- Session-wide data
 - Page-wide data
 - Application-wide data
 - Request-wide data
44. Which version of EJB introduced the concept of No interfaces for Session Beans?
- EJB 1.0
 - EJB 2.1
 - EJB 3.1
 - EJB 3.2

45. Which annotation is used to obtain reference to No-interface view or an enterprise bean through dependency injection?
- @Local
 - @EJB
 - @Remote
 - @Interface
46. Stateful session passes through ___ stages during its lifetime.
- 4
 - 1
 - 2
 - 3
47. Message Driven Bean has ___ states in lifecycle
- 1
 - 2
 - 3
 - 4
48. What is the purpose of JNDI?
- To parse XML documents
 - To access native code from Java application
 - To register Java Web Start applications with a web server
 - To access various directory services using a single interface
49. The association of a name with an object is called a _____.
- Binding
 - Context
 - Convention
 - Association
50. JNDI API is used by the _____ and _____ to look up objects in a network.
- Java EE & Java Servlets
 - Java RMI & Java Bean
 - Java RMI & Java EE
 - Java Servlets & Java Bean

Enterprise Java Unit 5

- _____ in java means storing data in a RDBMS.
 - Persistence
 - ORM
 - Mapping
 - COM

2. When a RDBMS needs to be transformed into an OOP model known as _____
 - a. Impedance mismatch
 - b. ORM
 - c. Persistence
 - d. COM

3. _____ provide API to retrieve objects of Java from RDBMS
 - a. Impedance mismatch
 - b. ORM
 - c. Persistence
 - d. COM

4. Which of the following is the advantages of ORM:
 - a. System Architecture
 - b. poorly-optimized SQL queries
 - c. Automated mapping of relational databases
 - d. leaky abstractions

5. _____ represents persistence annotations which helps you to define mapping metadata.
 - a. JPA
 - b. EJB
 - c. ORM
 - d. JSF

6. Which of the following is the Java Persistence types:
 - a. Hibernate
 - b. Servlet
 - c. JSP
 - d. EJB

7. _____ is a type of persistence which will allow you to write persistence class by using OO classes
 - a. Idiomatic
 - b. Non-persistence
 - c. Mapping
 - d. Context Param

8. POJO stands for
 - a. Plain Old Java Object
 - b. Performance of Java Object
 - c. Part of Java Object
 - d. Performance Old Java Object

9. Which of the following is the mapping file of Object Relational Mapping
- ORM.xml
 - OR.xml
 - Web.xml
 - context-param
10. Which of the following is used to create and manage number of instances of JPA
- EntityManagerFactory
 - EntityTransaction
 - EntityManager
 - Persistence
11. Which of the following is the advantages of JPA:
- does not use the table index
 - Portability
 - increased artifact size
 - lot of business rules
12. Hibernate is considered as an _____ solution for Java.
- ORM
 - Persistence
 - COM
 - POJO
13. The mapping of objects of java to the RDBMS and vice versa is known as:
- Transparent Persistence
 - Transparent Non Persistence
 - Transparent ORM
 - Transparent COM
14. Configuration data or mapping file can be identified by:
- Web.xml
 - Javax.persistence
 - Hibernate.cfg.xml
 - Hibernate.persistence
15. Transaction with the database is handled by _____ in Hibernate.
- Transaction manager
 - SessionFactory
 - Entity Manager
 - Session Object
16. Query objects use _____ to retrieve data from RDBMS.
- HQL
 - RDBMS

- c. DDL
- d. DML

17. _____ object is used to get the physical connection with the RDBMS

- a. SessionFactory
- b. Session
- c. Transaction
- d. TransactionManagement

18. _____ have the ability to execute more than one SQL statement at a time.

- a. Transaction management
- b. Transaction
- c. Session
- d. Cookies

19. Which of the following is not an example of ORM framework?

- a. Castor
- b. Spring DAO
- c. Hibernate
- d. NoSQL

20. Which of the following is true about HQL?

- a. Hibernate supports named parameters in its HQL queries.
- b. HQL queries cannot perform DDL operations
- c. HQL works without persistent objects and their properties
- d. HQL queries cannot insert single record into table

21. Persistence in java usually means storing data in a _____.

- a. MongoDB using MySQL.
- b. NoSQL
- c. Relational Database using SQL.
- d. MicrosoftSQL.

22. In Java, Persistence is accomplished by storing data in?

- a. JDBC.
- b. MongoDB
- c. NoSQL
- d. RDBMS.

23. Java API used to connect a relational RDBMS?

- a. JavaAPI
- b. JDBC
- c. RDBMS.
- d. MS SQL.

24. Which one of the following best illustrates the concept of Object Persistence.

- a) Determining how an object's state [data stored in member variable of an object] is stored in database table columns.
- b) Provides an object – oriented view of persistent data.
- c) Design patterns and sophisticated object oriented concepts such as inheritance and polymorphism can be used.
- d) Provide one to one mapping to database table.

25. _____ are Java classes that represent the tables in the database?

- a. ORM.
- b. JPA
- c. POJOs
- d. All of them.

26. Which of the following is not a correct explanation of JDO.

- a) JDO is a standard way to access persistent data in databases, using plain old Java objects (POJO) to represent persistent data.
- b) JDO is an object relational mapping tool.
- c) Provides object relational query language and support non-relational databases.
- d) JDO was popular and an integrated part of enterprise java platform.

27. _____ are persistence objects that represents datastore records.

- a. Entities.
- b. Persistence API.
- c. EntityManager
- d. POJOs.

28. Persistence objects are retrieved using a _____ object.

- a. JPA.
- b. JDBC
- c. Entity
- d. Query

29. Which of the following is not a core component of Hibernate?

- a. JDBC
- b. SessionFactory
- c. Session
- d. Configuration

30. Which tool provides a set of persistent annotations to define mapping metadata.

- a) JPA
- b) JSR
- c) XML
- d) JRE

31. Which of the following simplifies Object Relational Mapping tool.

- a) Data Creation, Data Isolation, Data Access

- b)Data Manipulation, Data Creation, Data Extraction
- c)Data Creation, Data Manipulation, Data Access
- d)Data Isolation, Data Extraction, Data Manipulation

32. What HQL stands for?

- a. Hibernate Query Language
- b. High Query Language
- c. Hybrid Query Language
- d. None of the above.

33. The problem which arises because of the difference between model of programming language and model of database is classified as.

- a)modelling mismatch
- b)referential mismatch
- c)dependence mismatch
- d)impedance mismatch

34. _____ is the Java Persistence query language defined in JPA specification. It is used to construct the queries.

- a. JPA API
- b. JPQL
- c. Entity Persistence
- d. JDBC

35.In JPA, _____ are used to persist the object of wrapper classes and String.

- a. String Collection.
- b. Java Collections.
- c. Class Collection.
- d. Method Collection.

36. Which technique is used by Hibernate to persist collections of embeddable types.

- a)ElementCollection
- b)ManyToMany
- c)OneToMany
- d)CollectionElement

37. Which of the following packages contains hibernate annotations?

- a. javax.annotations
- b.Javax.persistence
- c.javax.hibernate.annotations
- d. javax.persistence.annotations

38.Which is not a object state in hibernate?

- a. transient
- b. detached
- c. persistent
- d. volatile.

39. What is the JPA equivalent of hibernate.cfg.xml file.
- a) configuration.xml
 - b) persistence.xml
 - c) jpa.configuration.xml
 - d) jpa.persistence.xml
40. What is the full form of POJO?
- a. Plain Ordinary Java Object
 - b. Plain Old Java Object
 - c. Primitive Old Java Object
 - d. Primary Old Java Objects
41. What is the full form of JPQL
- a) Java Persistence Query Language
 - b) Java Provider Query Language
 - c) Java POJO Query Language
 - d) Java performance query language.
42. Which tool automatically creates the required SQL queries
- a) XML
 - b) JPQL
 - c) ORM
 - d) JPA
43. Which one is the simple java class that represents a row in a database table.
- a) Attribute
 - b) Primary key
 - c) foreign key
 - d) Entity
44. An object is called persistent if it is stored in the database and can be accessed anytime. This type of entity property is called as
- a) Persistability
 - b) Persistent Identity
 - c) Transactionality
 - d) Granularity.
45. What is hibernate?
- a) CRM
 - b) Programming Tool
 - c) ORM
 - d) SQL tool.
46. Which annotation is used to link two tables through a relation table?
- a. @RelationTable

- b. @JoinTable
- c. @LinkTable
- d. @GroupTable

47. Which annotation is used to create Pk-Fk relation b/w two tables?

- a. @JoinColumn
- b. @ForeignKey
- c. @JoinedKey
- d. @PrimaryKey

48. Which statement(S) is/are incorrect

- a. Stored procedure may return a value and function must return a value.
- b. Function has only IN parameter.
- c. Try and Catch can be used with both stored procedure and function.
- d. Stored procedure has IN and OUT parameter.

49. Which API is used to define queries for entities and their persistent state by creating query-defining objects

- a) Criteria API.
- b) Query API
- c) Entity API
- d) Transaction API

50. JPA 2.1 introduced Which method to call database functions which are not directly supported by the standard

- a) delete()
- b) insert()
- c) call()
- d) function()