

SUBJECT CODE: 602

SUBJECT NAME: ADVANCED JAVA

Unit 1 : JDBC

1)Which of the following contains both date and time?

- A) Java.io.date
- B) Java.sql.date
- C) Java.util.date
- D) Java.util.dateTime

Answer:D

2)Which of the following is advantage of using JDBC connection pool?

- A) Slow performance
- B) Using more memory
- C) Using less memory
- D) Better performance

Answer:D

3)Which of the following is advantage of using PreparedStatement in Java?

- A) Slow performance
- B) Encourages SQL injection
- C) Prevents SQL injection
- D) More memory usage

Answer:C

4)Which one of the following contains date information?

- A) Java.sql.TimeStamp
- B) Java.sql.Time
- C) java.io.Time
- D) java.io.TimeStamp

Answer:A

5)What does setAutoCommit(false) do?

- A) commits transaction after each query
- B) explicitly commits transaction
- C) does not commit transaction automatically after each query
- D) never commits transaction

Answer:C

6)Which of the following is used to call stored procedure?

- A) Statement
- B) PreparedStatement
- C) CallableStatement
- D) CalledStatement

Answer:C

7)Which of the following is used to limit the number of rows returned?

- A) setMaxRows(int i)
- B) setMinRows(int i)

C) getMaxrows(int i)

D) getMinRows(int i)

Answer:A

8)Which of the following is method of JDBC batch process?

A) setBatch()

B) deleteBatch()

C) removeBatch()

D) addBatch()

Answer:D

9)Which of the following is used to rollback a JDBC transaction?

A) rollback()

B) rollforward()

C) deleteTransaction()

D) RemoveTransaction()

Answer:A

10) Which of the following is not a JDBC connection isolation levels?

A) TRANSACTION_NONE

B) TRANSACTION_READ_COMMITTED

C) TRANSACTION_REPEATABLE_READ

D) TRANSACTION_NONREPEATABLE_READ

Answer:D

11) Which driver uses ODBC driver to connect to the database?

A) JDBC-ODBC bridge driver

B) Native - API driver

C) Network Protocol driver

D) Thin driver

Answer:A

12) How many JDBC product components does the Java software provides?

A) 3

B) 2

C) 4

D) 5

Answer:A

13) How many types of JDBC drivers are available?

A) 3

B) 4

C) 2

D) 5

Answer:B

14) Which result set generally does not show changes to the underlying database that are made while it is open. The membership, order, and column values of rows are typically fixed when the result set is created?

- A) TYPE_FORWARD_ONLY
- B) TYPE_SCROLL_INSENSITIVE
- C) TYPE_SCROLL_SENSITIVE
- D) ALL MENTIONED ABOVE

Answer:B

15) JDBC is a Java API that is used to connect and execute query to the database

- A) True
- B) False

Answer:A

16) Which method is used for an SQL statement that is executed frequently?

- A) prepare Statement
- B) prepare Call
- C) create Statement
- D) None of the above

Answer:A

17) What is used to execute parameterized query?

- A) Statement interface
- B) PreparedStatement interface
- C) ResultSet interface
- D) None of the above

Answer:B

18) Which JDBC product components does the Java software provide?

- A) The JDBC driver manager
- B) The JDBC driver test suite
- C) The JDBC-ODBC bridge
- D) All mentioned above

Answer:D

19) JDBC stands for?

- A) Java database connectivity
- B) Java database concept
- C) Java database communications
- D) None of the above

Answer:A

20) Which class has traditionally been the backbone of the JDBC architecture?

- A) JDBC driver manager
- B) JDBC driver test suite



- C) JDBC-ODBC bridge
- D) All mentioned above

Answer:A

- 21) The JDBC-ODBC Bridge supports multiple concurrent open statements per connection?
 - A) True
 - B) False

Answer: A

- 22) Which of the following allows non repeatable read in JDBC Connection?
 - A) TRANSACTION_READ_UNCOMMITTED
 - B) TRANSACTION_READ_COMMITTED
 - C) TRANSACTION_SERIALIZABLE
 - D) TRANSACTION_REPEATABLE_READ

Answer: D

- 23) Which of the following statements is false as far as different type of statements is concern in JDBC?
 - A) Regular Statement
 - B) Prepared Statement
 - C) Callable Statement
 - D) Interim Statement

Answer: D

- 24) Which of the following methods are needed for loading a database driver in JDBC?
 - A) registerDriver() method
 - B) Class.forName()
 - C) Both A and B
 - D) getConnection()

Answer: C

25) Which of the following is false as far as type 4 driver is concern?

- A) Type 4 driver is “native protocol, pure java” driver
- B) Type 4 drivers are 100% Java compatible
- C) Type 4 drivers uses Socket class to connect to the database
- D) Type 4 drivers can not be used with Netscape

Answer: D

26) To execute a stored procedure “totalStock” in a database server, which of the following code snippet is used?

- A) Statement stmt =
connection.createStatement();stmt.execute(“totalStock());
- B) CallableStatement clbstmnt = con.prepareStatement(“{call totalStock}”);cs.executeQuery();
- C) StoreProcedureStatement
stmt=connection.createStoreProcedure(“totalStock());spstmt.executeQuery();
- D) PreparedStatement pstmt =
connection.prepareStatement(“totalStock());pstmt.execute();

Answer: B

27) Which driver is efficient and always preferable for using JDBC applications?

- A) Type – 4
- B) Type – 1
- C) Type – 3
- D) Type – 2

Answer: A

28) JDBC facilitates to store the java objects by using which of the methods of PreparedStatement

setObject () 2. setBlob() 3. setClob()

- A) 1, 2
- B) 1,2,3
- C) 1,3
- D) 2,3

Answer: B

29) Which statement is static and synchronized in JDBC API?

- A) executeQuery()
- B) executeUpdate()
- C) getConnection()



D) prepareCall()

Answer: C

30) The JDBC-ODBC bridge is

A) Three tiered

B) Multithreaded

C) Best for any platform

D) All of the above

Answer: B

31) All raw data types (including binary documents or images) should be read and uploaded to the database as an array of

A) byte

B) int

C) boolean

D) char

Answer: A

32) The class java.sql.Timestamp has its super class as

A) java.sql.Time

B) java.util.Date

C) java.util.Time

D) None of the above

Answer: B

33) BLOB, CLOB, ARRAY and REF type columns can be updated in

A) JDBC 1.0

B) JDBC 4.0

C) JDBC 2.0

D) JDBC 3.0

Answer: D

34) Which of the following methods finds the maximum number of connections that a specific driver can obtain?

A) Database.getMaxConnections

B) Connection.getMaxConnections

C) DatabaseMetaData.getMaxConnections

D) ResultSetMetaData.getMaxConnections

Answer: C

35) Are prepared statements actually compiled?

- A) Yes, they compiled
- B) No, they are bound by the JDBC driver

Answer: A

36) When the message “No Suitable Driver” occurs?

- A) When the driver is not registered by Class.forName() method
- B) When the user name, password and the database does not match
- C) When the JDBC database URL passed is not constructed properly
- D) When the type 4 driver is used

Answer: C

37) Which driver is called as thin-driver in JDBC?

- A) Type-4 driver
- B) Type-1 driver
- C) Type-3 driver
- D) Type-2 driver

Answer: A

38) How many transaction isolation levels are defined in java.sql.Connection interface?

- A) 4
- B) 3
- C) 5
- D) 2

Answer: C

39) Which method is used to perform DML statements in JDBC?

- A) execute()
- B) executeQuery()
- C) executeUpdate()
- D) executeResult()

Answer: C

40) What is the disadvantage of Type-4 Native-Protocol Driver?

- A) At client side, a separate driver is needed for each database.
- B) Type-4 driver is entirely written in Java
- C) The driver converts JDBC calls into vendor-specific database protocol
- D) It does not support to read MySQL data

Answer: A

Unit 2 : Networking

1. Which of these package contains classes and interfaces for networking?

- A) Java.io
- B) Java.util
- C) Java.net
- D) Java.network

Answer:C

2. Which of these is a protocol for breaking and sending packets to an address across a network?

- A) TCP/IP
- B) DNS
- C) Socket
- D) proxy server

Answer:A

3. Which class is used to create servers that listen for either local client or remote client program?

- A) ServerSockets
- B) httpserver
- C) httpResponse



D) none

Answer:A

4. Which methods are commonly used in server socket class?

A) public outputstream getOutputStream()

B) public socket accept()

C) public synchronized void close()

D) none

Answer:B

5. Which method of URL class represent a URL and it has complete set of methods to manipulate URL in java?

A) Java.net.URL

B) Java.net.URLConnection

C) both A and B

D) none

Answer:A

6. Which package provides core functionality?

A) javanet

B) java.rmi

C) java.lang

D) java.math

Answer:C

7. The URLConnection class can be used to read and write data to specified resource referred by the URL.

A) true

B) false

Answer:A

8. Datagram is basically an information but there is no guarantee of its content,arrival or arrival time.

A) true

B) false

Answer:A

9. What does the java.net.InetAddress class represent?

A) Socket

B) IP address

C) Protocol

D) MAC address

Answer:B

10. The flush() method of printStream class flushes any uncleared buffers in memory?

A) true

B) false

Answer:A

11) TCP,FTP,Telnet,SMTP are example of?

- A) Socket
- B) IP address
- C) Protocol
- D) MAC address

Answer:C

12) In InetAddress class which method returns the host name of IP address?

- A) public String getHostName()
- B) public String getHostAddress()
- C) public String InetAddress getLocalHost()
- D) none

Answer:A

13) Show some networking terminology given below?

- A) All
- B) IP address
- C) Protocol
- D) MAC address

Answer:A

14) URL is an acronym for?

- A) Uniform Resource Locator
- B) Unified resource location

C) Uniform restore Locator

D) unified restore locator

Answer:A

15) Which classes are used for connection less socket programming?

A) Datagram Socket

B) Datagram packet

C) Both a and b

D) none

Answer:C

16) how many ports TCP/IP are reserved for specific protocol?

A) 10

B) 1024

C) 2048

D) 512

Answer:B

17) how many bits are in a single IP address?

A) 8

B) 16

C) 32

D) 64

Answer:C

18) Which of these class is used to encapsulate IP address and DNS?

- A) Datagram packet
- B) URL
- C) InetAddress
- D) ContentHandler

Answer:C

19) Which of these is return type of getAddress method of DatagramPacket class?

- A) findAddress()
- B) getAddress()
- C) Address()
- D) Whois()

Answer:B

20) Which of these method of DatagramPacket is used to find port number?

- A) port()
- B) getPort()
- C) findPort()
- D) receivedPort()

Answer:A

21) Which of these class is necessary to implement datagrams?



- A) DatagramPacket
- B) DatagramSocket
- C) All of the mentioned
- D) None of the mentioned

Answer: C

22) Which of these method of DatagramPacket is used to find the port number?

- A) port()
- B) getPort()
- C) findPort()
- D) recievePort()

Answer: A

23) Which of these method of DatagramPacket is used to obtain the byte array of data contained in a datagram?

- A) getData()
- B) getBytes()
- C) getArray()
- D) recieveBytes()

Answer: A

24) Which of these method of DatagramPacket is used to find the length of byte array?

- A) getnumber()
- B) length()
- C) Length()
- D) getLength()

Answer: D

Explanation: getLength returns the length of the valid data contained in the byte array that would be returned from the getData () method) This typically is not equal to length of whole byte array.

25) Which of these class must be used to send a datatgram packets over a connection?



- A) InetAddress
- B) DatagramPacket
- C) DatagramSocket
- D) All of the mentioned

Answer: D

Explanation: By using 5 classes we can send and receive data between client and server, these are InetAddress, Socket, ServerSocket, DatagramSocket, and DatagramPacket.

26) Which of these method is used to start a server thread?

- A) run()
- B) start()
- C) runThread()
- D) startThread()

Answer: A

Explanation: run() method is called when the server thread is started

27) Which of these method is called when http daemon is acting like a normal web server?

- A) Handle()
- B) HandleGet()
- C) handleGet()
- D) Handleget()

Answer: C

28) Which of these methods of httpd class is used to read data from the stream?

- A) getDta()
- B) GetResponse()
- C) getStream()
- D) getRawRequest()

Answer: D

Explanation: The getRawRequest() method reads data from a stream until it gets two consecutive newline characters.



29) Which of these method of httpd class is used to get report on each hit to HTTP server?

- A) log()
- B) logEntry()
- C) logHttpd()
- D) logResponse()

Answer: B

30) Which of these method is used to find a URL from the cache of httpd?

- A) findfromCache()
- B) findFromCache()
- C) serveFromCache()
- D) getFromCache()

Answer: C

Explanation: serveFromCache() is a boolean method that attempts to find a particular URL in the cache. If it is successful then the content of that cache entry are written to the client, otherwise it returns false.

31) Which of these variables stores the number of hits that are successfully served out of cache?

- A) hits
- B) hitstocache
- C) hits_to_cache
- D) hits.to.cache

Answer: D

32) Which of these class is used for operating on request from the client to the server?

- A) http
- B) httpDecoder
- C) httpConnection
- D) httpd



Answer: D

33) Which of these method of httpd class is used to write UrlCacheEntry object into local disk?

- A) writeDiskCache()
- B) writetoDisk()
- C) writeCache()
- D) writeDiskEntry()

Answer: A

Explanation: The writeDiskCache() method takes an UrlCacheEntry object and writes it persistently into the local disk. It constructs directory names out of URL, making sure to replace the slash(/) characters with system dependent seperatorChar.

34) Which of these is an instance variable of class httpd?

- A) port
- B) cache
- C) log
- D) All of the mentioned

Answer: D

Explanation: There are 5 instance variables : port, docRoot, log, cache and stopFlag. All of them are private.

35) Which of these is an instance variable of httpd that is a Hashtable?

- A) port
- B) cache
- C) log
- D) stopFlag

Answer: C

Explanation: Cache is the Hashtable where all of the files are cached in RAM and is initialized when the object is created.

36) What does URL stands for?

- A) Uniform Resource Locator
- B) Uniform Resource Latch



- C) Universal Resource Locator
- D) Universal Resource Latch

Answer: A

Explanation: URL is Uniform Resource Locator.

37) Which of these exception is thrown by URL class's constructors?

- A) URLNotFound
- B) URLSourceNotFound
- C) MalformedURLException
- D) URLNotFoundExpection

Answer: C

38) Which of these methods is used to know host of an URL?

- A) host()
- B) getHost()
- C) GetHost()
- D) gethost()

Answer: B

39) Which of these methods is used to know the full URL of an URL object?

- A) fullHost()
- B) getHost()
- C) ExternalForm()
- D) toExternalForm()

Answer: D

40) Which of these class is used to access actual bits or content information of a URL?

- A) URL
- B) URLDecoder
- C) URLConnection
- D) All of the mentioned

Answer: D

Unit 3 : JSP and SERVLET

1) Connection Pooling Class manages no of user requests for connections to improve the performance.

A) True

B) False

Answer:A

2) Which object of HttpSession can be used to view and manipulate information about a session?

A) session identifier

B) creation time

C) last accessed time

D) All mentioned above

Answer:D

3) Using mail API we cannot send mail from a servlet.

A) True

B) False

Answer:B

4) Which class provides stream to read binary data such as image etc from the request object?

A) ServletInputStream

B) ServletOutputStream

C) Both A & B

D) None of the above

Answer:A

5) The sendRedirect() method of HttpServletResponse interface can be used to redirect response to another resource, it may be servlet, jsp or html file.

A) True

B) False

Answer:A

6) Which of these ways used to communicate from an applet to servlet?

A) RMI Communication

B) HTTP Communication

C) Socket Communication

D) All mentioned above

Answer:D

7) Which methods are used to bind the objects on HttpSession instance and get the objects?

A) setAttribute

B) getAttribute

C) Both A & B

D) None of the above

Answer:C

8) Which type of ServletEngine is a server that includes built-in support for servlets?

- A) Add-on ServletEngine
- B) Embedded ServletEngine
- C) Standalone ServletEngine
- D) None of the above

Answer:C

9) What type of servlets use these methods doGet(), doPost(),doHead,doDelete(), doTrace()?

- A) Genereic Servlets
- B) HttpServlets
- C) All of the above
- D) None of the above

Answer:B

10) Which cookie it is valid for single session only and it is removed each time when the user closes the browser?

- A) Persistent cookie
- B) Non-persistent cookie
- C) All the above
- D) None of the above

Answer:B

11) JavaServer Pages often serve the same purpose as programs implemented using the Common Gateway Interface (CGI)

A) True

B) False

Answer:A

12) Which action tags are used in JSP for developing web application with Java Bean?

A) jsp:useBean

B) jsp:setProperty

C) jsp:getProperty

D) Both B & C

Answer:D

13) Which technology do we mix our business logic with the presentation logic?

A) Servlet

B) JSP

C) Both A & B

D) None of the above

Answer:A

14) Which is the Microsoft solution for providing dynamic Web content?

A) ASP

B) JSP

C) Both A & B

D) None of the above

Answer:A

15) A bean encapsulates many objects into one object, so we can access this object from multiple places.

A) True

B) False

Answer:A

16) Which tag is used to execute java source code in JSP?

A) Declaration Tag

B) Scriptlet tag

C) Expression tag

D) None of the above

Answer:B

17) Which JSP Action tags is used to include the content of another resource, it
May be jsp, html or servlet?

A) jsp:include

B) jsp:forward

C) jsp:plugin

D) jsp:papam

Answer:A

18) In JSP how many ways are there to perform exception handling?

- A) 3
- B) 2
- C) 4
- D) 5

Answer:B

19) In JSP page directive which attribute defines the MIME(Multipurpose Internet Mail Extension) type of the HTTP response?

- A) import
- B) Content Type
- C) Extends
- D) Info

Answer:B

20) A JSP page consists of which tags?

- A) HTML tags
- B) JSP tags
- C) Both A & B
- D) None of the above

Answer:C

21) Choose the statement that best describes the relationship between JSP and servlets:

A) Servlets are built on JSP semantics and all servlets are compiled to JSP pages for runtime usage.

B) JSP and servlets are unrelated technologies.

C) Servlets and JSP are competing technologies for handling web requests. Servlets are being superseded by JSP, which is preferred

D) The two technologies are not useful in combination.
D) JSPs are built on servlet semantics and all JSPs are compiled to servlets for runtime usage.

Answer: D

22) What is a benefit of using JavaBeans to separate business logic from presentation markup within the JSP environment?

A) It allows the JSP to access middleware.

B) It creates a cleaner role separation between the web-production team and the software development team, so that the web-production team can focus on presentation markup, while the software team can focus on building reusable software components for helping to generate dynamic displays.

C) It provides a dynamic markup environment, such that JavaBeans are integrated seamlessly with the template presentation content, in order to create the dynamic display for the client.

D) It provides the developer with full access to the Java 2 Platform Enterprise Edition (J2EE), which is unavailable from outside the JavaBean environment.

Answer: B

- 23) Why use RequestDispatcher to forward a request to another resource, instead of using a sendRedirect?
- A) Redirects are no longer supported in the current servlet API.
 - B) Redirects are not a cross-platform portable mechanism.
 - C) The RequestDispatcher does not use the reflection API.
 - D) The RequestDispatcher does not require a round trip to the client, and thus is more efficient and allows the server to maintain request state.

Ans: D

- 24) What alternatives exist to embedding Java code directly within the HTML markup of your JSP page?
- A) Moving the code into your session manager.
 - B) Moving the code into scriptlets.
 - C) Moving the code into JavaBeans and servlets.
 - D) Moving the code into a transaction manager.

Answer: C

- 25) What type of scriptlet code is better-suited to being factored forward into a servlet?
- A) Code that deals with logic that is common across requests.
 - B) Code that deals with logic that is vendor specific
 - C) Code that deals with logic that relates to database access.
 - D) Code that deals with logic that relates to client scope.

Answer: A

- 26) Choose the statement that best describes how to connect JSP pages and Enterprise JavaBeans (EJBs):
- A) Lookup the EJBs from within a JSP, but use the EJBs from within a basic JavaBean.
 - B) Lookup and use the EJBs from a separate business delegate. The JavaBeans that work with JSP pages are clients to these business delegates and know nothing about EJB specifics.
 - C) Lookup and use the EJBs from within a JSP page, but only as remote references.
 - D) Lookup the EJBs from within a servlet, delegating usage to specific JSP pages.

Answer: B

- 27) Are custom tags available in JSP 1.0? If not, how else might you implement iteration from within a JSP?
- A) Yes, but the only tags available relate to database access.
 - B) No. To iterate over a collection of values, one must use scriptlet code.
 - C) No, but there is a standard <iterate> tag that may be used
 - D) Yes, but custom tags will not help developers create tags for use in iterating over a collection.

Answer: B

- 28) What is the initial contact point for handling a web request in a Page-Centric architecture?
- A) A JSP page.
 - B) A JavaBean.
 - C) A servlet.
 - D) A session manager.

Answer: A

29) What is the difference between doing an include or a forward with a RequestDispatcher?

A) The forward method transfers control to the designated resource, while the include method invokes the designated resource, substitutes its output dynamically in the display, and returns control to the calling page.

B) The two methods provide the same functionality, but with different levels of persistence.

C) The forward method is deprecated as of JSP 1.1 and the include method should be used in order to substitute portions of a dynamic display at runtime.

D) The include method transfers control to a dynamic resource, while the forward method allows for dynamic substitution of another JPS pages output, returning control to the calling resource.

Answer: A

30) What line of code below might be combined in the same JSP page with a validation guard (for example, `<% bean.validationGuard(); %>`), in order to create an alternate flow of control for scenarios in which exceptions arise. The validationGaurd method might throw an exception, which should cause the flow of control to continue in another user-defined page (assume JSP 1.0).

A) `<jsp:error page="errorPage.jsp" guard="true" />`

B) `<%@ page language="java" buffer="8k" %>`

C) `<jsp:useBean id="bean" class="examples.Bean" scope="request" />`

D) `<%@ page language="java" errorPage="errorPage.jsp" buffer="8k" %>`

Answer: D

- 31) JSP stands for ___ ?
A) Java Server Pages
B) Java Service Page
Answer: A
- 32) What is a Hidden Comment in JSP?
A) `<%-- %>`
B) `<%- %>`
Answer: A
- 33) What is a Expression in JSP?
A) `<%= %>`
B) `<% %>`
Answer: A
- 34) `pageContext` is an implicit object in jsp.
A) TRUE
B) FALSE
Answer: A
- 35) `config` is an implicit object in jsp.
A) TRUE
B) FALSE
Answer: A
- 36) What is the result of adding following header?
`response.addDateHeader("Expires",-1);`
A) To ensure the page does not get cached at the client browsers.
B) To ensure the page is accessible on any date and page doesnt get expireD)
Answer: A
- 37) Given following form:
`<form action="register.do">`
`<input type="text" name="Name">`
`<input type="submit" value="Save">`
`</form>`

and a servlet code:

```
public class RegisterServlet extends HttpServlet{  
public void doPost(HttpServletRequest req, HttpServletResponse res) {  
// registration logic goes here  
return;  
}  
}
```

with the above code, assuming the servlet is configured properly and registration logic works good, trying to register user fails.

Choose one reason.

- A) The registration fails because, above servlet dont have doGet() method)
- B) The registration fails because, above servlet dont have service() method)

Answer: A

- 38) Which of the following statements is true regarding the scope of 'request' in JSP?
- A) Objects with request scope are accessible from pages processing the same request where they were created)
 - B) All references to the object shall be released after the request is processed; in particular, if the request is forwarded to a resource in the same runtime, the object is still reachable.
 - C) References to objects with request scope are stored in the request object.
 - D) All of the above.

Answer: A

- 39) URL encoding is the method of replacing all the spaces and other extra characters into their corresponding _____ Characters?
- A) Hex
 - B) Binary
 - C) Octal
 - D) Decimal

Answer: A

- 40) Which of the scripting of JSP not putting content into service method of the converted servlet?
- A) Declarations
 - B) Scriptlets
 - C) Expressions
 - D) None of the above

Answer: A



Unit 4 : Multithreading

1) In java multi-threading, a thread can be created by

- a. Extending Thread class
- b. Implementing Runnable interface
- c. Using both
- d. None

Answer:C

2) Which method is called internally by Thread start() method?

- a. execute()
- b. run()
- c. launch()
- d. main()

Answer:B

3) What is maximum thread priority in Java

- a. 10
- b. 12
- c. 5
- d. 8

Answer:A

4) Which method must be implemented by a Java thread?

- a. run()
- b. execute()
- c. start()
- d. None

Answer:A

Q5) Number of threads in below java program is

```
public class ThreadExtended extends Thread {  
    public void run() {  
        System.out.println("\nThread is running now\n");  
    }  
    public static void main(String[] args) {  
        ThreadExtended threadE = new ThreadExtended();  
        threadE.start();  
    }  
}
```

- a) 0
- b) 1
- c) 2
- d) 3

Answer:C

Q6) Execution of a java thread begins on which method call?

- a) Start ()
- b) Run ()
- c) Execute ()
- d) Launch ()

Answer:A

Q7) How many ways a thread can be created in Java multithreading?

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

Answer:B

Q8) Which statements is/are correct

- a) On calling Thread start () method a new thread get created
- b) Thread start () method call run () method internally
- c) Thread run () method can also be called directly to create thread
- d) All correct

Answer:A & B

Q9) Which method is used to make main thread to wait for all child threads

- a) Join ()
- b) Sleep ()
- c) Wait ()
- d) Stop ()

Answer:A

Q10) Default value of a java thread is

- a) 0
- b) 1
- c) 5
- d) 10

Answer:C

Q11) If a priority of a java thread is 3 then the default priority of its child thread will be

- a) 0
- b) 1
- c) 5
- d) 3

Answer:D

Q12) Which method is used to check if a thread is running?

- a) isAlive()
- b) run ()
- c) alive ()
- d) keepAlive()

Answer:A

Q13) True statement about process and thread is/are

- a) If a child process crashes all main process will also be crashed
- b) If a child thread is crash entire process will crash
- c) Threads have their own memory stack
- d) Each process has different virtual space

Answer:B,C,D

Q14) Min and Max priority of a thread in Java multithreading are

- A) 1, 10
- B) 0,10
- C) 0,255
- D) 1,256

Answer:A

Q15) Which method we implement from Runnable interface?

- a) Run ()
- b) Start ()
- c) Execute ()
- d) call ()

Answer:A

Q16) Daemon thread runs in

- a) Background
- b) Foreground
- c) Both
- d) None

Answer:A

Q17) Which method is used to create a daemon thread?

- a) setDaemon(boolean value)
- b) setThread(boolean value)
- c) createDaemon(boolean value)
- d) makeDeamon(boolean value);

Answer:A

Q18) To create a daemon thread

- a) First thread setDaemon() is called then start()
- b) First thread start() is called then setDaemon()
- c) Call thread start() and setDaemon() in any order
- d) All correct

Answer:A

Q19) Which method is used to wait for child threads to finish in Java?

- a) Wait ()
- b) Sleep ()
- c) Join ()
- d) isAlive()

Answer:C

Q20) Which will contain the body of the thread in Java?

- a) Start()
- b) Run()
- c) Main()
- d) Execute()

Answer:B

21) What requires less resources?

- A) Thread
- B) Process
- C) Thread and Process
- D) Neither Thread nor Process

Answer: a

Explanation: Thread is a lightweight and requires less resources to create and exist in the process. Thread shares the process resources.

22) What does not prevent JVM from terminating?

- A) Process
- B) Daemon Thread
- C) User Thread
- D) JVM Thread

Answer: B

Explanation: Daemon thread runs in the background and does not prevent JVM from terminating. Child of daemon thread is also daemon thread.

23) What decides thread priority?

- A) Process
- B) Process scheduler
- C) Thread
- D) Thread scheduler

Answer: D

Explanation: Thread scheduler decides the priority of the thread execution. This cannot guarantee that higher priority thread will be executed first, it depends on thread scheduler implementation that is OS dependent.

24) What is true about time slicing?

- A) Time slicing is OS service that allocates CPU time to available runnable thread
- B) Time slicing is the process to divide the available CPU time to available runnable thread
- C) Time slicing depends on its implementation in OS
- D) Time slicing allocates more resources to thread

Answer: B

Explanation: Time slicing is the process to divide the available CPU time to available runnable thread.

25) Deadlock is a situation when thread is waiting for other thread to release acquired object.

- A) True
- B) False

Answer: a

Explanation: Deadlock is java programming situation where one thread waits for an object lock that is acquired by other thread and vice-versa.

26) What should not be done to avoid deadlock?

- A) Avoid using multiple threads
- B) Avoid hold several locks at once
- C) Execute foreign code while holding a lock
- D) Use interruptible locks

Answer: c

Explanation: To avoid deadlock situation in Java programming do not execute foreign code while holding a lock.

27) What is true about threading?

- A) run() method calls start() method and runs the code
- B) run() method creates new thread
- C) run() method can be called directly without start() method being called
- D) start() method creates new thread and calls code written in run() method

Answer: D

Explanation: start() eventually calls run() method. Start() method creates thread and calls the code written inside run method.

28) Which of the following is a correct constructor for thread?

- A) Thread(Runnable a, String str)
- B) Thread(int priority)
- C) Thread(Runnable a, int priority)
- D) Thread(Runnable a, ThreadGroup t)

Answer: a

Explanation: Thread(Runnable a, String str) is a valid constructor for thread. Thread() is also a valid constructor.

29) Which of the following stops execution of a thread?

- A) Calling SetPriority() method on a Thread object
- B) Calling notify() method on an object
- C) Calling wait() method on an object
- D) Calling read() method on an InputStream object

Answer: B

Explanation: notify() wakes up a single thread which is waiting for this object.

30) Which of the following will ensure the thread will be in running state?

- A) yield()
- B) notify()
- C) wait()
- D) Thread.killThread()

Answer: c

Explanation: wait() always causes the current thread to go into the object's wait pool. Hence, using this in a thread will keep it in running state.

31) What is multithreaded programming?

- A) It's a process in which two different processes run simultaneously
- B) It's a process in which two or more parts of same process run simultaneously
- C) It's a process in which many different process are able to access same information
- D) It's a process in which a single process can access information from many sources

Answer: B

Explanation: Multithreaded programming a process in which two or more parts of the same process run simultaneously.

32) Which of these are types of multitasking?

- A) Process based
- B) Thread based
- C) Process and Thread based
- D) None of the mentioned

Answer: c

Explanation: There are two types of multitasking: Process based multitasking and Thread based multitasking.

33) Thread priority in Java is?

- A) Integer
- B) Float

C) double

D) long

Answer: a

Explanation: Java assigns to each thread a priority that determines how that thread should be treated with respect to others. Thread priority is integers that specify relative priority of one thread to another.

34) What will happen if two threads of the same priority are called to be processed simultaneously?

A) Any one will be executed first lexographically

B) Both of them will be executed simultaneously

C) None of them will be executed

D) It is dependent on the operating system

Answer: D

Explanation: In cases where two or more threads with same priority are competing for CPU cycles, different operating systems handle this situation differently. Some execute them in a time sliced manner some depending on the thread they call.

35) Which of these statements is incorrect?

A) By multithreading CPU idle time is minimized, and we can take maximum use of it

B) By multitasking CPU idle time is minimized, and we can take maximum use of it

C) Two threads in Java can have the same priority

D) A thread can exist only in two states, running and blocked

Answer: D

Explanation: Threads exist in several states, a thread can be running, suspended, blocked, terminated & ready to run.

36) What will be the output of the following Java code?

```
1. class multithreaded_programing
2. {
3.     public static void main(String args[])
4.     {
5.         Thread t = Thread.currentThread();
6.         System.out.println(t);
7.     }
```

8. }

- A) Thread[5,main]
- B) Thread[main,5]
- C) Thread[main,0]
- D) Thread[main,5,main]

Answer: D

Explanation: None.

Output:

```
$ javac multithreaded_programing.java
$ java multithreaded_programing
Thread[main,5,main]
```

37) What is the priority of the thread in the following Java Program?

```
1. class multithreaded_programing
2. {
3.     public static void main(String args[])
4.     {
5.         Thread t = Thread.currentThread();
6.         System.out.println(t);
7.     }
8. }
```

- A) 4
- B) 5
- C) 0
- D) 1

Answer: B

Explanation: The output of program is Thread[main,5,main], in this priority assigned to the thread is 5. It's the default value. Since we have not named the thread they are named by the group to they belong i:e main method.

Output:

```
$ javac multithreaded_programing.java
$ java multithreaded_programing
Thread[main,5,main]
```

38) What is the name of the thread in the following Java Program?

```
1. class multithreaded_programing
2. {
```

```
3.    public static void main(String args[])
4.    {
5.        Thread t = Thread.currentThread();
6.        System.out.println(t);
7.    }
8. }
```

- A) main
- B) Thread
- C) System
- D) None of the mentioned

Answer: a

Explanation: The output of program is Thread[main,5,main], Since we have not explicitly named the thread they are named by the group to they belong i:e main method. Hence they are named 'main'.

Output:

```
$ javac multithreaded_programing.java
$ java multithreaded_programing
Thread[main,5,main]
```

39) Which method is used to wait for child threads to finish in Java?

- e) Wait ()
- f) Sleep ()
- g) Join ()
- h) isAlive()

Answer:C

40) Which will contain the body of the thread in Java?

- e) Start()
- f) Run()
- g) Main()
- h) Execute()

Answer:B

Unit 5 : java Beans and RMI

1. Which of the following is not an Enterprise Beans type?

- a) Doubleton
- b) Singleton
- c) Stateful
- d) Stateless

Answer:A

2. 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

Answer:B

3. Which file separator should be used by MANIFEST file?

- a) /
- b) \
- c) –
- d) //

Answer:A



4. Which of the following is correct error when loading JAR file with duplicate name?

- a) java.io.NullPointerException
- b) java.lang.ClassNotFound
- c) java.lang.ClassFormatError
- d) java.lang.DuplicateClassError

Answer:C

5. Java Beans are extremely secured?

- a) True
- b) False

Answer:B

6. Which of the following is not a feature of Beans?

- a) Introspection
- b) Events
- c) Persistence
- d) Serialization

Answer:D

7. What is the attribute of java bean to specify scope of bean to have single instance per Spring IOC?

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

Answer:B

8. Which attribute is used to specify initialization method?

- a) init
- b) init-method
- c) initialization
- d) initialization-method

Answer:B

9. Which attribute is used to specify destroy method?

- a) destroy
- b) destroy-method
- c) destruction
- d) destruction-method

Answer:B

10. How to specify autowiring by name?

- a) @Qualifier
- b) @Type
- c) @Constructor
- d) @Name

Answer:A

11. What is Remote method invocation (RMI)?

- a) RMI allows us to invoke a method of java object that executes on another machine
- b) RMI allows us to invoke a method of java object that executes on another Thread in multithreaded programming
- c) RMI allows us to invoke a method of java object that executes parallely in same

machine

d) None of the mentioned

Answer:A

12. Which of these package is used for remote method invocation?

a) java.applet

b) java.rmi

c) java.lang.rmi

d) java.lang.reflect

Answer:B

13. Which of these methods are member of Remote class?

a) checkIP()

b) addLocation()

c) AddServer()

d) None of the mentioned

Answer:D

14. Which of these Exceptions is thrown by remote method?

a) RemoteException

b) InputOutputException

c) RemoteAccessException

d) RemoteInputOutputException

Answer:A

15. Which of these class is used for creating a client for a server-client operations?

a) serverClientjava

- b) Client.java
- c) AddClient.java
- d) ServerClient.java

Answer:C

16. Which of these package is used for all the text related modifications?

- a) Java.text
- b) Java.awt
- c) java.lang.text
- d) java.text.modify

Answer:A

17. What will be the output of the following Java code?

```
import java.lang.reflect.*;
class Additional_packages
{
    public static void main(String args[])
    {
        try
        {
            Class c = Class.forName("java.awt.Dimension");
            Constructor constructors[] =
            C.getConstructors(); for (int i = 0; i <
            constructors.length; i++)
            System.out.println(constructors[i]);
        }
    }
}
```

```
}  
    catch (Exception e)  
    {  
        System.out.print("Exception");  
    }  
}  
}
```

- A) Program prints all the constructors of 'java.awt.Dimension' package
- B) Program prints all the possible constructors of class 'Class'
- C) Program prints "Exception"
- D) Runtime Error

Answer:A

18. What will be the output of the following Java code?

```
import java.lang.reflect.*;  
class Additional_packages  
{  
    public static void main(String args[])  
    {  
        try  
        {  
            Class c = Class.forName("java.awt.Dimension");  
            Field fields[] = C.getFields();  
            for (int i = 0; i < fields.length; i++)
```

```
        System.out.println(fields[i]);
    }
    catch (Exception e)
    {
        System.out.print("Exception");
    }
}
}
```

- A) Program prints all the constructors of 'java.awt.Dimension' package
- B) Program prints all the methods of 'java.awt.Dimension' package
- C) Program prints all the data members of 'java.awt.Dimension' package
- D) program prints all the methods and data member of 'java.awt.Dimension' package

Answer:C

19. What is the length of the application box made in the following Java program?

```
import java.awt.*;
import java.applet.*;
public class myapplet extends Applet
{
    Graphic g;
    g.drawString("A Simple Applet",20,20);
}
```

- A) 20
- B) Default value
- C) Compilation Error
- D) Runtime Error

Answer:C

20. What will be the output of the following Java program?

```
import java.lang.reflect.*;
class Additional_packages
{
    public static void main(String args[])
    {
        try
        {
            Class c =
                Class.forName("java.awt.Dimension");
            Method methods[] = c.getMethods();
            for (int i = 0; i < methods.length; i++)
                System.out.println(methods[i]);
        }
        catch (Exception e)
        {
            System.out.print("Exception");
        }
    }
}
```

```
}  
  
}
```

- A) Program prints all the constructors of 'java.awt.Dimension' package
- B) Program prints all the methods of 'java.awt.Dimension' package
- C) Program prints all the data members of 'java.awt.Dimension' package
- D) program prints all the methods and data member of 'java.awt.Dimension' package

Answer:B

21) In a RMI Client Program, what are the exceptions which might have to handled?

- A) RemoteException
- B) NotBoundException
- C) MalformedURLException
- D) All mentioned above

Answer:D

22) Which is a one-way communication only between the client and the server and it is not a reliable and there is no confirmation regarding reaching the message to the destination?

- A) TCP/IP
- B) UDP
- C) Both A & B
- D) None of the above

Answer:B

23) RMI Architecture consists of how many layers?

- A) 5
- B) 3
- C) 4
- D) 2



Answer:C

24) An RMI Server is responsible for,

- A) Creating an instance of the remote object
- B) Exporting the remote object
- C) Binding the instance of the remote object to the RMI registry
- D) All mentioned above

Answer:D

25) In RMI Distributed object applications need to do?

- A) Locate remote objects
- B) Communicate with remote objects
- C) Load class definitions for objects that are passed around
- D) All mentioned above

Answer:D

26) In RMI applications which program obtains a remote reference to one or more remote objects on a server and then invokes methods on them?

- A) Server
- B) Client
- C) Both A & B
- D) None of the above

Answer:B

27) In RMI program the following example shows the,

```
import java.rmi.*;
```

```
public interface Adder extends Remote{
```

```
    public int add(int x,int y)throws RemoteException;  
}
```

- A) Create and start the remote application
- B) Create and start the client application
- C) Create the remote interface
- D) Provide the implementation of the remote interface



Answer:C

28) In RMI program the following two steps are used to,
Either extend the UnicastRemoteObject class,
the exportObject() method of the UnicastRemoteObject class,

- A) Provide the Implementation of the remote interface
- B) Create the remote interface
- C) Create and start the remote application
- D) Compile the implementation class and create the stub and skeleton objects using the rmic tool

Answer:A

29) Which package is used for Remote Method Invocation (RMI)?

- A) java.lang.rmi
- B) java.lang.reflect
- C) java.applet
- D) java.rmi

Answer:D

30) Java supports RMI, RMI Stands for?

- A) Random Method Invocation
- B) Remote Memory Interface
- C) Remote Method Invocation
- D) Random Method Invocation

Answer:C

31) RMI uses a layered architecture; each of the layers could be enhanced or replaced without affecting the rest of the system?

- A) True
- B) False

Answer:A

32) RMI is a server-side component; It is not required to be deployed on the server?

- A) True
- B) False



Answer:B

33) Which is built on the top of socket programming?

- A) EJB
- B) RMI
- C) Both A & B
- D) None of the above

Answer:B

34) RMI and EJB, provides services to access an object running in another JVM (known as remote object)?

- A) True
- B) False

Answer:A

35) In RMI Distributed object applications need to do?

- A) Locate remote objects
- B) Communicate with remote objects
- C) Load class definitions for objects that are passed around
- D) All mentioned above

Answer:D

36) In RMI applications which program obtains a remote reference to one or more remote objects on a server and then invokes methods on them?

- A) Server
- B) Client
- C) Both A & B
- D) None of the above

Answer:B

37) In RMI program the following example shows the,

```
import java.rmi.*;
public interface Adder extends Remote{

public int add(int x,int y)throws RemoteException;
}
```



- A) Create and start the remote application
- B) Create and start the client application
- C) Create the remote interface
- D) Provide the implementation of the remote interface

Answer:C

38) In RMI program the following two steps are used to,
Either extend the UnicastRemoteObject class,
the exportObject() method of the UnicastRemoteObject class,

- A) Provide the Implementation of the remote interface
- B) Create the remote interface
- C) Create and start the remote application
- D) Compile the implementation class and create the stub and skeleton objects using the rmic tool

Answer:A

39) Which package is used for Remote Method Invocation (RMI)?

- A) java.lang.rmi
- B) java.lang.reflect
- C) java.applet
- D) java.rmi

Answer:D

40) Java supports RMI, RMI Stands for?

- A) Random Method Invocation
- B) Remote Memory Interface
- C) Remote Method Invocation
- D) Random Method Invocation

Answer:C