<u>NOTE</u>: Keep your resourse limited and the best strategy to score 100 percentage in the test is to keep on revising and revising. *Important link to be refer only after completing Chapra dumps 7-12 times*.

<u>Authenticity</u>: Chapra Study materials has help nearly 4 batches student to pass the test. Highly Trusted notes.

Típs: During 1st module: Golden Nitin + VV Important

During 2nd module: Golden Nitin + VV Important + Golden Meerut

JDBC 30 Questions + Moradabad

During 3rd module: 1st module + 2nd module

Important link: www.careerride.com

www.sanfoundry.com

www.javabysri.blogspot.in/2012/06/jdbc-objective-questions.html

#### IAVA CORE: Final Assessment

<u>Contribution</u>: Golden Nitin Study Materials, Golden Meerut Study Material, Very Very Important Question, Moradabad JDBC Study Materials, Lala Dumps and Final Questions.

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JDBC 30 QUESTIONS: (Refer careerride.com jdbc question for practice)

#### Ques1)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.

#### Ques2)Which of the following are needed for loading a database driver in JDBC?

- a)registerDriver() method
- b)Class.forName()
- c)Both A and B
- d)getConnection()

#### Ques3)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

# Ques4)To execute a stored procedure"Total stock" in a database server which of the following is used?

- a)Statement
- b)Callable Statement
- c)Stored Procedure Statement
- d)Prepare Statement

#### Ques5)Which of the following is false as far as Type4 driver is concerned?

- 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.

#### Ques6)Which statement is static and synchronized in JDBC API?

- a)executeQuery()
- b) executeUpdate()
- c) getConnection()
- d) prepareCall()

### Ques7)Which of the following stament is false as far as different type is concern in JDBC?

- a)Regular Statement
- b)Prepared Statement
- c)Callable Statement
- d)Interim Statement

### Ques8)All raw data types should be read and uploaded to the database as an array of?

- a)byte
- b)int
- c)boolean
- d)char

#### Ques9)Which are the new features adding in to the JDBC 4.0?

- (a) Auto-loading of JDBC driver class
- (b)Connection management enhancements
- (c)Support for RowId SQL type
- (d)All of the above

#### Ques10)Which method is used to perform the DML statement in JDBC?

a)execute()

b)executeQuery()

c)executeUpdate()

d)executeResult()

#### Ques11)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.

# Ques12)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

#### Ques13)Which JDBC driver Type(s) can be used in either applet or servlet code?

- a) Both Type 1 and Type 2
- b) Both Type 1 and Type 3
- c) Both Type 3 and Type 4
- d) Type 4 only

### Ques14)Which JDBC driver Type(s) can you use in a three-tier architecture and if the Web server and the DBMS are running on the same machine?

- a) Type 1 only
- b) Type 2 only
- c) Both Type 3 and Type 4
- d) All of Type 1, Type 2, Type 3 and Type 4

#### Ques15) ODBC is not appropriate for direct use from java because it uses a .....

- a) C interface
- b) C# interface
- c) java interface
- d) Both A and C

#### Ques16) Which statements about JDBC are true?

- a) JDBC is an API to connect to relational-, object- and XML data sources
- b) JDBC stands for Java DataBase Connectivity
- c) JDBC is an API to access relational databases, spreadsheets and flat files
- d) JDBC is an API to bridge the object-relational mismatch between OO programs and relational databases

## Ques17) Which type of driver converts JDBC calls into the network protocol used by the database management system directly?

- a) Type 1 driver
- b) Type 2 driver

- c) Type 3 driver
- d) Type 4 driver

#### Ques18) Which type of Statement can execute parameterized queries?

- a) PreparedStatement
- b) ParameterizedStatement
- c) ParameterizedStatement and CallableStatement
- d) All kinds of Statements (i.e. which implement a sub interface of Statement)

#### Ques19) How can you retrieve information from a ResultSet?

- a) By invoking the method get(..., String type) on the ResultSet, where type is the database type
- b) By invoking the method get(..., Type type) on the ResultSet, where Type is an object which represents a database type.
- c) By invoking the method getValue(...), and cast the result to the desired Java type.
- d) By invoking the special getter methods on the ResultSet: getString(...), getBoolean (...), getClob(...),...

#### Ques20) What statements are correct about JDBC transactions?

- a) A transaction is a set of successfully executed statements in the database
- b) A transaction is finished when commit() or rollback() is called on the Connection object,
- c) A transaction is finished when commit() or rollback() is called on the Transaction object
- d) A transaction is finished when close() is called on the Connection object.

#### Ques21) What happens if you call deleteRow() on a ResultSet object?

- a) The row you are positioned on is deleted from the ResultSet, but not from the database.
- b) The row you are positioned on is deleted from the ResultSet and from the database.
- c)The result depends on whether the property synchronizeWithDataSource is set to true or false
- d) You will get a compile error: the method does not exist because you can not delete rows from a ResultSet

### Ques22) The JDBC-ODBC Bridge supports multiple concurrent open statements per connection?

- a) True
- b) False

```
Ques23) 84. try {
85. ResourceConnection con = resourceFactory.getConnection();
86. Results r = con.query("GET INFO FROM CUSTOMER");
87. info = r.getData();
88. con.close();
89. } catch (ResourceException re) {
90. errorLog.write(re.getMessage());
91. }
92. return info;
```

#### Which statement is true if a ResourceException is thrown on line 86?

- a) Line 92 will not execute.
- b) The connection will not be retrieved in line 85.
- c) The resource connection will not be closed on line 88.
- d) The enclosing method will throw an exception to its caller

#### Ques24) Which packages contain the JDBC classes?

- a)java.jdbc and javax.jdbc b)java.jdbc and java.jdbc.sql
- c) java.sql and javax.sql
- d) java.rdb and javax.rdb

### Ques25)How can you execute DML statements (i.e. insert, delete, update) in the database?

- a) By making use of the InsertStatement, DeleteStatement or UpdateStatement classes
- b) By invoking the execute(...) or executeUpdate(...) method of a normal Statement object or a sub-interface object thereof
- c) By invoking the executeInsert(...), executeDelete(...) or executeUpdate(...) methods of the DataModificationStatement object.
- d) By making use of the execute(...) statement of the DataModificationStatement object.

#### Ques25)What is, in terms of JDBC, a DataSource?

a) A DataSource is the basic service for managing a set of JDBC drivers.

- b) A DataSource is the Java representation of a physical data source.
- c) A DataSource is a registry point for JNDI-services.
- d) A DataSource is a factory of connections to a physical data source.

#### Ques26) Are prepared statement actually compiled?

- a)Yes,They complied
- b)No,they are bound by JDBC driver.

#### Ques27)What is correct about DDL statements (create, grant,...)

- a) DDL statements are treated as normal SQL statements, and are executed by calling the execute() method on a Statement (or a sub interface thereof) object
- b) To execute DDL statements, you have to install additional support files
- c) DDL statements can not be executed by making use of JDBC, you should use the native database tools for this.
- d) Support for DDL statements will be a feature of a future release of JDBC'

#### Ques28)Which of the following allows non repeatable read in JDBC Connection?a

- a)TRANSACTION\_READ\_UNCOMMITTED
- b) TRANSACTION\_READ\_COMMITTED
- c) TRANSACTION\_SERIALIZABLE
- d) TRANSACTION\_REPEATABLE\_READ

#### Ques29)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

#### Ques30) Which driver is called as Thin-driver in JDBC?

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

### Golden Nitin Study Materials

1. How to import all package?

```
Answer: import java.*
```

2. Which of the following is correct about junit?

```
Answer: - It is an open source framework.

- It provides Annotation to identify the test methods.

- It provides Assertions for testing Expected results
```

3. Pattern which follows sequential order?

```
Answer: Iterator
```

4. The pattern involves a single class which is responsible to create an object while making sure that only single object gets created?

```
Answer: Singleton
```

```
5. class Animal{
        public String noise(){
        return "peep";
        }
```

```
}
          class Dog extends Animal
              public String noice()
          {
              return "bark";
          class cat extends Animal
          {
              public String noise()
          {
              return "meow";
         Animal animal = new Dog();
         Cat cat= (Cat)animal;
         SOP(cat.noise());
Answer: Exception is thrown at the Runtime
     6. class output {
       public static void main(String args[]){
       String buffer s1 = new StringBuffer("Hello world")
       s1.insert(6,"Good");
       SOP(s1);
       Answer: Hello Goodworld
```

```
7. SOP (^{\prime}1'+new integer (2) +3);
Answer: 123
 8. A team of programmer is involved in reviewing a proposed design for a new utility
     class after some discussion.....
   Answer: weak encapsulation
 9. Man dog best friend
   Answer: class man private dog best friend;
 10. Bluemix deploy cloud foundry
   Answer: cf push
 11. Class vector {
   PSVM(String args[])
   Vector obj = new vector(4,2);
   Obj.add element(new Interger(3));
   Obj.add element(new Interger(2));
   Obj.add element(new Interger(5));
   Obj.removeAll(obj);
   SOP(obj.isEmpty());
   Answer : True
 12. <%@ taglib .....%>
   <c:set var = "j" value = "4,3,2,1" />
```

<c:foreach item = "\${j}" var = "item" varstatus = "status">

<c:if test = "\${status.first}">

```
<c:out value = "${status. Index}" default = "abc"/>
   </c:if>
   </c:foreach>
   Answer: 1
  13. StringBuffer s1 = new StringBuffer("Hello");
   StringBuffer s2 = reverse(s1);
   SOP(s2);
   Answer : olleH
  14. Chain...cf..whch filter user?
Answer: cf.doFilter()
  15. How to access the resultsetobject?
   Answer: by using special getter method.....
  16. X= something
   While(X < 10 \& x > 24)
   Answer: condition false
  17. RunWith(Suit.class)
   @SuiteClasses({
   annotationTest.class,
   AssertTest.class
   CalculateTest.class.
   EmployeeTest.class})
   Public class SuiteTest{
   //the class remains empty
   //used only as a holder for the above annotation
   What is the sequence of junit test?
   Answer: AnnotationTest, AsserTest, CalculateTest, EmployeeTest
  18. Public static void main(String args[])
```

```
{
 List<string> List = new ArrayList<string>();
 //add string
 List.add("cricket");
 List.add("football");
 List.add("hockey");
 Iterator it = List.iterator();
 While(it.hasNext())
 String s = it.next();
 Which pattern
 Answer : Iterator
19. Java.util.enumeration is an example of which pattern?
 Answer : Iterator
20. Aggregation represent in UML?
 Answer: hollow diamond on the collection side
21. Composition represent in UML?
 Answer: Filled diamond on the side of the collection
22. Generalization represent in UML?
 Answer: hollow triangle shape on the superclass end of the line
23. Dependency represent in UML?
 Answer: dotted line followed by
24. 1..* specify about relationship?
 Answer: At least one instance
```

#### 25. O..1 Specify about relationship?

Answer: Zero or one instance. The notation n..m indicate n to m instances.

26. The relationship between the object and component parts in UML diagram are represented by -----. Answer: Aggregation 27. Class x implements Runnable { Public static void main(String args[]) { /\*missing code? \*/ Public void run() { }} Which of the following line of code to start thread? Answer: x run = new x();Thread t = new Thread(run);t.start(); 28. PSVM() { try{ int a = 5; int b = 0; int c = a/b; SOP("World"); Catch(exception e) SOP("hello"); }} Answer : hello 29. Int a = 10;

```
Int b = 0;
 Int c = a/b;
 SOP("c");
 Output:
 Answer: runtime exception not arithmetic exception
30. Which will contain the body of the thread?
 Answer : run()
31. Which two of the following methods are defined in class thread?
 1. Start() 2. Wait() 3. Notify() 4. Run()
 Answer: start() and run()
32. <%@ ...... %>
 <c.foreach var = "item" begin ="0" end ="12" step = "3">
 Answer: 0,3,6,9,12
33. A user types on URL which method is called?
 Anser: get Method
34. The method getWriter return an object of type PrintWriter?
 Answer: HttpServletResponse
35. To send binary o/p?
 Answer: getOutputStream
36. Unit testing?
 Answer: Single Entity
37. Assume the following method is properly synchronized and called from a thread A on
   an object B.
 wait(2000);
```

After calling this method, when will the thread A become a candidate to get another turn at the CPU?

- A. After thread A is notified, or after two seconds.
- B. After the lock on B is released, or after two seconds.
- C. Two seconds after thread A is notified.
- D. Two seconds after lock B is released.
- 38. Invoked only once?

Answer: @BeforeClass

39. Invoked before each test?

Answer: @Before

40. Invoked after each test?

Answer : (a)After

41. Only once invoked finishing all tests?

Answer: <u>@AfterClass</u>

- 42. Which of the following represents the XML equivalent of this statement <%@ include file="a.jsp"%> . Select the one correct statement
  - a. <jsp:include file="a.jsp"/>
  - b. <jsp:include page="a.jsp"/>
  - c. <jsp:directive.include file="a.jsp"/>

There is no XML equivalent of include directive.

43. What will be proper order of session?

Answer: loading, instantiation, init, service, destroy

44. Proper order of access modifier

Answer: private default protected public

- 45. If the options are iterator servlet etc answer will be iterator.
- 46. If the options will be like

New class foo {print(.....)},

Answer: new foo() {print(.....)}

47. Insert(6, "Good")

Answer: Hello Good Word

48. Class {

```
PSVM
 String str = new String( "....");
 Do{
 str = "Hello Stop World";
 SOP(str);
 }
 While(str!=Strong);
 Answer: Hello Stop World
49. When we use command design pattern
 Answer. when history of requests is needed
50. In use case diagram actor represents?
 Answer: An actor represent a roll that an outsider takes on when intracting with the
 business system for instance, an action can be a customer, a business partner, a supplier
 or another business system
51. In use case diagram actor represents _____?
 Answer: An actor represents a role that an outsider takes on when interacting with the
 business system.
  For instance, an actor can be a customer, a business partner, a supplier, or another
 business system.
52. Common mechanisms for session tracking
 Ans.
    User authorization
    Hidden fields
    URL rewriting
    Cookies
    Session tracking API
53. The code snippet below is an example of which of the following?
   Long myLong = 211;
```

```
A Autoboxing
     B Autounboxing
     C Autocasting
     D Autoinstancing
     Answer: Autoboxing
 54. which listener is used to log the...
   Answer: ServletRequestListner
 55. when you want to know attribute has added removed or replaced?
   Answer: HttpSessionAttributeListner
 56. when you want to know how many users are there?
   Answer: HttpSessionListner
 57. listener is noticed initialized and destroyed?
Answer: ServletContextListner
 58. clear(2) in the string of index 2
   Answer : 0134
 59. Authentication mechanishm in deployment descriptor?
   Answer: login-config.
 60.
    1. interface TestA { String toString(); }
   2. public class Test {
   3. public static void main(String[] args) {
   4. System.out.println(new TestA() {
   5. public String toString() { return "test"; }
   6. });
   7. }
   8. }
   What is the result?
   A. test
   B. null
   C. An exception is thrown at runtime.
   D. Compilation fails because of an error in line 1.
   E. Compilation fails because of an error in line 4.
   F. Compilation fails because of an error in line 5.
```

```
Answer: A
61.2 + 3*5
 Answer 17 integer
  17 byte
 25 byte
 25 integer
62. Identify the correct signature of the main method?
 Answer: public static void main(String args[])
63. public static void main(String[] args)
  {
 GenericTest<String> arr[] = new GenericTest[5];
                                                             //line 1
                                                      //line 2
 arr[0] = new GenericTest("Java");
 arr[1] = new GenericTest(1);
                                                      //line 3
 arr[2] = (GenericTest<String>)new GenericTest(1);
                                                                     //line 4
 arr[3] = (GenericTest<String>)new GenericTest<Integer>(1);
                                                                     //line 5
 for(GenericTest o:arr)
 System.out.println(o);
  }
 Output: Error in Line 1
64. <c:forToken item = "first, second, third, last;" delims = "," var = "current">
  <c:out value = "${current}" /> =?
 Answer: beforelast
65. Answer: AaBaaaCaaaa
66. Multiple exception catch block...
 Answer: superclass exception can not be caught first
 Can we caught either super class or subclass
67. Filter life cycle
 Answer: init() dofilter() destroy()
68. / \{3+2-1\} : \{3+2-1\}
```

```
Answer: a. /$\{3+2-1\}:4
 b. 4:4
  c. /4:4
69.1.add(2)
 1.add(5)
 1.add(8)
 1.add(1)
 1.reverse();
 Answer: 1852
70. getvalue(IDEAL)
 SOP(word.subString(0,word.length()-1)+word.charAt(word.length()-1))
 Answer: DEAL
71. in javabean reference id define?
  a. Classname
 b. Package
 <mark>c. Instance</mark>
 d. None
72. Int x=6;
 Int y = 12;
 If(x>y)
  {
 X++;
 y--;
 SOP(....);
 Answer: 2
73. Datatype of the no 9.6352
  Answer: float
 <mark>double</mark>
 Float
  Double
74. Answer: RS.CONCUR_UPDATABLE
```

```
75. How many thread one from exception mainclass
   Answer: is only 1 thread(main thread)
 76. Start same thread two times
t1.start()
t1.start()
Answer: compilation fails, compile time error
 77. Behavior of UML diagram?
   Answer: a. usecase
   b. object
   c. profile
 78. Decouples in which design pattern?
   Answer: Bridge
 79. String s1 = abc;
   String s2 = def;
   String s3 = s1. concat(s2.UpperCase)
   Answer.: abcdefabcDEF
 80. HttpServlet supports
   a. http
   b. https
   c. both
   d. none
 81. what is the output of this program
   class output{
   public static void main(String args[])
   Object obj = new object();
   System.out.print(obj.getclass());
   }}
   Answer: class java.lang.object
 82. declare array of string
   string[]s;
   string s[]
```

```
string []s;b
  Answer: ABD
83. class A{
 int i;
 int j;
 A() {
 I = 1;
 J=2;
 Class output {
 Public static void main(String args[])
  A obj1 = new A();
  SOP(obj1.toString());
  }
  Answer: String associated with obj 1
 And output will be A@1cde5f
84. public void divide(int a, int)
  {
 Try{
 Int c = a/b;
  }
 Catch(Exception e)
  SOP(Exception);
  }
  Finally {
  SOP("finally")
  Output:
```

```
Answer if a,b not initialized then error and if b = 0; then compile time error with finally
 will work.
85. Current thread
 Public class MyRunnable implements runnable {
 Public void run()
  {
 //some code
  }
 Which of these will create and start this thread?
 Answer:
 new Thread(new MyRunnable()).start();
86. When we use command desig pattern?
 Answer: when history of request is needed
87. Xyz-xyz instance (pattern)
 Answer: Singleton
 Abstract
 Factory
88. To execute in the parameterized statement?
 Answer: prepared statement
89. Design pattern to limit class instaiated to one object?
 Answer: Singleton
90. Given
  10 interface Foo {int bar();}
  11 public class sprite{
  12 public int fubar(Foo foo) {return foo.bar();}
  13 public void testFoo() {
  14 fubar(
  15 //insert code here
 16);
 17 }}
 Answer: new Foo() {public int bar() {return 1;}}
91. A: unit testing is the testing of single entity
```

B: unit testing is the process of checking the functionality of the application whether it is working as per requirements

```
Options:
```

```
a. A is trueb. B is true
```

- c. Both are true
- d. None of the above

What will be the output of this -

```
92. String river = new String("TRAINING");
System.out.println(river.length());
answer-8

93. String getValue(String word)
{
    if (word.length() == 1)
    return "";
    else
    return getValue( word.substring(0, word.length() - 1) ) + word.charAt(word.length() - 1);
}
```

What is the value of the string returned by getValue("DEMOS")

Answer: EMOS

```
94. public class Question {
public static void main(String args[]) {
    String s1 = "uvw";
    String s2 = "xyz";
    String s3 = s1.concat(s2.toUpperCase());
    System.out.println(s1+s2+s3);
    }
}
```

```
answer: uvwxyzuvwXYZ
     95. int a = 9;
       int b = 14;
       while(a < b) {
              System.out.println("In the loop");
              a+=2;
              b=2;
       }
answer- In the loop
In the loop
     96. abstract class xyz
       {
              abstract abc (int a, int b) {}
       }
       - What sort of compilation error you will get?
       - How to fix the compilation error
Answer-- give return type void. and remove empty parenthesys.
     97. interface ATOB {
              String s = "yo";
              public void meth();
       }
       interface BTOC { }
       interface C extends ATOB, BTOC {
              public void meth();
              public void meth(int x);
        }
- Will this compile?
answer--- interface can also be extended (when inheriting from two interfaces.)
     98. int i = -1;
       int b = 10;
       int val = b/i;
```

```
answer- -10
        interface Data { public void load(); }
        abstract class Info { public abstract void load(); }
     99. How Can i inherit both the interface and abstract class?
answer= class xyz extends Info implements interface { void load}
     100.
              public class GenericTest<G> {
Gg;
GenericTest(G g){
       this.g = g;
}
public static void main(String[] args)
       GenericTest<String> arr[] = new GenericTest[5];
                                                                  //line 1
       arr[0] = new GenericTest("Java");
                                                           //line 2
       arr[1] = new GenericTest(1);
                                                           //line 3
       arr[2] = (GenericTest<String>)new GenericTest(1);
                                                                          //line 4
       arr[3] = (GenericTest<String>)new GenericTest<Integer>(1);
                                                                          //line 5
       for(GenericTest o:arr)
        {
               System.out.println(o);
         }
       }
}
Answer-- can not cast <Integer> to <String> line5
and default value is null in an array
     101.
              class A {
              static String str = "STRING_IN_A";
       }
       class B extends A {
```

```
static String str = "STRING_IN_B";
//
in void main
B b1=new B();
sop b1.str
//
Answer--- will compile fine.bt str is being overwritten in B class.
     102.
              int j=8;
while (j < 10) & (j > 24)
        System.out.println(" Am here");
answer-while() condition is always false
     103.
              class output {
        public static void main(String args[]){
               StringBuffer c = new StringBuffer("Hello");
               StringBuffer c1 = new StringBuffer("World");
               c.append(c1);
               System.out.print(c);
               }
        }
answer-helloworld
```

104. are resultset updateable?

> Answer: yes but only if you indicate a concurrency strategy when executing the statement and if the driver and database support this option.

105. How can you start a database transaction in the database

Answer: by setting the autocommit property of the connection to false & execute a statement in the database

106. The object that does not contain the stored procedure itself but contains only a call to the store procedure?

Answer: callableStatement

107. To execute a stored procedure "total stack" in a database server which of the following code snipper is used?

Answer: callablestatement clbstmnt = con.preparecall("{call totoal stack}"); cs.executeQuery();

- 108. Jsp pages have access to implicit objects that are exposed automatically one such object that is available is request that request object is an instance of which class?

  Answer: HttpServletRequest
- 109. Relative path

Answer: c:/test/\*\*\*

110. In class diagram instance are represented by using

Answer: Italics

111. Which type of driver converts jdbc calls into the Network protocol used by the datamanagement system?

Answer: Type 4

112. UML behavior diagram?

Answer: Attribute diagram

113. SOP(index(i)+index(0)+lastIndex(i)+lastIndex(0));

Answer: 6469

114. < c.set var = "j" value = "4,3,2,1"/>

< c:forEach items = " $\{j\}$ " var = "item" begin="1" end ="2"

Answer: 2 and 3

115. The sendError method defined in the httpservlet class is equivalent to invoking the setstatus method with the following parameter. Select the one correct answer:

Answer: SC NOT FOUND

- 116. When a select statement returns only one record with a single column of integer datatype on invoking resultset getinteger(0) causes\_\_\_\_\_\_\_
  Answer:
- 117. A user types the url <a href="http://www.javaprepare.com/scwd/index.html">http://www.javaprepare.com/scwd/index.html</a> which http request gets generated select the one correct answer?

Answer: GET Method

118. Which listener class will close() method?

Answer: windowlistner

119. Class exception\_Handling{

```
Public static void main(String args[]){
   Try{
   SOP("Hello"+" "+1/0);
   Catch(ArithmeticException e)
   SOP("World");
   }}
   Answer: World
120.
         What get printed when the following JSTL code program is executed?
   <%@ taglib uri = http://java.sun.com/jsp/jstl/core prefix = "c" %>
   <c:forEach var = "item" begin ="0" end = "12" step ="3">
   ${item}
   </c:forEach>
   Answer: 0,3,6,9,12
121.
         What is the output of this program?
   Import java.util.*
   Public static void main(String args[]){
   TreeMap obj = new Treemap();
   Obj.put("A", newInteger(1));
   Obj.put("b", newInteger(2));
   Obj.put("c", newInteger(3));
   SOP(obj.entrySet());
   }
   Answer: [A=1,B=2,C=3]
   Public class genericstack<E>{
   Stack<E>{
   Stack<E>stk = new stack<E>();
   }
122.
         Which of the following describes the purpose of JUnit?
   A It is a framework to help with writing unit tests for your code.
```

B It is a framework to help with writing code involving unit conversions.

C It is a framework to help with packaging your code into units for distribution.

D It is a framework to convert all days/dates in your code to June.

Answer: A

- 123. Which diagram in UML shows a complete or partial view of the structure of a modeled system at a specific time?
  - a) Sequence Diagram
  - b) Collaboration Diagram
  - c) Class Diagram
  - d) Object Diagram

Answer: d

- 124. Which of these keywords must be used to monitor for exceptions?
  - a) try
  - b) finally
  - c) throw
  - d) catch

View Answer

Answer: a

- 125. Treemap question and options will be like
  - (7,9)
  - (9,7)

Answer: 7.9

- 126. Testing Amit Gupta and Ravi Kumar wala question?
  - a) Amit Gupta False
  - b)Ravi Kumar False
  - c) Amit Gupta False(Expected name as Ravi Kumar)
  - d)Ravi Kumar False(Expected name as Amit Gupta)

use

127. Fill in the blank

```
Exception _____{{
   printstack e;
   Exception____{{
   printStack e;
   }
   Answer class not found
   Sql exception
128.
         Get value from resultset
   Answer: getBoolean(),getClob()
   getBlob()
129.
        class exception_handling {
   public static void main(String args[]) {
   try {
   int a, b;
   b = 0;
   a = 5 / b;
   System.out.print("A");
   catch(ArithmeticException e) {
   System.out.print("B");
   }
   a) A
   b) B
   c) Compilation Error
   d) Runtime Error
   Ans:B
130.
        class A implements foo {
   16 foo bar()
   17 {
```

```
18 Return 1;
       }
       Class A implements foo
       25 foobar()
       26 {
       27 return 2;
       Answer: return 2;
       If eliminate 16,17,18 return 2
       If eliminate 25 26 27 return 1
131.
        Which of these handles the exception when no catch is used?
   a. Default handler
   b. Finally
   c. Throw handler
   d. Java run time system
132.
        class exception_handling {
   public static void main(String args[]) {
   try {
   int a, b;
   b = 0;
   a = 5 / b;
   System.out.print("A");
   catch(ArithmeticException e) {
   System.out.print("B");
   finally {
   System.out.print("C");
```

```
}
   }
   a) A
   b) B
   c) AC
   d) BC
   Answer:BC
133.
         public class Delta
   { static boolean foo(char c)
      {
        System.out.print(c);
        return true;
     public static void main( String[] argv )
        int i = 0;
        for (foo('A'); foo('B') && (i < 2); foo('C'))
          i++;
          foo('D');
        }
   Answer: A.
   ABDCBDCB
134.
         Why beans are used in J2EE architecture in stead of writing all the code in JSPs?
   Answer: (a) Allows separation of roles between web developers and application
   developers
         public class TreeSet {
135.
   public static void main(String args[]){
                 //Creating and adding elements
                 TreeSet<Integer> al=new TreeSet<Integer>();
```

```
al.add("7"); //line 5
al.add(9);

//Traversing elements
Iterator<Integer> itr=al.iterator();
while(itr.hasNext()){
    System.out.println(itr.next());
}

Answer: compilation error at line 5
```

136. Which implementation of set would you choose if you want the iterator of set would give you object in the order it were inserted?

#### LinkedHashSet

TreeSet

HashSet

137. Push(7); Push(2);

Pop();

Push(9);

Answer: print[7,9]

138. Which operator use to separate url and attribute?

Answer:?

139. Which operator is used to separate parameters or attributes?

Anser: &

140. Which method is used to url rewriting?

Answer doget method

141. Delay show in usecase by "Slant line"

Answer Slant line for delay

142. (first,two,three,four;,five;) delimits(,)

Answer: firsttwothreefour; five;

- 143. Which packages contain the JDBC classes?
- (a) java.jdbc and javax.jdbc
- (b) java.jdbc and java.jdbc.sql
- (c) java.sql and javax.sql
- (d) java.rdb and javax.rdb
- 144. Which type of driver provides JDBC access via one or more ODBC drivers?
- (a) Type 1 driver
- (b) Type 2 driver
- (c) Type 3 driver
- (d) Type 4 driver
- 145. Which type of driver converts JDBC calls into the network protocol used by the database management system

directly?

- (a) Type 1 driver
- (b) Type 2 driver
- (c) Type 3 driver
- (d) Type 4 driver
- 146. How can you retrieve information from a ResultSet?
- (a) By invoking the method get(..., String type) on the ResultSet, where type is the database type
- (b) By invoking the method get(..., Type type) on the ResultSet, where Type is an object which represents a database

type

- (c) By invoking the method getValue(...), and cast the result to the desired Java type.
- (d) By invoking the special getter methods on the ResultSet: getString(...), getBoolean (...), getClob(...),...
- 147. How can you execute DML statements (i.e. insert, delete, update) in the database?

- (a) By making use of the InsertStatement, DeleteStatement or UpdateStatement classes
- (b) By invoking the execute(...) or executeUpdate(...) method of a normal Statement object or a sub-interface object

thereof

- (c) By invoking the executeInsert(...), executeDelete(...) or executeUpdate(...) methods of the DataModificationStatement object
- (d) By making use of the execute(...) statement of the DataModificationStatement object
- 148. How do you know in your Java program that a SQL warning is generated as a result of executing a SQL statement in

the database?

- (a) You must catch the checked SQLException which is thrown by the method which executes the statement
- (b) You must catch the unchecked SQLWarningException which is thrown by the method which executes the statement
- (c) You must invoke the getWarnings() method on the Statement object (or a sub interface thereof)
- (d) You must query the ResultSet object about possible warnings generated by the database
- 149. What is, in terms of JDBC, a DataSource?
- (a) A DataSource is the basic service for managing a set of JDBC drivers
- (b) A DataSource is the Java representation of a physical data source
- (c) A DataSource is a registry point for JNDI-services
- (d) A DataSource is a factory of connections to a physical data source
- 150. What is the meaning of ResultSet.TYPE SCROLL INSENSITIVE
- (a) This means that the ResultSet is insensitive to scrolling
- (b) This means that the Resultset is sensitive to scrolling, but insensitive to updates, i.e. not updateable
- (c) This means that the ResultSet is sensitive to scrolling, but insensitive to changes made by others

- (d) The meaning depends on the type of data source, and the type and version of the driver you use with this data source
- 151. Are ResultSets updateable?
- (a) Yes, but only if you call the method openCursor() on the ResultSet, and if the driver and database support this option
- (b) Yes, but only if you indicate a concurrency strategy when executing the statement, and if the driver and database support this option
- (c) Yes, but only if the ResultSet is an object of class UpdateableResultSet, and if the driver and database support thisoption
- (d) No, ResultSets are never updateable. You must explicitly execute DML statements (i.e. insert, delete and update) to change the data in the underlying database
- 152. How can you start a database transaction in the database?
- (a) By asking a Transaction object to your Connection, and calling the method begin() on it
- (b) By asking a Transaction object to your Connection, and setting the autoCommit property of the Transaction to false
- (c) By calling the method beginTransaction() on the Connection object
- (d) By setting the autoCommit property of the Connection to false, and execute a statement in the database
- 153. What is the meaning of the transaction isolation level TRANSACTION REPEATABLE READ
- (a) Dirty reads, non-repeatable reads and phantom reads can occur
- (b) Dirty reads are prevented; non-repeatable reads and phantom reads can occur
- (c) Dirty reads and non-repeatable reads are prevented; phantom reads can occur
- (d) Dirty reads, non-repeatable reads and phantom reads are prevented
- 154. What statements are correct about positioned updates (i.e. cursor updates) in ResultSets? (2 correct answers)

- [a] Using the cursor technique is currently the only possible way to change the data in the current row of a ResultSet
- [b] Insert statements are only supported when using scrollable cursors.
- [c] Only scrollable updateable ResultSets can use this approach to change the data in the current row of a ResultSet
- [d] The name of the cursor is specified by the setCursorName(String name) method the Statement object.
- 155. How can you execute a stored procedure in the database?
- (a) Call method execute() on a CallableStatement object
- (b) Call method executeProcedure() on a Statement object
- (c) Call method execute() on a StoredProcedure object
- (d) Call method run() on a ProcedureCommand object
- 156. What happens if you call the method close() on a ResultSet object?
- (a) the method close() does not exist for a ResultSet. Only Connections can be closed.
- (b) the database and JDBC resources are released
- (c) you will get a SQLException, because only Statement objects can close ResultSets
- (d) the ResultSet, together with the Statement which created it and the Connection from which the Statement was retrieved, will be closed and release all database and JDBC resources
- 157. What happens if you call deleteRow() on a ResultSet object?
- (a) The row you are positioned on is deleted from the ResultSet, but not from the database.
- (b) The row you are positioned on is deleted from the ResultSet and from the database
- (c) The result depends on whether the property synchronizeWithDataSource is set to true or false
- (d) You will get a compile error: the method does not exist because you can not delete rows from a ResultSet
- 158. What statements are correct about batched insert and updates? (2 answers)

- [a] To create a batch of insert and update statements, you create an object of type Batch, and call the method
- addStatement(String statement) for each statement you want to execute in the batch
- [b] Batch insert and updates are only possible when making use of parameterized queries.
- [c] To do a batched update/insert, you call addBatch(String statement) on a Statement object for each statement you want to execute in the batch
- [d] To execute a batched update/insert, you call the executeBatch() method on a Statement object
- 159. What is correct about DDL statements (create, grant,...)?
- (a) DDL statements are treated as normal SQL statements, and are executed by calling the execute() method on a Statement (or a sub interface thereof) object
- (b) To execute DDL statements, you have to install additional support files
- (c) DDL statements can not be executed by making use of JDBC, you should use the native database tools for this.
- (d) Support for DDL statements will be a feature of a future release of JDBC
- 160. The JDBC-ODBC Bridge supports multiple concurrent open statements per connection?
- a. True
- b. False
- 162. 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
- 163. 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
- 164. 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()
- 165. 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
- 166. 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.prepareCall("{call totalStock}");cs.executeQuery();
- c. StoreProcedureStatement

stmt=connection.createStoreProcedure("totalStock()");spstmt.executeQuery();

- d. PrepareStatement pstmt = connection.prepareStatement("totalStock()");pstmt.execute();
- 167. Which driver is efficient and always preferable for using JDBC applications?
- a. Type 4
- b. Type 1
- c. Type -3
- d. Type -2
- 168. 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. 2,3 169. Which statement is static and synchronized in JDBC API? a. executeQuery() b. executeUpdate() c. getConnection() d. prepareCall() 170. The JDBC-ODBC bridge is a. Three tiered b. Multithreaded c. Best for any platform d. All of the above 171. All raw data types (including binary documents or images) should be read and uploaded to the database as an array of <mark>a. byte</mark> b. int c. boolean d. char 172. 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 173. 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 3.0 174. 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 175. Are prepared statements actually compiled? a. Yes, they compiled b. No, they are bound by the JDBC driver 176. 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 177. 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 178. How many transaction isolation levels are defined in java.sql.Connection interface? a. 4

b. 3

c. 5d. 2

```
179. Which method is used to perform DML statements in JDBC?
a. execute()
b. executeQuery()
c. executeUpdate()
d. executeResult()
180. 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.
181. import java.util.*;
class TestHashMaps{
public static void main(String args[]) {
HashMap<Integer,String> hm= new HashMap<Integer,String> ();
hm.put(100, "John");
hm.put(101, "Paul");
hm.put(102, "George");
hm.put(103, "Ringo");
for (Map.Entrym: hm.entrySet()) {
System.out.println(m.getKey() + " " + m.getValue());
Answer:
100 John
101 Paul
102 George
103 Ringo
```

```
182. import java.util.Map;
import java.util.TreeMap;
public class TestTreeMap {
public static void main(String args[]) {
TreeMap< Integer, String > hm= new TreeMap< Integer, String > ();
hm.put(100, "John");
hm.put(102, "Paul");
hm.put(101, "George");
hm.put(103, "Ringo");
for (Map.Entry m. hm.entrySet()) {
System.out.println(m.getKey() + " " + m.getValue());
}
Answer
100 John
101 George
102 Paul
103 Ringo
183.Given:
5. import java.util.*;
6. public class SortOf {
7. public static void main(String[] args) {
8. ArrayList<Integer> a = new ArrayList<Integer>();
9. a.add(1); a.add(5); a.add(3);
11. Collections.sort(a);
12. a.add(2);
13. Collections.reverse(a);
14. System.out.println(a);
15. }
16.}
```

```
What is the result?
A. [1, 2, 3, 5]
B. [2, 1, 3, 5]
C. [2, 5, 3, 1]
D. [5, 3, 2, 1]
E. [1, 3, 5, 2]
F. Compilation fails.
G. An exception is thrown at runtime.
Answer: C
184. class BabyRaccoon extends Mammal { }
Which four statements are true? (Choose four.)
A. Raccoon is-a Mammal.
B. Raccoon has-a Mammal.
C. BabyRaccoon is-a Mammal.
D. BabyRaccoon is-a Raccoon.
E. BabyRaccoon has-a Mammal.
F. BabyRaccoon is-a BabyRaccoon.
Answer: A.B.C.F
185. Which Man class properly represents the relationship "Man has a best friend who is
a Dog"?
A. class Man extends Dog { }
B. class Man implements Dog { }
C. class Man { private BestFriend dog; }
D. class Man { private Dog bestFriend; }
E. class Man { private Dog<bestFriend>; }
F. class Man { private BestFriend<dog>; }
Answer: D
```

186. Given:

```
11. class Alpha {
12. public void foo() { System.out.print("Afoo "); }
13. }
14. public class Beta extends Alpha {
15. public void foo() { System.out.print("Bfoo"); }
16. public static void main(String[] args) {
17. Alpha a = new Beta();
18. Beta b = (Beta)a;
19. a.foo();
20. b.foo();
21.}
22. }
What is the result?
A. Afoo Afoo
B. Afoo Bfoo
C. Bfoo Afoo
D. Bfoo Bfoo
E. Compilation fails.
F. An exception is thrown at runtime.
Answer: D
187. Given:
5. import java.util.Date;
6. import java.text.DateFormat;
21. DateFormat df;
22. Date date = new Date();
23. // insert code here
24. String s = df.format(date);
Which code fragment, inserted at line 23, allows the code to compile?
A. df = new DateFormat();
B. df = Date.getFormat();
```

```
C. df = date.getFormat();
D. df = DateFormat.getFormat();
E. df = DateFormat.getInstance();
Answer: E
188. Given:
1. public class Base {
2. public static final String FOO = "foo";
3. public static void main(String[] args) {
4. Base b = new Base();
5. Sub s = new Sub();
6. System.out.print(Base.FOO);
7. System.out.print(Sub.FOO);
8. System.out.print(b.FOO);
9. System.out.print(s.FOO);
10. System.out.print(((Base)s).FOO);
11. } }
12. class Sub extends Base {public static final String FOO="bar";}
What is the result?
A. foofoofoofoo
B. foobarfoobarbar
C. foobarfoofoo
D. foobarfoobarfoo
E. barbarbarbar
F. foofoofoobarbar
G. foofoobarfoo
Answer: D
```

189 A company has a business application that provides its users with many different reports.

receivables reports, payables reports, revenue projects, and so on. The company has just

purchased some new, state-of-the-art, wireless printers, and a programmer has been assigned the

task of enhancing all of the reports to use not only the company's old printers, but the new wireless printers as well. When the programmer starts looking into the application, the programmer

discovers that because of the design of the application, it is necessary to make changes to each

report to support the new printers. Which two design concepts most likely explain this situation?

(Choose two.)

- A. Inheritance
- B. Low cohesion
- C. Tight coupling
- D. High cohesion
- E. Loose coupling
- F. Object immutability

Answer: B.C

190.A team of programmers is reviewing a proposed API for a new utility class. After some discussion,

they realize that they can reduce the number of methods in the API without losing any functionality. If they implement the new design, which two OO principles will they be promoting?

- A. Looser coupling
- B. Tighter coupling
- C. Lower cohesion
- D. Higher cohesion
- E. Weaker encapsulation
- F. Stronger encapsulation

Answer: A

191. A team of programmers is involved in reviewing a proposed design for a new utility class. After

some discussion, they realize that the current design allows other classes to access methods in

the utility class that should be accessible only to methods within the utility class itself. What design

issue has the team discovered?

- A. Tight coupling
- B. Low cohesion
- C. High cohesion
- D. Loose coupling
- E. Weak encapsulation
- F. Strong encapsulation

```
Answer: E
```

- 192. Given:
- 1. public class TestString1 {
- 2. public static void main(String[] args) {
- 3. String str = "420";
- 4. str += 42;
- 5. System.out.print(str);
- 6. }
- 7. }

What is the output?

- A. 42
- B. 420
- C. 462
- D. 42042
- E. Compilation fails.
- F. An exception is thrown at runtime.

Answer: D

193. Given

```
11. public interface Status {
12. /* insert code here */ int MY VALUE = 10;
13. \ Which three are valid on line
12?
(Choose three.)
A. final
B. static
C. native
D. public
E. private
F. abstract
G. protected
Answer: A,B,D
194. Given:
10. interface Foo { int bar(); }
11. public class Sprite {
12. public int fubar( Foo foo ) { return foo.bar(); }
13. public void testFoo() {
14. fubar(
15. // insert code here
16.);
17. }
18. }
Which code, inserted at line 15, allows the class Sprite to compile?
A. Foo { public int bar() { return 1; }
B. new Foo { public int bar() { return 1; }
C. new Foo() { public int bar() { return 1; }
D. new class Foo { public int bar() { return 1; }
Answer: C
195. Given:
```

```
11. class Animal { public String noise() { return "peep"; } }
12. class Dog extends Animal {
13. public String noise() { return "bark"; }
14. }
15. class Cat extends Animal {
16. public String noise() { return "meow"; }
17. \} ...
30. Animal animal = new Dog();
31. Cat cat = (Cat)animal;
32. System.out.println(cat.noise());
What is the result?
A. peep
B. bark
C. meow
D. Compilation fails.
E. An exception is thrown at runtime.
Answer: E
196. A programmer has an algorithm that requires a java.util.List that provides an efficient
implementation of add(0, object), but does NOT need to support quick random access. What
supports these requirements?
A. java.util.Queue
B. java.util.ArrayList
C. java.util.LinearList
D. java.util.LinkedList
Answer: D
197. Which Man class properly represents the relationship "Man has a best friend who is
a Dog"?
A. class Man extends Dog { }
B. class Man implements Dog { }
C. class Man { private BestFriend dog; }
D. class Man { private Dog bestFriend; }
```

```
E. class Man { private Dog<bestFriend>; }F. class Man { private BestFriend<dog>; }Answer: D
```

199. A team of programmers is reviewing a proposed API for a new utility class. After some discussion,

they realize that they can reduce the number of methods in the API without losing any functionality. If they implement the new design, which two OO principles will they be promoting?

- A. Looser coupling
- B. Tighter coupling
- C. Lower cohesion
- D. Higher cohesion

C. Dog is-a Animal

- E. Weaker encapsulation
- F. Stronger encapsulation

Answer: A

```
200. Given:

10. interface Jumper { public void jump(); } ...

20. class Animal {} ...

30. class Dog extends Animal {

31. Tail tail; 32. } ...

40. class Beagle extends Dog implements Jumper {

41. public void jump() {}

42. } ...

50. class Cat implements Jumper {

51. public void jump() {}

52. }

Which three are true?(Choose Three)

A. Cat is-a Animal

B. Cat is-a Jumper
```

```
D. Dog is-a Jumper
E. Cat has-a Animal
F. Beagle has-a Tail
G. Beagle has-a Jumper
Answer: B,C,F
201. Given:
10. interface Data { public void load(); }
11. abstract class Info { public abstract void load(); }
Which class correctly uses the Data interface and Info class?
A. public class Employee extends Info implements Data {
public void load() { /*do something*/ }
}
B. public class Employee implements Info extends Data {
public void load() { /*do something*/ }
C. public class Employee extends Info implements Data {
public void load() { /*do something*/ }
public void Info.load() { /*do something*/ }
D. public class Employee implements Info extends Data {
public void Data.load() { /*do something*/ }
public void load() { /*do something*/ }
}
E. public class Employee implements Info extends Data {
public void load() { /*do something*/ }
public void Info.load() { /*do something*/ }
}
F. public class Employee extends Info implements Data {
public void Data.load() { /*do something*/ }
public void Info.load() { /*do something*/ }
}
```

```
202. Given:
1. class TestA {
2. public void start() { System.out.println("TestA"); }
3. }
4. public class TestB extends TestA {
5. public void start() { System.out.println("TestB"); }
6. public static void main(String[] args) {
7. ((TestA)new TestB()).start();
8. }
9. }
What is the result?
A. TestA
B. TestB
C. Compilation fails.
D. An exception is thrown at runtime.
Answer: B
203. import java.io.*;
class files {
public static void main(String args[]) {
File obj = new File("/java/system");
System.out.print(obj.getName());
}
}
a) java
b) system
c) java/system
d) /java/system
Answer:B
```

```
204. import java.io.*;
class files {
public static void main(String args[]) {
File obj = new File("/java/system");
System.out.print(obj.getAbsolutePath());
}
}
Note: file is made in c drive.
a) java
b) system
c) java/system
d) /java/system
View Answer
Answer: d
Explanation: None.
Output:
$ javac files.java
$ java files
\java\system
205. What is the output of this program?
import java.io.*;
class files {
public static void main(String args[]) {
File obj = new File("/java/system");
System.out.
}
Note: file is made in c drive.
a) java
b) system
c) java/system
```

## d) /java/system

## Answer:D

```
206. class exception_handling {
public static void main(String args[]) {
try {
int a = args.length;
int b = 10 / a;
System.out.print(a);
try {
if (a == 1)
a = a / a - a;
if (a == 2) {
int c = \{1\};
c[8] = 9;
}
catch (ArrayIndexOutOfBoundException e) {
System.out.println("TypeA");
catch (ArithmeticException e) {
System.out.println("TypeB");
}}}}
a) TypeA
b) TypeB
c) OTypeA
```

## Very Very Important

jsp, servlet, exceptions, syntaxes statement connection.createStatement(java.sql.ResultSet.TYPE FORWARD ONLY,java.sql.Re ultSet.CONCUR READ ONLY); statement.setFetchSize(Integer.MIN VALUE); Which isolation level prevents dirty read in JDBC, connection class. (A) TRANSACTION\_READ\_ COMMITTED (B) TRANSACTION UNREAD COMMITTED Isolation Level Table-Level Locking **Row-Level Locking** TRANSACTION READ UNCOMMITTED Dirty reads, nonre peatable reads, and phantom reads possible Dirt y reads, nonrepeatable reads, and phantom reads po ssible TRANSACTION READ COMMITTED Nonrepeatable reads an d phantom reads possible Nonrepeatable re ads and phantom reads possible TRANSACTION REPEATABLE READ Phantom reads not poss ible because entire table is locked Phantom read s possible TRANSACTION SERIALIZABLE None None TYPE SCROLL INSENSITIVE: The result can be scrolled; its cursor can move both forward and backward relat ive to the current position, and it can move to an absolute position. The result set is insensitive to changes made to the underlying data source while it is open. It contains the rows that satisfy the query at either the time the query is executed or as the rows are retrieved. TYPE SCROLL SENSITIVE:

The result can be scrolled; its cursor can move both forward and backward relative to the current position, and it can move to an ab solute position. The result set reflects changes made to the underlying data source while the result set remains open.

What is the effect of executing the following JSP statement, assuming a class with name Employee exi sts in classes package.

<%@ page import = "classes.Employee" %> <jsp:useBe
an id="employee" class="classes.Employee" scope="s
ession"/> <jsp:setProperty name="employee" propert
y="\*"/>

The code does not compile as there is no proper ty attribute of setProperty tag.

The code does not compile as property attribute cannot take \* as a value.

The code sets value of all properties of employ ee bean to "\*".

Ans) The code sets the values of all properties of employee bean to matrching parameters in reque st object.

bookmark is in get.

```
1. class Animal {
public String noise() {
return "peep";
}
}
class Dog extends Animal {
public String noise() {
return "bark";
}
}
class Cat extends Animal {
public String noise() {
return "meow";
}
```

```
}
30. Animal animal = new Dog();
31. Cat cat = (Cat)animal;
32. System.out.println(cat.noise());
What is the result?
A. peep
B. bark
C. meow
D. Compilation fails.
E. An exception is thrown at runtime.
Answer: E
1. class A {
2. void foo() throws Exception {
3. throw new Exception();
4. }
5.}
6.
7. class SubB2 extends A {
8. void foo() {
9. System.out.println("B");
10. }
11.}
12. class Tester {
13. public static void main(String[] args) {
14. A a = new SubB2();
15. a.foo();
16. }
17. }
What is the result?
A.B
B. B, followed by an Exception.
C. Compilation fails due to an error on line 9.
D. Compilation fails due to an error on line 15.
E. An Exception is thrown with no other output
Answer: D
Section: All
```

```
Explanation/Reference:
Unhandled exception type Exception
2. legal s3=s2+s1
3. when we are sending data in URI in get method ho
w to separate
parameters? ANs) &
when we are sending data in URI in get method how t
o separate
parameter and separate path? ANs)?
4. class multithreaded programing{
public static void main(String args[]){
Thread t = Thread.currentThread();
t.setname("new thread");
System.out.println(t);
ans- thread[new thread,5,main]
5. current thread
public class MyRunnable implements runnable{
public void run(){
//some code
which of these will create and start this thread?
Ans) new Thread(new MyRunnable()).start();
Description: Becuase the class implements Runnable,
an instance of it has to be passed to the Thread co
nstructor
and then the instance of the Thread has to be start
ed.
6. class Mammal { }
class Raccoon extends Mammal {
Mammal m = new Mammal();
class BabyRaccoon extends Mammal { }
Which four statements are true? (Choose four.)
A. Raccoon is-a Mammal.
B. Raccoon has-a Mammal.
```

```
C. BabyRaccoon is-a Mammal.
D. BabyRaccoon is-a Raccoon.
E. BabyRaccoon has-a Mammal.
F. BabyRaccoon is-a BabyRaccoon.
Answer: A,B,C,F
Explanation: Check is-A and Has-A relationship betw
een both classes.
7. What is the output of this program?
import java.io.*;
public class filesinputoutput {
public static void main(String[] args)
String obj = "abc";
byte b[] = obj.getBytes();
ByteArrayInputStream obj1 = new Byte
ArrayInputStream(b);
for (int i = 0; i < 2; ++ i) {
int c;
while ((c = obj1.read()) != -1)
if (i == 0) {
System.out.print(Charact
er.toUpperCase((char)c)); }}}}
ans) ABC
8. class output {
public static void main(String args[])
StringBuffer s1 = new StringBuffer("
Hello World");
s1.insert(6 , "Good ");
System.out.println(s1);
}
a) HelloGoodWorld
b) HellGoodoWorld
c) HellGood oWorld
d) Hello Good World
```

Answer: d

Explanation: The insert() method inserts one string

into another. It is overloaded

to accept values of all simple types, plus String and Objects. Sting is inserted into invoking objec

t at

specified position. "Good" is inserted in "Hello W orld" T index 6 giving "Hello Good World".

output:

\$ javac output.java

\$ java output

Hello Good World

9. string index(i)

10. Which of these keywords cannot be used for a cl ass which has been declared final?

- a) abstract
- b) extends
- c) abstract and extends
- d) None of the mentioned

View Answer

Answer: a

Explanation: A abstract class is incomplete by its elf and relies upon its subclasses to provide comp lete

implementation. If we declare a class final then n o class can inherit that class, an abstract class needs its subclasses

hence both final and abstract cannot be used for a same class.

11. import all- import .\*

12. abstract class abc{

abstract ...(int a, int b, int c)

Q= method declared right?

13. sos('1'+new integer(2)+3);

**ANS-123** 

14.int a[]=new int[]{1,2,6,4,5}; int b[]=new int[5];

```
b[2]=a[2];
a[2]=10;
System.out.println(b[2]);
ans: 6
15. GENERICS STRING TAG QUESTION
16. What gets printed when the following JSTL code
fragment is executed? Select the one correct answ
er.
<%@ taglib uri="http://java.sun.com/jsp/jstl/core"</pre>
prefix="c" %>
<c:set var="item" value="2"/>
<c:if test="${var==1}" var="result" scope="session"
<c:out value="${result}"/>
</c:if>
A.The JSTL code does not compile as attribute f
or if tag are not correct.
B.true
C. false
Ans D. Nothing gets printed.
17. ideal
removin loop
-operations
a)idea
b)deal
18. The sendError method defined in the HttpServlet
class is
equivalent to invoking the setStatus method with th
e following
parameter. Select the one correct answer.
4.
A. SC OK
B. SC MOVED TEMPORARILY
C. SC NOT FOUND Ans) C
D. SC_INTERNAL_SERVER_ERROR
E. ESC BAD REQUEST
5. The sendRedirect method defined
```

The sendRedirect method defined in the HttpServlet class is

equivalent to invoking the setStatus method with the following

parameter and a Location header in the URL. Select the one

correct answer.

A. SC OK

B. SC\_MOVED\_TEMPORARILY Ans) B

C. SC NOT FOUND

D. SC\_INTERNAL\_SERVER\_ERROR

E. ESC\_BAD\_REQUEST

19.doget is in which? a)request.httpresponse? b)re sponse.http?

20.jsp-attributes: differentiate a), b)& c)?

21. independently vary=bridge

22. factory set

23. A team of programmers is involved in reviewing a proposed design for a new utility class.

After some discussion, they realize that the curre nt design allows other classes to access methods in the utility class that should be access ible only to methods within the utility class itse If.

What design issue has the team discovered?

A. Tight coupling

B. Low cohesion

C. High cohesion

D. Loose coupling

E. Weak encapsulation

F. Strong encapsulation

Answer: E

24. instanceof

25. man dog best friend ans:class man{private dog b est friend;}

26. push pop stack

27. blue mmix deploy cloud foundry ans)cf push

```
28. 1..*At least one instance
29. window if class=underline
30. abstract class- italics
31. slant line for delay
32. hollow diamond on collection side for aggregat
ion, filled for composition and hollow triangle fo
r generalization.
33. jstl
34. arrow towards mammal
35. iterator question
36. hasnext(), traverse
37. junit testing in which order
38. scroll insensitive
39. What is the output of this program?
import java.util.*;
class vector {
public static void main(String args[])
Vector obj = new Vector(4,2);
obj.addElement(new Integer(3));
obj.addElement(new Integer(2));
obj.addElement(new Integer(5));
obj.removeAll(obj);
System.out.println(obj.isEmpty());
}
}
a) 0
b) 1
c) true
d) false
View Answer
Answer: c
Explanation: firstly elements 3, 2, 5 are entered
in the vector obj, but when obj.removeAll(obj); is
executed all the elements are deleted and vector
is empty, hence obj.isEmpty() returns true.
Output:
```

```
$ javac vector.java
$ java vector
true
40. import java.util.*;
class Array {
public static void main(String args[])
int array[] = new int [5];
for (int i = 5; i > 0; i--)
array[5 - i] = i;
Arrays.sort(array);
for (int i = 0; i < 5; ++i)
System.out.print(array[i]);;
}
} Ans) 12345
41. What is the output of this program?
import java.util.*;
class Maps {
public static void main(String args[])
TreeMap obj = new TreeMap();
obj.put("A", new Integer(1));
obj.put("B", new Integer(2));
obj.put("C", new Integer(3));
System.out.println(obj.entrySet());
}
a) [A, B, C]
b) [1, 2, 3]
c) {A=1, B=2, C=3}
d) [A=1, B=2, C=3]
Answer: d
Explanation: obj.entrySet() method is used to obta
in a set that contains the entries in the map. Thi
s method provides set view of the invoking map.
Output:
$ javac Maps.java
```

```
$ java Maps
[A=1, B=2, C=3]
42. What is the output of this program?
import java.util.*;
class Bitset {
public static void main(String args[])
BitSet obj = new BitSet(5);
for (int i = 0; i < 5; ++i)
obj.set(i);
obj.clear(2);
System.out.print(obj);
}
a) {0, 1, 3, 4}
b) {0, 1, 2, 4}
c) {0, 1, 2, 3, 4}
d) {0, 0, 0, 3, 4}
View Answer
Answer: a
Explanation: None.
Output:
$ javac Bitset.java
$ java Bitset
\{0, 1, 3, 4\}
43. What is the output of this program?
import java.util.*;
class Array {
public static void main(String args[])
int array[] = new int [5];
for (int i = 5; i > 0; i--)
array[5-i] = i;
Arrays.fill(array, 1, 4, 8);
for (int i = 0; i < 5; i++)
System.out.print(array[i]);
}
```

```
}
advertisements
a) 12885
b) 12845
c) 58881
d) 54881
View Answer
Answer: c
Explanation: array was containing 5,4,3,2,1 but wh
en method Arrays.fill(array, 1, 4, 8) is called it
fills the index location starting with 1 to 4 by
value 8 hence array becomes 5,8,8,8,1.
Output:
$ javac Array.java
$ java Array
58881
44. prefix uri
45. last; or; last
46. What is the output of this program?
import java.util.*;
class Collection Algos {
public static void main(String args[])
LinkedList list = new LinkedList();
list.add(new Integer(2));
list.add(new Integer(8));
list.add(new Integer(5));
list.add(new Integer(1));
Iterator i = list.iterator();
Collections.reverse(list);
Collections.shuffle(list);
while(i.hasNext())
System.out.print(i.next() + " ");
}
a) 2851
b) 1582
```

```
c) 1258
d) Any random order
Answer: d
Explanation: shuffle – randomizes all the elements
in a list.
Output:
$ javac Collection_Algos.java
$ java Collection_Algos
1528
(output will be different on your system)
47. What is the output of this program?
import java.util.*;
class Collection_Algos {
public static void main(String args[])
LinkedList list = new LinkedList();
list.add(new Integer(2));
list.add(new Integer(8));
list.add(new Integer(5));
list.add(new Integer(1));
Iterator i = list.iterator();
Collections.reverse(list);
Collections.sort(list);
while(i.hasNext())
System.out.print(i.next() + " ");
}
}
a) 2851
b) 1582
c) 1258
d) 2185
Answer: c
Explanation: Collections.sort(list) sorts the give
n list, the list was 2->8->5->1 after sorting it b
ecame 1->2->5->8.
Output:
when reverse 1582
```

```
but sorting 1 2 5 8 ans is C
48. URL from a remote location protocol http is use
d. a)http b)https c)both d)none [Ans. c]
49. <%@ taglib uri="http://java.sun.com/jsp/jstl/co
re"
prefix="c" %>
<c:set var="item" value="2"/>
<c:forEach var="item" begin="0" end="0" step="2">
<c:out value="${item}" default="abc"/>
</c:forEach>
The JSTL code does not compile as an attribute for
forEach
tag is not correct. Ans A
A. 0
B. 2
C. ABC
D. Nothing gets printed as c.out statement does not
get executed.
50.<%@ taglib uri="http://java.sun.com/jsp/jstl/cor
e"
prefix="c" %>
<c:set var="i" value="4,3,2,1"/>
<c:forEach items="${j}" var="item" varStatus="statu
s">
<c:if test="${status.first}">
<c:out value="${status.index}" default="abc"/>
</c:if>
</c:forEach>
A. 1
B. 2
C. 3
D. 4
E. abc
F. The program does not compile
51. What is the output of this program?
import java.util.*;
public class genericstack <E> {
```

```
Stack <E> stk = new Stack <E>();
public void push(E obj) {
stk.push(obj);
}
public E pop() {
E obj = stk.pop();
return obj;
class Output {
public static void main(String args[])
genericstack <String> gs = new gene
ricstack<String>();
gs.push("Hello");
System.out.print(gs.pop() + " ");
genericstack <Integer> gs = new gen
ericstack<Integer>();
gs.push(36);
System.out.println(gs.pop());
}
}
a) Error
b) Hello
c) 36
d) Hello 36
Answer: d
Explanation: None.
Output:
$ javac Output.java
$ java Output
Hello 36
52. class output {
public static void main(String args[])
StringBuffer c = new StringBuffer(
"Hello");
```

```
StringBuffer c1 = new StringBuffer
(" World");
c.append(c1);
System.out.println(c);
}
a) Hello
b) World
c) Helloworld
d) Hello World Ans-d.
53.class output {
public static void main(String args[])
StringBuffer s1 = new StringBuffer("
Hello");
s1.setCharAt(1,'x');
System.out.println(s1);
}
a) xello
b) xxxxx
c) Hxllo
d) Hexlo
View Answer
Answer: c
Explanation: None.
Output:
$ javac output.java
$ java output
Hxllo
54. switch case
55. array of string
56. "welcome.trim()"= when compiled ans) equals
57. builder pattern
58. Question on this:
Calendar calendar = new GregorianCalendar();
int year = calendar.get(Calendar.YEAR);
```

```
int month = calendar.get(Calendar.MONTH);
int dayOfMonth = calendar.get(Calendar.DAY_OF_MONTH
); // Jan = 0, not 1
int dayOfWeek = calendar.get(Calendar.DAY OF WEEK)
int weekOfYear = calendar.get(Calendar.WEEK OF YEAR
int weekOfMonth= calendar.get(Calendar.WEEK_OF_MONT
H);
int hour = calendar.get(Calendar.HOUR);
// 12 hour clock
int hourOfDay = calendar.get(Calendar.HOUR OF DAY)
: // 24 hour clock
int minute = calendar.get(Calendar.MINUTE);
int second = calendar.get(Calendar.SECOND);
int millisecond= calendar.get(Calendar.MILLISECOND)
59. class output {
public static void main(String args[])
String s1 = "one";
String s2 = s1 + "two";
System.out.println(s2);
a) one
b) two
c) one two
d) compilation error
View Answer
Answer: c
60. Total number of users using listners - ans. ht
tpsessionlistner
61. class exception_handling {
public static void main(String args[])
try {
```

```
System.out.print("Hello" + " "
+1/0);
}
catch(ArithmeticException e) {
System.out.print("World");
}
a) Hello
b) World
c) HelloWorld
d) Hello World
Answer: b
62. class output {
public static void main(String args[])
char c[]={'a', '1', 'b',' ','A',
'0'};
for (int i = 0; i < 5; ++i)
if(Character.isDigit(c[i]))
System.out.println(c[i]+
" is a digit");
if(Character.isWhitespace(c[
i]))
System.out.println(c[i]+
" is a Whitespace character");
if(Character.isUpperCase(c[i
]))
System.out.println(c[i]+
" is an Upper case Letter");
if(Character.isLowerCase(c[i
]))
System.out.println(c[i]+
" is a lower case Letter");
i=i+3;
}
```

```
}
}
a) a is a lower case Letter
is White space character
b) b is a lower case Letter
is White space character
c) a is a lower case Letter
A is a upper case Letter
d) a is a lower case Letter
0 is a digit
View Answer
Answer:c
62. Two questions on these.
Interfaces for Event Listeners-
Session Serialization--HttpSession
Request Lifecycle Event--ServletRequestListener
Session Attribute Binding--HttpSessionAttribute
Listener
Session LifecycleEvent--HttpsessionListener
Web Application Lifecycle Event--ServletContext
Listener
63. Which of the following describes the correct
sequence of the steps involved in making a connect
ion with a database.
1. Loading the driver
2. Process the results.
3. Making the connection with the database.
4. Executing the SQL statements.
(A) 1,2,3,4
(B) 1,3,4,2
(C) 2,1,3,4
(D) 4,1,2,3
Answer: 1,3,4,2
64. import java.io.*;
class filesinputoutput {
public static void main(String args[])
InputStream obj = new FileInputStre
```

```
am("inputoutput.java");
System.out.print(obj.available());
Note: inputoutput.java is stored in the disk.
a) true
b) false
c) prints number of bytes in file
d) prints number of characters in the file
View Answer
Answer: c
Explanation: obj.available() returns the number of
bytes.
Output:
$ javac filesinputoutput.java
$ java filesinputoutput
1422
(Output will be different in your case
65.import java.io.*;
public class filesinputoutput {
public static void main(String[] args)
String obj = "abc";
byte b[] = obj.getBytes();
ByteArrayInputStream obj1 = new Byte
ArrayInputStream(b);
for (int i = 0; i < 2; ++ i) {
int c;
while((c = obj1.read()) != -1) {
if(i == 0) {
System.out.print(Charact
er.toUpperCase((char)c));
obj2.write(1);
System.out.print(obj2);
```

```
}
}
a) AaBaCa
b) ABCaaa
c) AaaBaaCaa
d) AaBaaCaaa
Answer: d
Explanation: None.
Output:
$ javac filesinputoutput.java
$ java filesinputoutput
AaBaaCaaa
66. Which of these methods are used to read in from
file?
a) get()
b) read()
c) scan()
d) readFileInput()
View Answer
Answer: b
67. tostring question
68. SC OK
69. Which of the following allows non repeatable re
ad in JDBC Connection?
a. TRANSACTION_READ_UNCOMMITTED
b. TRANSACTION_READ_COMMITTED
c. TRANSACTION_SERIALIZABLE
d. TRANSACTION_REPEATABLE_READ Ans. D
70. dirty unread- ans)read.
71.package pkg;
class output {
public static void main(String args[])
StringBuffer s1 = new StringBuffer(
"Hello");
s1.setCharAt(1, x);
System.out.println(s1);
```

```
}
}
a) xello
b) xxxxx
c) Hxllo
d) Hexlo
Answer: c
72.public class Test8 {
public static void main (String args[]) {
Number numberRef = new Integer(0);
Double doubleRef = (Double)numberRef;
}
It shows me exception at runtime:
Exception in thread "main" java.lang.ClassCastExcep
tion:
java.lang.Integer cannot be cast to java.lang.Dou
73. command design pattern ans)d (history...)
74. Which of these is not a valid value for dispatc
her element of filtermapping.
Select the one correct answer.
A. FORWARD
B. RESPONSE Ans) B
C. INCLUDE
D. ERROR
75. Which of the following is legal JSP syntax to p
rint the value of i.
Select the one correct answer
A. <%int i = 1;%>
<%= i; %>
B. <%int i = 1;
i; %>
C. <%int i = 1%>
<%= i %>
D. <%int i = 1;%>
<%= i %>
```

```
E. <%int i = 1%>
<%= i; %>
Ans) D.
76. <% int sum = 0;
for(j = 0; j < 10; j++) { %>
// XXX --- Add i to sum
<% } %>
// YYY --- Display ths sum. What must be added at
the location YYY to print the sum of ten numbers.
Select the one correct statement
A. <% sum %>
B. <% sum; %>
C. <%= sum %>
D. <%= sum; %> ANS) C.
77. <%@ taglib uri="http://java.sun.com/jsp/jstl/co
re"
prefix="c" %>
<c:set var="j" value="4,3,2,1"/>
<c:forEach items="${j}" var="item" begin="1" end="2
">
<c:out value="${item}" default="abc"/>
</c:forEach>
A. 1
B. 2
C. 3
D. 4
E. abc
F. The program does not compile.
Which numbers gets pri
Ans) 2,3
78. Which number gets printed when the following JS
TL code
fragment is executed? Select the one correct answer
<%@ taglib uri="http://java.sun.com/jsp/jstl/core"</pre>
prefix="c" %>
<c:set var="j" value="4,3,2,1"/>
```

```
<c:forEach items="${j}" var="item" varStatus="statu
s">
<c:if test="${status.first}">
<c:out value="${status.index}" default="abc"/>
</c:if>
</c:forEach> Ans)A
A. 1
B. 2
C. 3
D. 4
```

E. abc

F. The program does not compile.

79. Which of the following is not a valid HTTP/1.1 method. Select the one correct answer.

15.

A. CONNECT method

B. COMPARE method

C. OPTIONS method

D. TRACE method

Name the http method used

answer: B

80. Name the location of compiled class files within a war file? Select the one correct answer.

19.

A. /META-INF/classes

B. /classes

C. /WEB-INF/classes

D. /root/classes

Answers- web inf

81. What get printed when the following JSTL code f ragment is executed?

<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>

<c:forEach var="item" begin="0" end="12" step="3">

\${item}

</c:forEach>
options

A)0,3,6,9,12

B)3,6,9,12

C)0,6,9,12

D)0,3,6,9

# **Questions on Servlets (GoldenMeerut)**

1. The method getWriter returns an object of type PrintWriter. This class has println methods to generate output. Which of these classes define the getWriter method? Select the one correct answer.

A. HttpServletRequest

# B. HttpServletResponse

C. ServletConfig

D. ServletContext

2. Name the method defined in the HttpServletResponse class that may be used to set the content type. Select the one correct answer.

A. setType

#### B. setContent

C. setContentType

D. setResponseContentType

- 3. Which of the following statement is correct. Select the one correct answer.
- A. The response from the dedicated server to a HEAD request consists of status line, content type and the document.
- B. The response from the server to a GET request does not contain a document.
- C. The setStatus method defined in the HttpServletRequest class takes an int as an argument and sets the status of Http response

# D. The HttpServletResponse defines constants like SC\_NOT\_FOUND that may be used as a parameter to setStatus method.

4. The sendError method defined in the HttpServlet class is equivalent to invoking the setStatus method with the following parameter. Select the one correct answer.

A. SC OK

B. SC\_MOVED\_TEMPORARILY

# C. SC\_NOT\_FOUND

D. SC\_INTERNAL\_SERVER\_ERROR

E. ESC\_BAD\_REQUEST

5. The sendRedirect method defined in the HttpServlet class is equivalent to invoking the setStatus method with the following parameter and a Location header in the URL. Select the one correct answer.

A. SC OK

# B. SC\_MOVED\_TEMPORARILY

C. SC\_NOT\_FOUND

D. SC\_INTERNAL\_SERVER\_ERROR

E. ESC\_BAD\_REQUEST

6. Which of the following statements are correct about the status of the Http response. Select the one correct answer.

# A. A status of 200 to 299 signifies that the request was successful.

B. A status of 300 to 399 are informational messages.

C. A status of 400 to 499 indicates an error in the server.

D. A status of 500 to 599 indicates an error in the client.

7. To send binary output in a response, the following method of HttpServletResponse may be used to get the appropriate Writer/Stream object. Select the one correct answer.

A. getStream

# B. getOutputStream

C. getBinaryStream

D. getWriter

8. To send text output in a response, the following method of HttpServletResponse may be used to get the appropriate Writer/Stream object. Select the one correct answer.

A. getStream

B. getOutputStream

C. getBinaryStream

# D. getWriter

9. Is the following statement true or false. URL rewriting may be used when a browser is disabled. In URL encoding the session id is included as part of the URL.

10. Name the class that includes the getSession method that is used to get the HttpSession object.

# A. HttpServletRequest

B. HttpServletResponse

C. SessionContext

D. SessionConfig

11. Which of the following are correct statements? Select the two correct answers.

A. The getRequestDispatcher method of ServletContext class takes the full path of

# the servlet, whereas the getRequestDispatcher method of HttpServletRequest

class takes the path of the servlet relative to the ServletContext.

B. The include method defined in the RequestDispatcher class can be used to access one servlet from another. But it can be invoked only if no output has been sent to the server.

# C. The getRequestDispatcher(String URL) is defined in both ServletContext and

# HttpServletRequest method

- D. The getNamedDispatcher(String) defined in HttpServletRequest class takes the name of the servlet and returns an object of RequestDispatcher class.
- 12. A user types the URL http://www.javaprepare.com/scwd/index.html . Which HTTP request gets generated. Select the one correct answer.

#### A. GET method

- B. POST method
- C. HEAD method
- D. PUT method
- 13. Which HTTP method gets invoked when a user clicks on a link? Select the one correct answer.

#### A. GET method

- B. POST method
- C. HEAD method
- D. PUT method
- 14. When using HTML forms which of the following is true for POST method? Select the one correct answer.
- A. POST allows users to bookmark URLs with parameters.
- B. The POST method should not be used when large amount of data needs to be transferred.
- C. POST allows secure data transmission over the http method.
- D. POST method sends data in the body of the request.
- 15. Which of the following is not a valid HTTP/1.1 method. Select the one correct answer.
- A. CONNECT method

#### B. COMPARE method

- C. OPTIONS method
- D. TRACE method
- 16. Name the http method used to send resources to the server. Select the one correct answer.
- A. FTP methodd

#### B. PUT method

- C. WRITE method
- D. COPY method
- 17. Name the http method that sends the same response as the request. Select the one correct answer.
- A. DEBUG method

#### B. TRACE method

- C. OPTIONS method
- D. HEAD method
- 18. Which three digit error codes represent an error in request from client? Select the one correct answer.
- A. Codes starting from 200
- B. Codes starting from 300

# C. Codes starting from 400

- D. Codes starting from 500
- 19. Name the location of compiled class files within a war file? Select the one correct answer.
- A. /META-INF/classes
- B. /classes

#### C. /WEB-INF/classes

D. /root/classes

# Questions on JSTL and EL

1. What gets printed when the following expression is evaluated? Select the one correct answer.

```
${(1==2) ? 4 : 5}
```

- A. 1
- B. 2
- C. 4
- D. 5

2. What gets printed when the following expression is evaluated? Select the one correct answer.

```
${4 div 5}
```

- A. 0
- B. 0.8
- C. 1
- D. -1

3. What gets printed when the following expression is evaluated? Select the one correct answer.

```
${12 % 4}
```

- A. 0
- B. 3
- C. 8
- D. 16

4. What is the effect of executing the following JSP statement, assuming a class with name Employee exists in classes package.

```
<%@ page import = "classes.Employee" %> <jsp:useBean
id="employee"</pre>
```

class="classes.Employee" scope="session"/> <jsp:setProperty
name="employee" property="\*"/>

- A. The code does not compile as there is no property attribute of setProperty tag.
- B. The code does not compile as property attribute cannot take \* as a value.
- C. The code sets value of all properties of employee bean to "\*".
- D. The code sets the values of all properties of employee bean to matrching parameters in request object.
- 5. What is the effect of evaluation of following expression? Select the one correct answer.  $\{(5*5) \text{ ne } 25\}$

A. true

#### B. false

C. 25

D. The expression does not compile as ne is not a valid operator.

6. What is the effect of evaluation of following expression? Select the one correct answer. \$\{'cat' gt 'cap'\}

#### A. true

B. false

D. 11

C. catcap

D. The expression does not compile as gt operator cannot be applied on strings.

7. How many numbers are printed, when the following JSTL code fragment is executed? Select the one correct answer.

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<c:forEach var="item" begin="0" end="10" step="2">
${item}
</c:forEach>
A.1
B.5
C.6
```

8. What gets printed when the following JSTL code fragment is executed? Select the one correct answer.

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<c:set var="item" value="2"/>
<c:if test="${var==1}" var="result" scope="session">
<c:out value="${result}"/>
</c:if>
```

A. The JSTL code does not compile as attribute for if tag are not correct.

B. true

C. false

# D. Nothing gets printed.

9. What gets printed when the following JSTL code fragment is executed? Select the one correct answer.

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<c:set var="item" value="2"/>
<c:forEach var="item" begin="0" end="0" step="2">
<c:out value="${item}" default="abc"/>
</c:forEach>
```

A. The JSTL code does not compile as an attribute for forEach tag is not correct.

#### B. 0

C. 2

D. ABC

E. Nothing gets printed as c.out statement does not get executed.

10. How many numbers gets printed when the following JSTL code fragment is executed? Select the one correct answer.

```
<%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %>
<c:set var="item" value="2"/>
<c:choose>
<c:when test="${item>0}">
<c:out value="1"/>
</c:when>
<c:when test="${item==2}">
<c:out value="2"/>
</c:when>
<c:when test="${item<2}">
<c:out value="3"/>
</c:when>
<c:otherwise>
<c:out value="4"/>
</c:otherwise>
</c:choose>
A. No number gets printed.
```

# B. One number gets printed.

- C. Two numbers gets printed.
- D. Three numbers gets printed.
- E. Four numbers gets printed.

11. Which numbers gets printed when the following JSTL code fragment is executed? Select the two correct answers. <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %> <c:set var="j" value="4,3,2,1"/> <c:forEach items="\${j}" var="item" begin="1" end="2"> <c:out value="\${item}" default="abc"/> </c:forEach> A. 1 B. 2 C. 3 D. 4 E. abc F. The program does not compile. 12. Which numbers gets printed when the following JSTL code fragment is executed? Select the two correct answers. <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %> <c:set var="j" value="4,3,2,1"/> <c:forEach items="\${j}" var="item" begin="1" end="2"</pre> varStatus="status"> <c:out value="\${status.count}" default="abc"/> </c:forEach> A. 1 B. 2 C.3D. 4 E. abc F. The program does not compile. 13. Which number gets printed when the following JSTL code fragment is executed? Select the one correct answers. <%@ taglib uri="http://java.sun.com/jsp/jstl/core" prefix="c" %> <c:set var="j" value="4,3,2,1"/> <c:forEach items="\${j}" var="item" varStatus="status"> <c:if test="\${status.first}"> <c:out value="\${status.index}" default="abc"/> </c:if> </c:forEach> A. 1 B. 2 C. 3 D. 4 E. abc F. The program does not compile.

14. Which of these represent the correct path for the core JSTL library in JSTL version 1.1? Select the one correct answer.

# A. http://java.sun.com/jsp/jstl/core

- B. http://java.sun.com/jsp/core
- C. http://java.sun.com/core
- D. <a href="http://java.sun.com/jsp/jstl1.1/core">http://java.sun.com/jsp/jstl1.1/core</a>

# Questions on tag library

1. When implementing a tag, if the tag just includes the body verbatim, or if it does not include the body, then the tag handler class must extend the BodyTagSupport class. Is this statement true of false.

#### **FALSE**

2. Fill in the blanks. A tag handler class must implement the javax.servlet.jsp.tagext.Tag interface. This is accomplished by extending the class

TagSupport or another class named in one of the options below. Select the one correct answer.

- A. IterationTag
- B. TagClass
- C. BodyTag

# D. BodyTagSupport

3. Is this statement true or false. The deployment descriptor of a web application must have the name web.xml. In the same way the tag library descriptor file must be called taglib.xml.

#### **FALSE**

- 4. A JSP file that uses a tag library must declare the tag library first. The tag library is defined using the taglib directive <%= taglib uri="..." prefix="..."%> Which of the following specifies the correct purpose of prefix attribute. Select the one correct answer.
- A. The prefix defines the name of the tag that may be used for a tag library.
- B. The prefix attribute defines the location of the tag library descriptor file.
- C. The prefix attribute should refer to the short name attribute of the tag library file that is defined by the uri attribute of taglib directive.
- D. The prefix attribute is used in front of a tagname of a tag defined within the tag library.

5. A JSP file uses a tag as <myTaglib:myTag>. The myTag element here should be defined in the tag library descriptor file in the tag element using which element. Select the one correct answer.

A. tagname

#### B. name

C. tag

D. prefix

6. Which of the elements defined within the taglib element of taglib descriptor file are required. Select the two correct answers.

A. tlib-version

#### B. short-name

C. uri

D. display-name

7. Which of the elements defined within the taglib element of taglib descriptor file are required. Select the two correct answers.

#### A. name

B. description

C. validator

# D. tag-class

E. display-name

8. Name the element within the tag element that defines the name of the class that implements the functionality of tag. Select the one correct answer.

A. class-name

B. tag

C. class

# D. tag-class

E. tei-class

9. Which of these are legal return types of the doStartTag method defined in a class that extends TagSupport class. Select the two correct answers.

A. EVAL PAGE

B. EVAL BODY

C. EVAL\_PAGE\_INCLUDE

D. EVAL\_BODY\_INCLUDE

E. SKIP\_PAGE

# F. SKIP\_BODY

G. SKIP PAGE INCLUDE

H. SKIP\_BODY\_INCLUDE

10. Which of these are legal return types of the doAfterBody method defined in a class that extends TagSupport class. Select the two correct answers.

A. EVAL\_PAGE

B. EVAL\_BODY

C. EVAL\_PAGE\_AGAIN

# D. EVAL\_BODY\_AGAIN

E. SKIP\_PAGE

#### F. SKIP BODY

G. SKIP\_PAGE\_AGAIN

H. SKIP\_BODY\_AGAIN

11. Which of these are legal return types of the doEndTag method defined in a class that extends TagSupport class. Select the two correct answers.

#### A. EVAL PAGE

B. EVAL BODY

C. EVAL\_PAGE\_INCLUDE

D. EVAL\_BODY\_INCLUDE

#### E. SKIP PAGE

F. SKIP\_BODY

G. SKIP\_PAGE\_INCLUDE

H. SKIP\_BODY\_INCLUDE

# **Questions on JSP**

1. Which of the following is legal JSP syntax to print the value of i. Select the one correct

answer

A. 
$$<\%$$
 int  $i = 1;\%>$ 

$$<\%=i; \%>$$

B. 
$$<\%$$
 int  $i = 1$ ;

C. 
$$<\%$$
 int i = 1%>

$$<\% = i \% >$$

D. 
$$<\%$$
 int  $i = 1;\%>$ 

$$<\% = i \% >$$

E. 
$$<\%$$
 int  $i = 1\%>$ 

$$<\%=i; \%>$$

2. A JSP page called test.jsp is passed a parameter name in the URL using

```
http://localhost/test.jsp?name="John". The test.jsp contains the
following code.
<%! String myName=request.getParameter();%>
<% String test= "welcome" + myName; %>
<%= test%>
A. The program prints "Welcome John"
B. The program gives a syntax error because of the statement
<%! String myName=request.getParameter();%>
C. The program gives a syntax error because of the statement
<% String test= "welcome" + myName; %>
D. The program gives a syntax error because of the statement
<%= test%>
3. Which of the following correctly represents the following JSP statement. Select
the one
correct answer.
<%=x%>
A. <jsp:expression=x/>
B. <jsp:expression>x</jsp:expression>
C. <jsp:statement>x</jsp:statement>
D. <jsp:declaration>x</jsp:declaration>
E. <jsp:scriptlet>x</jsp:scriptlet>
4. Which of the following correctly represents the following JSP statement. Select
the one
correct answer.
<%x=1;%>
A. \langle \text{jsp:expression x=1;}/\rangle
B. <jsp:expression>x=1;</jsp:expression>
C. <jsp:statement>x=1;</jsp:statement>
D. <jsp:declaration>x=1;</jsp:declaration>
E. <jsp:scriptlet>x=1;</jsp:scriptlet>
5. What gets printed when the following JSP code is invoked in a browser. Select
the one
correct answer.
<%= if(Math.random() < 0.5) %>
```

hello

<%= } else { %>

```
hi <%= } %>
```

- A. The browser will print either hello or hi based upon the return value of random.
- B. The string hello will always get printed.
- C. The string hi will always get printed.
- D. The JSP file will not compile.
- 6. Which of the following are correct. Select the one correct answer.
- A. JSP scriptlets and declarations result in code that is inserted inside the \_jspService method.
- B. The JSP statement < ! int x; % is equivalent to the statement <jsp:scriptlet>int x; </jsp:scriptlet%.
- C. The following are some of the predefined variables that maybe used in JSP expression httpSession, context.
- D. To use the character %> inside a scriptlet, you may use %\> instead.
- 7. What gets printed when the following is compiled. Select the one correct answer.

```
<% int y = 0; %>
<% int z = 0; %>
<% for(int x=0; x<3; x++) { %>
<% z++; ++y; %>
<% }%>
<% if(z<y) {%>
<%= z%>
<% } else {%>
<%= z - 1%>
<% }%>
A. 0
B. 1
C. 2
```

- C. 2
- D. 3
- E. The program generates compilation error.
- 8. Which of the following JSP variables are not available within a JSP expression. Select

the one correct answer.

- A. out
- B. session
- C. request
- D. response
- E. httpsession
- F. page
- 9. A bean with a property color is loaded using the following statement <jsp:usebean id="fruit" class="Fruit"/>

Which of the following statements may be used to print the value of color property of the

bean. Select the one correct answer.

- A. <jsp:getColor bean="fruit"/>
- B. <jsp:getProperty id="fruit" property="color"/>
- C. <jsp:getProperty bean="fruit" property="color"/>
- D. <jsp:getProperty name="fruit" property="color"/>
- E. <jsp:getProperty class="Fruit" property="color"/>
- 10. A bean with a property color is loaded using the following statement <jsp:usebean id="fruit" class="Fruit"/>

Which of the following statements may be used to set the of color property of the bean.

Select the one correct answer.

- A. <jsp:setColor id="fruit" property="color" value="white"/>
- B. <jsp:setColor name="fruit" property="color" value="white"/>
- C. <jsp:setValue name="fruit" property="color" value="white"/>
- D. <jsp:setProperty name="fruit" property="color" value="white">
- E. <jsp:setProperty name="fruit" property="color" value="white"/>
- F. <jsp:setProperty id="fruit" property="color" value="white">
- 11. A bean with a property color is loaded using the following statement <jsp:usebean id="fruit" class="Fruit"/>

What happens when the following statement is executed. Select the one correct answer.

```
<jsp:setProperty name="fruit" property="*"/>
```

A. This is incorrect syntax of <jsp:setProperty/> and will generate a compilation

error. Either value or param must be defined.

- B. All the properties of the fruit bean are initialized to a value of null.
- C. All the properties of the fruit bean are assigned the values of input parameters of

#### the JSP page that have the same name.

- D. All the properties of the fruit bean are initialized to a value of \*.
- 12. Is the following statement true or false. If the isThreadSafe attribute of the page directive is false, then the generated servlet implements the SingleThreadModel interface.

#### **TRUE**

13. Which of the following represents a correct syntax for usebean. Select the two correct

answers.

- A. <jsp:usebean id="fruit scope ="page"/>
- B. <jsp:usebean id="fruit type ="String"/>
- C. <jsp:usebean id="fruit type ="String" beanName="Fruit"/>
- D. <jsp:usebean id="fruit class="Fruit" beanName="Fruit"/>
- 14. Name the default value of the scope attribute of <jsp:usebean>.
- A. page
- B. application
- C. session
- D. request
- 15. Which of the following statements are true for <jsp:usebean>. Select the two correct

answers.

- A. The id attribute must be defined for <jsp:usebean>.
- B. The scope attribute must be defined for <jsp:usebean>.
- C. The class attribute must be defined for <jsp:usebean>.
- D. The <jsp:usebean> must include either type or class attribute or both.
- 16. Which of these are legal attributes of page directive. Select the two correct answers.
- A. include
- B. scope
- C. errorPage
- D. session
- E. debug

17. Which of the following represents the XML equivalent of this statement <%@include

file="a.jsp"%> . Select the one correct statement

- A. <jsp:include file="a.jsp"/>
- B. <jsp:include page="a.jsp"/>
- C. <jsp:directive.include file="a.jsp"/>
- D. There is no XML equivalent of include directive.
- 18. Assume that you need to write a JSP page that adds numbers from one to ten, and then

print the output.

```
<% int sum = 0;
for(j = 0; j < 10; j++) { %>
// XXX --- Add j to sum
<% } %>
// YYY --- Display the sum
```

Which statement when placed at the location XXX can be used to compute the sum.

Select the one correct statement

```
A. <% sum = sum + j %>
B. <% sum = sum + j; %>
C. <%= sum = sum + j %>
D. <%= sum = sum + j; %>
```

19. Now consider the same JSP example as last question. What must be added at the location

YYY to print the sum of ten numbers. Select the one correct statement

```
A. <% sum %>
B. <% sum; %>
C. <%= sum %>
D. <%= sum; %>
```

20. JSP pages have access to implicit objects that are exposed automatically. One such object

that is available is request. The request object is an instance of which class?

- A. HttpRequest
- B. ServletRequest
- C. Request
- D. HttpServletRequest

21. JSP pages have access to implicit objects that are exposed automatically. Name the implicit object that is of type HttpSession.

A. session

B. application

C. httpSession

D. httpsession

22. A Java bean with a property color is loaded using the following statement <jsp:usebean id="fruit" class="Fruit"/>

What is the effect of the following statement.

```
<jsp:setproperty name="fruit" property="color"/>
Colort the contract of the color than the
```

Select the one correct answer.

- A. An error gets generated because the value attribute of setAttribute is not defined.
- B. The color attribute is assigned a value null.
- C. The color attribute is assigned a value "".
- D. If there is a non-null request parameter with name color, then its value gets assigned to color property of Java Bean fruit.
- 23. The page directive is used to convey information about the page to JSP container. Which

of these are legal syntax of page directive. Select the two correct statement

```
A. <% page info="test page" %>
```

```
B. < 0 page info="test page" session="false" > 0
```

C.<%@ page session="true" %>

E. <%@ page isThreadSafe=true %>

24. Is the following JSP code legal? Select the one correct statement.

```
<%@page info="test page" session="false"%>
<%@page session="false"%>
```

A. Yes. This is legal JSP syntax.

- B. No. This code will generate syntax errors.
- 25. A JSP page needs to generate an XML file. Which attribute of page directive may be

used to specify that the JSP page is generating an XML file.

A. contentType

- B. generateXML
- C. type
- D. outputXML
- 26. A JSP page uses the java.util.ArrayList class many times. Instead of referring the class by

its complete package name each time, we want to just use ArrayList. Which attribute of

page directive must be specified to achieve this. Select the one correct answer.

- A. extends
- B. import
- C. include
- D. package
- E. classpath
- 27. Which of these are true. Select the two correct answers.
- A. The default value of isThreadSafe attribute of page directive is true.
- B. If isThreadSafe attribute of page directive is set to true, then JSP container dispatches request for the page sequentially.
- C. When is Thread Safe attribute of page directive is set to true, a thread is created for each request for the page.
- D. Setting isThreadSage attribute to true for JSP pages, can lead to poor performance.
- 28. Which of the following are examples of JSP directive. Select the two correct answers.(?)(not checked yet)
- A. include
- B. exclude
- C. import
- D. taglibrary
- E. servlet
- F. page
- 29. Which of these is true about include directive. Select the one correct answer.
- A. The included file must have jspf extension.
- B. The XML syntax of include directive in <jsp:include file="fileName"/>.
- C. The content of file included using include directive, cannot refer to variables local
- to the original page.

- D. When using the include directive, the JSP container treats the file to be included as if it was part of the original file.
- 30. Name the implicit variable available to JSP pages that may be used to access all the other implicit objects.

A. page

B. pageContext

C. context

D. object

E. jspPave

# Questions on Deployment Descriptor

1. Which of the following files is the correct name and location of deployment descriptor of

a web application. Assume that the web application is rooted at \doc-root. Select the one

correct answer

A. \doc-root\dd.xml

B. \doc-root\web.xml

C. \doc-root\WEB-INF\web.xml

D. \doc-root\WEB\_INF\dd.xml

E. \doc-root\WEB-INF\dd.xml

F. \doc-root\WEB\_INF\web.xml

 ${\sf G. \backslash doc\text{-}root\backslash WEB\text{-}INF\backslash lib\backslash dd.xml}}$ 

H. \doc-root\WEB-INF\classes\dd.xml

2. Which element of the servlet element in the deployment descriptor is used to specify

the parameters for the ServletConfig object. Select the one correct answer.

A. servlet-config

B. init-param

C. load-on-startup

D. filter

3. Which of these is true about deployment descriptors. Select the one correct answer.

A. The order of elements in deployment descriptor is not important. The elements can follow any order.

- B. The elements of deployment descriptor are case insensitive.
- C. The servlet-mapping element, if defined, must be included within the servlet element.
- D. The web-app element must include the servlet element.
- 4. The exception-type element specifies an exception type and is used to handle exceptions

generated from a servlet. Which element of the deployment descriptor includes the

exception-type as a sub-element. Select the one correct answer.

#### A. error-page

- B. servlet
- C. exception
- D. error-handling
- 5. Which of these is a correct fragment within the web-app element of deployment descriptor. Select the one correct answer.
- A. <exception> <exception-type> mypackage.MyException</exception-type> <location> /error.jsp</location> </exception>
- B. <error-page> <exception-type> mypackage.MyException</exception-type> <location> /error.jsp</location> </error-page>
- C. <error-page> <exception> mypackage.MyException </exception-type> <location> /error.jsp </location> </error-page>
- D. <error-page> <exception-type> mypackage.MyException</exception-type> </error-page>
- E. <error-page> <servlet-name> myservlet</servlet-name> <exception-type> mypackage.MyException</exception-type> </error-page>
- F. <exception> <servlet-name> myservlet</servlet-name> <exception-type> mypackage.MyException</exception-type> </exception>

6. Which element of the deployment descriptor of a web application includes the welcomefile-

list element as a subelement. Select the one correct answer.(?)(not checked yet) A. web-app

- B. welcome-file
- C. servlet
- D. file-list
- 7. Which of these is a correct fragment within the web-app element of deployment descriptor. Select the two correct answer.
- A. <error-page> <error-code>404</error-code> <location>/error.jsp</location> </error-page>
- B. <error-page> <exception-type>mypackage.MyException</exception-type> <error-code>404</error-code> <location>/error.jsp</location> </error-page> C. <error-page> <exception-type>mypackage.MyException</exception-type> <error-code>404</error-code> </error-page>
- D. <error-page> <exception-type>mypackage.MyException</exception-type> <location>/error.jsp</location> </error-page>
- 8. Which of these is a correct example of specifying a listener element resented by MyClass

class. Assume myServlet element is defined correctly. Select the one correct answer.

- A. < listener > MyClass < / listener >
- B. tener> listener-class>MyClass</listener-class></listener>
- C. < listener > < listener name > a Listener < / listener name > < listener class > MyClass < / listener >
- D. clistener> <servlet-name>myServlet</servlet-name> <listenerclass> MyClass</listener-class> </listener>
- 9. The root of the deployment descriptor is named as
- A. web
- B. web-app
- C. name

- D. display-name
- 10. With in a context-param element of deployment descriptor, which of the following

element is required?

- A. param-name
- B. name
- C. init-param
- D. servlet-name
- 11. Which of these is not a valid top level element in web-app
- A. icon
- B. listener
- C. eror-page
- D. security-constraint
- E. param-name
- 12. Which of the follwing are mandatory elements within the filter element. Select two

correct answers.

- A. filter-name
- B. name
- C. value
- D. filter-class
- E. init-param
- 13. Which of these is not a valid value for dispatcher element of filter-mapping. Select the

one correct answer.

- A. FORWARD
- **B. RESPONSE**
- C. INCLUDE
- D. ERROR

14. Which of these is not correct about the filter-mapping element of web-app. Select the one

correct answer.

- A. filter-name element must be present in the filter-mapping element.
- B. Either url-pattern or servlet-name must be present in the filter-mapping element.
- C. dispatcher element can be declared zero to three times in the filter-mapping element.
- D. filter-name element in the filter-mapping should be same as the corresponding filter-name element in the filter element of deployment descriptor.