**Question Paper**

**(CoreJava,JDBC,Servlet & JSP)**

**Marks :30**

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| Q1. | Which two statements are true for any concrete class implementing the java.lang.Runnable interface?   1. You can extend the *Runnable* interface as long as you override the *public run()* method. 2. The class must contain a method called *run()* from which all code for that thread will be initiated. 3. The class must contain an empty *public void* method named *run()*. 4. The class must contain a *public void* method named *runnable()*. 5. The class definition must include the words implements *Threads* and contain a method called *run()*. 6. The mandatory method must be *public*, with a return type of *void*, must be called | | | | |
|
|  | A. | |  | | --- | | 1 and 3 | |  | B. | |  | | --- | | 2 and 4 | |
|  | C. | |  | | --- | | 1 and 5 | |  | D. | |  | | --- | | 2 and 6 | |

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| Q2. | public class X  {  public static void main(String [] args)  {  X x = new X();  X x2 = m1(x); /\* Line 6 \*/  X x4 = new X();  x2 = x4; /\* Line 8 \*/  doComplexStuff();  }  static X m1(X mx)  {  mx = new X();  return mx;  }  }  After line 8 runs. how many objects are eligible for garbage collection? |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | A. | |  | | --- | | 0 | |  | B. | |  | | --- | | 1 | | |  | C. | |  | | --- | | 2 | |  | D. | |  | | --- | | 3 | | |

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| Q3. | Which one of these lists contains only Java programming language keywords? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | class, if, void, long, Int, continue | | |  | B. | |  | | --- | | goto, instanceof, native, finally, default, throws | | |  | C. | |  | | --- | | try, virtual, throw, final, volatile, transient | | |  | D. | |  | | --- | | strictfp, constant, super, implements, do | | |  | E. | |  | | --- | | byte, break, assert, switch, include | | |
| Q4.Which statement is true for the class java.util.HashSet? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | The elements in the collection are ordered. | | |  | B. | |  | | --- | | The collection is guaranteed to be immutable. | | |  | C. | |  | | --- | | The elements in the collection are guaranteed to be unique. | | |  | D. | |  | | --- | | The elements in the collection are accessed using a unique key. | | |

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| Q5. | Suppose that you would like to create an instance of a new *Map* that has an iteration order that is the same as the iteration order of an existing instance of a *Map*. Which concrete implementation of the *Map* interface should be used for the new instance? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | TreeMap | | |  | B. | |  | | --- | | HashMap | | |  | C. | |  | | --- | | LinkedHashMap | | |  | D. | |  | | --- | | The answer depends on the implementation of the existing instance. | | |

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| Q6. | Which three are valid method signatures in an interface?   1. private int getArea(); 2. public float getVol(float x); 3. public void main(String [] args); 4. public static void main(String [] args); 5. boolean setFlag(Boolean [] test); |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | A. | |  | | --- | | 1 and 2 | |  | B. | |  | | --- | | 2, 3 and 5 | | |  | C. | |  | | --- | | 3, 4, and 5 | |  | D. | |  | | --- | | 2 and 4 | | |

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| Q7. | Which class does not override the *equals()* and *hashCode()* methods, inheriting them directly from class Object? |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | A. | |  | | --- | | java.lang.String | |  | B. | |  | | --- | | java.lang.Double | | |  | C. | |  | | --- | | java.lang.StringBuffer | |  | D. | |  | | --- | | java.lang.Character | | |

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| Q8. | Which is true about an anonymous inner class? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | It can extend exactly one class and implement exactly one interface. | | |  | B. | |  | | --- | | It can extend exactly one class and can implement multiple interfaces. | | |  | C. | |  | | --- | | It can extend exactly one class or implement exactly one interface. | | |  | D. | |  | | --- | | It can implement multiple interfaces regardless of whether it also extends a class. | | |

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| Q9. | Which two are valid constructors for Thread?   1. Thread(Runnable r, String name) 2. Thread() 3. Thread(int priority) 4. Thread(Runnable r, ThreadGroup g) 5. Thread(Runnable r, int priority) |
| |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  | A. | |  | | --- | | 1 and 3 | |  | B. | |  | | --- | | 2 and 4 | | |  | C. | |  | | --- | | 1 and 2 | |  | D. | |  | | --- | | 2 and 5 | | |

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| Q10. | Which statement is true? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | The *notifyAll()* method must be called from a synchronized context. | | |  | B. | |  | | --- | | To call *wait()*, an object must own the lock on the thread. | | |  | C. | |  | | --- | | The *notify()* method is defined in class java.lang.Thread. | | |  | D. | |  | | --- | | The *notify()* method causes a thread to immediately release its locks. | | |

**Q11.Which of the following methods are needed for loading a database driver in JDBC?**

1. registerDriver() method
2. Class.forName()
3. Both A and B
4. getConnection()

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

1. Statement stmt = connection.createStatement();stmt.execute("totalStock()");
2. CallableStatement clbstmnt = con.prepareCall("{call totalStock}");cs.executeQuery();
3. StoreProcedureStatement spstmtconnection.createStoreProcedure("totalStock()");

spstmt.executeQuery();

1. PrepareStatement pstmt = connection.prepareStatement("totalStock()");pstmt.execute();

Q 13.State true or false

ResultSet.CONCUR\_UPDATABLE used with the result set is used to update the rows directly in the database.

1. True
2. False

Q14.Which driver is efficient and always preferable for using JDBC applications?

1. Type-4
2. Type-1
3. Type-2
4. Type-3

Q15. 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?

1. All Drivers Type1,Type2,Type3,Type4
2. Type-1 Only
3. Type-2 Only
4. Type-3 and Type-4

Q16.In which file do we define a servlet mapping?

1. servlet.mappings
2. servlet.xml
3. web.xml
4. Simple.java

Q17 Given an HttpServletRequest request and HttpServletResponse response, which sets a cookie "username" with the value "joe" in a servlet?

1. request.addCookie(new Cookie("username", "joe"));
2. response.addCookie(new Cookie("username", "joe"));
3. response.addCookie("username", "joe");
4. request.addCookie("username", "joe");

Q18.For a given ServletResponse response, which retrieve an object forwriting text data?

1. response.getOutputWriter()
2. response.getWriter()
3. response.getWriter().getOutputStream()
4. response.getWriter(Writer.OUTPUT\_TEXT)

Q19. 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.

1. HttpServletRequest
2. ServletConfig
3. HttpServletResponse
4. ServletContext

Q20. Given the following servlet mapping definition for the web application named 'secureapp',

<servlet>

<servlet-name>ProcessLoginData</servlet-name>

<servlet-class>DoLogin</servlet-class>

</servlet>

<servlet-mapping>

<servlet-name>ProcessLoginData</servlet-name>

<url-pattern>do/Login</url-pattern>

</servlet-mapping>

which of the following URLs will correctly request the Servlet?

1. http://www.mywebapp.com/secureapp/do/Login?name="bob"
2. http://www.mywebapp.com/secureapp/doLogin?name="bob"
3. http://www.mywebapp.com/Login?name="bob"
4. http://www.mywebapp.com/secureapp/Login?name="bob"

Q21.Name the method defined in the HttpServletResponse class that may be used to set the content type. Select the one correct answer.

1. setContent
2. setType
3. setContentType
4. setResponseContentType

Q22.Which of the following JSP variables are not available within a JSP expression. Select the one correct answer.

1. out
2. httpsession
3. session
4. request

Q23.In JSP, how can you know what HTTP method (GET or POST) is used by client request ?

1. by using request.setMethod()
2. impossible to know
3. by using request.getMethod()

Q24.What is the key difference between using a <jsp:forward> and HttpServletResponse.sendRedirect()?

1. The two methods perform identically.
2. forward executes on the client while sendRedirect() executes on the server.
3. forward executes on the server while sendRedirect() executes on the client.
4. None of the above

Q25.The following declaration is valid or not?

<%@ page language='java' %>

1. Valid
2. Invalid

Q26.Which of the following tags can you use to print the value of an expression to

the output stream?

1. <%@ %>
2. <%! %>
3. <% %>
4. <%= %>

Q.27 The following declaration is valid or not?

<%@ page import="org.pskills.dbconnection.\* " %>

<%@ page session="true" %>

<%@ page import="java.text.\*" %>

1. Valid
2. Invalid

Q28.Which of the following methods is defined by the JSP engine?

1. jspInit()
2. \_jspService()
3. \_jspService(HttpServletRequest, HttpServletResponse)
4. \_jspDestroy()

Q29.What will be the output of the following code?

<% int x = 5; %>

<%! int x = 10; %>

<%! int y = 50; %>

is <%= y \* x %>

1. The code will not compile
2. 30
3. 250
4. 500

Q30. How much implicit object in JSP?

1. 7
2. 8
3. 9
4. None of These.