1. Valid comments in Java include which of the following?

/\* This is a comment \*/

// This is a comment

/\*\* \* This is a comment

1. 2 only
2. 1 and 3 only
3. **1, 2 and 3**
4. 1 and 2 only
5. How do search engine companies like Google, Microsoft, and Yahoo make money?
6. government subsidies
7. **selling product advertising on the engine's site**
8. users are billed per search
9. users pay a monthly fee for unlimited searching
10. In the following URL, what is the name of the server http\://trestle.icarnegie.com/ssd1/course.html
    * 1. **trestle.icarnegie.com**
      2. ssd1/course.html
      3. trestle
      4. http
11. What does "url" stand for?
12. Universal Resource Locator
13. **Uniform Resource Locator**
14. Uniform Requirement Location
15. Underground Racing League
16. In www.google.com; what does "www" stand for?
17. We Won't Work
18. World Wild Web
19. Wild Wild West
20. **World Wide Web**
21. Consider the following class.

public class AppletClass extends java.applet.Applet

public void paint(java.awt.Graphics g) g.drawString("Welcome to Java!", 30, 30);

Before compiling this class, the Java compiler requires that it be stored with which of the following names?

1. Applet.java
2. **AppletClass.java**
3. AppletClass.applet
4. Any filename with the extension ".java"
5. In Java programming, a programmer creates \_\_\_\_\_ files, and then a compiler translates them to \_\_\_\_\_ files.
6. source, HTML
7. HTML, byte code
8. **source, byte code**
9. byte code, source
10. When compiling a Java program that contains syntax errors, the compiler will always

fix the syntax errors and complete the compilation

**fail to complete the compilation and report a guess of what and where the errors are**

ignore the syntax errors and create a compiled program without the lines containing errors

fail to complete the compilation and report the exact location of each error

1. When programming a Java applet, a programmer creates a(n) \_\_\_\_\_ file, which a Java compiler translates into a(n) \_\_\_\_\_ file.
2. source code, HTML
3. bytecode, source code
4. **source code, bytecode**
5. HTML, bytecode
6. Upon compilation, the source code of a Java class MyClass will be stored in the file \_\_\_\_\_, and the corresponding byte code will be stored in the file \_\_\_\_\_.
   1. MyClass.class, MyClass.java
   2. **MyClass.java, MyClass.class**
   3. MyClass.java, MyClass.exe
   4. MyClass.class, MyClass.exe
7. Which of the following statements is true of the process of programming?
   1. Most of the time spent in programming is usually spent planning the solution to a problem.
   2. The best way to program is to begin coding immediately, and then to follow up by testing.
   3. Programming is synonymous with coding
   4. **Programming can be made easier by dividing a larger problem into smaller pieces.**
8. Which of the following are Java keywords? {
   1. Static
   2. **All the above**
   3. Void
   4. public
9. When a Java class is designed, which of the following is a part (are parts) of the planning stage? Deciding how to display the results

Writing a problem definition

Identifying the data needed to solve the problem

1. I and II
2. II only
3. I and III
4. **II and III**
5. Programming involves four general phases that the programmer moves into and out of during the development of a program. The order in which the programmer moves through these phases is generally which of the following?

**There is no defined order. The programmer moves into and out of one of the various four phases as dictated by circumstance and situation while writing the program.**

1. Of the following phases of programming, which is generally the phase on which most time is spent?  {
2. **Coding**
3. Planning a solution to the problem
4. Testing and evaluation
5. Defining the problem
6. Valid Java comments include which of the following?

/\* this is an /\* embedded \*/ comment \*/

/\* this is an // embedded // comment \*/

// this is a comment \*/

* 1. I only
  2. I and II only
  3. I and III only
  4. **II and III only**

1. What is the name of the class whose definition is begun by the following line? public class Hello extends Greeting
2. **Hello**
3. Greeting.Hello
4. Hello.Greeting
5. Greeting
6. Which of the following is a Java statement that imports classes in the package java.sql?  {
7. import java.sql.all
8. import all java.sql
9. **import java.sql.\*;**
10. import java.sql
11. The following is a Java program segment\: public void paint (Graphics g) { int x \= 10;     int y \= 20;     paintPicture( g, x, y); } public void paintPicture(Graphics g, int a, int b) { g.setColor(Color.red); // more code follows } What will be the value of the parameter "a", in the method paintPicture when this code is executed?
12. 20
13. This will not compile. This is an error because the parameter "a" was never declared and never given a value.
14. **10**
15. 0
16. Which of the following statements is (are) true about debugging and testing servlets?

After a change is made to a servlet, the servlet must be recompiled for the change to take effect. Modifying the parameters of calls to the method out.println can change the HTML in the response of a servlet.

* 1. I only
  2. II only
  3. **I and II**
  4. None

1. A Java servlet can be declared with the type of content it will produce, such as image/gif or text/html, by using a call to which of the following methods of HttpServletResponse?  {
2. **setContentType**
3. resetBuffer
4. addCookie
5. encodeURL
6. Consider a Java source file that begins with the following line.   import javax.servlet.http.\*; In this file, which of the following lines of code can introduce a valid definition for a Java servlet class named Welcome?
7. **public class Welcome extends HttpServlet**
8. servlet class Welcome
9. public servlet Welcome extends HttpServlet
10. new Welcome extends HttpServlet
11. If you have written a class Hello, what would be the filename under which you save this class?
12. **Hello.java**
13. Hello
14. Hello.txt
15. Idontknow.java
16. Which of the following is (are) true regarding the Java API documentation?

Programmers can view it on the web.

It consists solely of Java classes and methods.

1. II only
2. **I and II**
3. I only
4. None
5. Which of the following is a valid HTML tag that sets the size of text characters?
6. text font="size 5"
7. size font="5"
8. **font size="5"**
9. size text="5"
10. In HTML, an ordered list begins with the tag \_\_\_\_\_, and each item in the list begins with the tag \_\_\_\_\_.
11. **OL, LI**
12. IT, OL
13. OL , IT
14. LI , OL
15. In HTML, the HR tag instructs a browser to
16. display a heading
17. shrink text
18. **draw a horizontal line**
19. align text to the right of the screen
20. An ordered list in a correctly written HTML page is enclosed within tags
21. li and /li and each numbered item is enclosed within tags ol and /ol
22. **ol and /ol and each numbered item is enclosed within tags li and /li**
23. li and /li and each numbered item is enclosed within tags ul and /ul
24. ul and /ul and each numbered item is enclosed within tags li and /li
25. Which of the following is a valid HTML segment that directs Web browsers to display green text?  {
26. color green\="true"
27. **font color\="green"**
28. color font\="green"
29. font green\="true"
30. An HTML document should begin and end with which pair of tags?
    1. doc and /doc
    2. **html and /html**
    3. page and /page
    4. p and /p
31. Consider the following segment of HTML code. a href\="cnn.com" CNN News /a When the segment appears in an HTML document called links.html, the Web browser will
32. ignore the segment because the attribute value for href does not contain the sequence "\://"
33. **create a link to the file cnn.com in the same directory as links.html**
34. ignore the segment because the attribute value for attribute href is a relative address
35. create a link to the front page of the server cnn.com
36. Which of the following is an attribute (are attributes) of the HTML tag a ? HREF NAME
    1. I only
    2. **I and II**
    3. II only
    4. None
37. Which of the following HTML tags is (are) typically found within tags table and /table ? tr body td
38. II and III only
39. I and II only
40. **I and III only**
41. I, II, and III
42. The following is a Java program segment: public void setMarks() { int mathsMarks = 80; int scienceMarks = 90; displayMarks(mathsMarks, scienceMarks); } public void displayMarks(int a, int b) { System.out.println("Marks in Maths "+a); System.out.println("Marks in Science "+b); } What will be the value of the parameter "a", in the method displayMarks when this code is executed?
43. Compile error
44. **80**
45. 0
46. 90
47. Consider the following table. Which of the following HTML sequences can be used to lay out the preceding table?
    1. table th tr + /tr tr 0 /tr tr 1 /tr /th th tr 0 /tr td 0 /td td 1 /td /th th tr 1 /tr td 1 /td td 0 /td /th /table
    2. **table tr th + /th th 0 /th th 1 /th /tr tr th 0 /th td 0 /td td 1 /td /tr tr th 1 /th td 1 /td td 0 /td /tr /table**
    3. table td th + /th th 0 /th th 1 /th /td td th 0 /th tr 0 /tr tr 1 /tr /td td th 1 /th tr 1 /tr tr 0 /tr /td /table
    4. table td tr + /tr tr 0 /tr tr 1 /tr /td td tr 0 /tr th 0 /th th 1 /th /td td tr 1 /tr th 1 /th th 0 /th /td /table
48. Which of the following is (are) true of GIF and JPEG compression?

Both are image compression techniques.

Neither technique results in loss of information

1. I and II
2. None
3. **I only**
4. II only
5. HTML files can be edited using
6. compilers
7. image editors
8. **text editors**
9. applet viewers
10. In the context of HTML, Markup refers to
11. an increase in price.
12. defacing a document.
13. **annotating text with tags that specify how it is to appear or function.**
14. adding lines or curves to text.
15. Which of the following statements is (are) true about Web browsers?

The primary purpose of a Web browser is to execute Java programs.

A Web browser can communicate using HTTP.

1. **None**
2. I and II
3. II only
4. I only
5. Drawbacks of embedding many images in a Web page include which of the following? Dramatically increased transfer time to fully display the Web page Dramatically increased storage requirements for the Web page source
6. II only
7. I and II
8. None
9. **I only**
10. Clicking a browser's View Source or View Frame Source or View Page Source menu option while viewing a Web page will cause the browser to display
    1. the location of the Web server that hosts the page
    2. the date when the page was last modified
    3. the HTML page layout in a text editor
    4. **the HTML code for the page**
11. A link in a Web page is
    1. the only part of the Web page which reacts once you click on it
    2. any underlined word or group of words
    3. always a reference to a different Web page
    4. **a picture or text that takes your browser to another location when you click on it**
12. The main reason to connect two pages in a large Web site via a hyperlink is
13. to avoid copyright violation
14. to avoid using excessive graphics
15. so you don't lose any pages
16. **because a reader of one page may wish to refer to the other**
17. Which of the following are tags for changing the logical style of text? EM and CITE STRONG and SAMP B and I
18. I only
19. III only
20. I, II, and III
21. **I and II only**
22. The Java compiler generates a \_\_\_\_\_\_\_\_\_\_\_ file of the programmer's \_\_\_\_\_\_\_\_\_\_\_\_ file.
23. source code, byte code
24. HTML, byte code
25. Byte code , HTML
26. **World Wide Web**
27. What is the conceptual difference between logical and physical styles?
28. Logical styles are intended to be used for graphics, whereas physical styles are intended to be used for text.
29. Logical styles are intended to specify the look of content, whereas physical styles are used to specify the meaning of content.
30. **Logical styles are intended to specify the meaning of content, whereas physical styles are used to specify the look of content.**
31. Logical styles are intended to be used for text, whereas physical styles are intended to be used for graphics.
32. In Java, which of the following is true about constructors?
    1. Constructors must be declared for every class
    2. Constructors can only accept primitive Java types as parameters
    3. **Constructors cannot return a value**
    4. Constructors can only return 0 or a negative integer
33. What operator is used to allocate storage for objects?
34. **new**
35. \=
36. init
37. \=\=
38. Consider the following Java code segment. public class IQ { public int getIQ(String s) { return 50; } } If object p is an instance of class IQ, which of the following is a Java statements that will not generate a compilation error?
    1. **int c \= p.getIQ("alex");**
    2. String s \= IQ.getIQ(p);
    3. getIQ.p("bob");
    4. IQ x \= getIQ("chuck");
39. Which of the following statements is true about methods in Java? Every method must be declared public. Every method must accept at least one parameter. Every method must return a value.
40. I, II, and III
41. II and III only
42. **none of them**
43. III only
44. Consider the following HTML FORM element. FORM action\='/servlet/Welcome' method\='post' The action attribute in the above element specifies which of the following regarding the servlet used to process this form?   The name of the servlet The location of the servlet
    1. II only
    2. **I and II**
    3. I only
    4. None
45. Which of the following variable names conforms to Java naming conventions?  {
46. **fuelRemaining**
47. FuelRemaining
48. AmountOfFuelRemainingInTheTank
49. fuel\_remaining
50. Which of the following is (are) consistent with Java naming conventions regarding capitalization? int numPeople; int Counter; class serviceElevator\{\}
    1. **I only**
    2. None
    3. I and III only
    4. I, II, and III
51. If variable br references an instance of the class java.io.BufferedReader, which of the following statements is a legal call to the method readLine of the class?
    1. br(readLine);
    2. **br.readLine();**
    3. br.readLine
    4. readLine(br);
52. Valid method definitions in Java include which of the following? public method myMethod() \{\} public void myMethod(int i) \{\} public void myMethod \{\}
53. II only
54. None
55. **II and III only**
56. I only
57. Once you compile Hello.java which file do you get?
    1. Hello
    2. **Hello.class**
    3. Hello.doc
    4. Hello.txt
58. Suppose you are given a class called List which has print as one of its methods and a correctly instantiated object called myList. Which of the following could be a valid call to the print method?
59. print.myList();
60. print(List);
61. **myList.print();**
62. myList.print;
63. Which of the following method names adheres to the Java naming convention standards?
64. is\_empty
65. IsEmpty
66. is-empty
67. **isEmpty**
68. In Java, the initial values of method parameters are set by
    1. arguments of the invoking message
    2. access control
    3. accessor methods
    4. **initialization statements**
69. Which of the following is (are) true of instance variables in Java?   Their declarations must appear at the end of a class definition. Their declarations must appear outside of all method definitions. Instance variables must be declared.
    1. I, II, and III
    2. I and II only
    3. **II and III only**
    4. III only
70. Consider the following URL, which corresponds to the submission of an HTML form. http\://www.carnegietech.org/search?keyword\=MCQ&amp;course\=SSD1 According to the URL, the names of the two successful controls in the submitted form are
71. MCQ and SSD1
72. search and HTTP
73. **keyword and course**
74. search and GET
75. When a Web browser submits an HTML form to a Web server, the browser sends
    1. **encoded name-value pairs**
    2. ASN.1-encoded data
    3. XML-encoded data
    4. comma-separated lists
76. Which of the following is (are) necessary for a radio button or checkbox control in an HTML form to be considered successful? It must be checked or selected. The HTML FORM element in which it appears must contain at least one INPUT element with a type of hidden. The HTML element that defines it must set a value for the attribute named value.
77. II and III only
78. II only
79. **I and III only**
80. I only
81. Which of the following HTML INPUT elements will result in a check box that appears initially in a checked state? input name\='chkbox' type\='checkbox' input name\='chkbox' type\='checkbox' value\='checked' input name\='chkbox' type\='checkbox' value\='checkbox' checked\='checked'
82. **III only**
83. I, II, and III
84. II only
85. II and III only
86. In an HTML FORM element, the values get and post are the only valid options for which of the following attributes?
    1. accept
    2. enctype
    3. **method**
    4. action
87. For a given Java servlet, which of the following events typically result(s) in the termination of the servlet? The servlet completes a request and forwards its response to the server. The server sends a servlet's response to a client.
88. I only
89. I and II
90. II only
91. **None**
92. Java programs that extend the functionality of a web server are
    1. Servers
    2. **Servlets**
    3. Services
    4. Servants
93. Before a Java servlet can process a request, the Web server must first
    1. formulate a response to be sent to the client browser
    2. forward the request to the client browser
    3. **ensure the servlet is loaded and initialized**
    4. restart any running instance of the servlet
94. The series of interactions a user has with a Web server to carry out a task is known as a
95. **session**
96. request
97. transaction
98. response
99. The control of a client-server transaction maintained by the Web server is known as
100. server pull
101. client pull
102. client push
103. **server push**
104. Consider the following Java class definition. class A extends B \{ \} According to this definition, which of the following statements is (are) true?   A is a subclass of B. B is a superclass of A.
105. I only
106. None
107. **I and II**
108. II only
109. Which of the following is true concerning the following example class definition? public class Hello extends Applet  \{ ... \}   Hello is a superclass of Applet Hello inherits from Applet Hello is a subclass of Applet  {
     1. II only
     2. III only
     3. **II and III only**
     4. I and II only
110. Consider a Java program that contains two classes, Programmer and Person. The class Programmer is a subclass of the class Person, and both classes define a method sleep. Which of the following statements will be true about the program?
     1. The method sleep of Person will override that of Programmer when the program is executed. ( When the method sleep of Programmer is called, the method sleep of Person will be called first.
     2. **The method sleep of Programmer will override that of Person when the program is executed.**
     3. The program will not compile.
111. Which of the following indicates that class Dog is a subclass of class Animal?
112. public class Dog imports Animal
113. public class Animal imports Dog
114. **public class Dog extends Animal**
115. public class Animal extends Dog
116. Consider the following Java code fragment where B is a Java class. Public class A extends B \{\} Which of the following is indicated by the code fragment?
117. Class B must also extend at least one other class.
118. **Class A is a subclass of class B.**
119. Class A must also extend class Applet.
120. Class B is a subclass of class A.
121. Which of the following kinds of relationships between classes does inheritance describe?
     1. produces-a
     2. has-a
     3. uses-a
     4. **is-a-kind-of**
122. Consider the following Java program fragment. import java.applet.Applet; public class Hello extends Applet \{ ... \} The fragment indicates that
123. **Hello is a subclass of Applet**
124. Hello is an instance of Applet
125. Applet is a subclass of Hello
126. Applet is an instance of Hello
127. What are the different kinds of errors that can arise?
     1. **None of the above**
     2. None
     3. All of above
128. In the following program segment, the call super(len,wid) invokes the constructor for which class? public class CustomWindow extends MyWindow implements ActionListener \{ public CustomWindow(int len, int wid, Font ft) \{ super(len, wid); \} \}
129. CustomWindow
130. Font
131. ActionListener
132. **MyWindow**
133. If class A is a subclass of class B, which of the following statements is (are) true? All public data and methods of class B are available to class A. All public data and methods of class A are available to class B.
134. I and II
135. None
136. II only
137. **I only**
138. Consider the following Java program segment. String a \= "A"; String b \= "B"; String c \= "C"; String d \= "D"; Vector v \= new Vector(); v.add(a); v.add(b); v.add(c); v.add(d); At the end of execution of the program segment, what value will be returned by v.elementAt(1)?
139. "C"
140. **"B"**
141. "D"
142. "A"
143. Which of the following is a method invocation that retrieves the first element from an instance of class java.util.Vector?
     1. **elementAt(0)**
     2. elementAt(1)
     3. read(1)
     4. read(0)
144. Valid Java identifiers include which of the following? \_$4dollar $\_4dollar 4\_dollar  {
145. I, II, and III
146. None
147. III only
148. **I and II only**
149. The region of a program where a variable can be referenced is known as the \_\_\_\_\_ of the variable.
150. type
151. conventional space
152. **scope**
153. storage space
154. Consider the following Boolean expression. !(!(a&amp;&amp;b)) For which of the following values of a and b, respectively, will the expression evaluate to true?
     1. false, true
     2. true, false
     3. **true, true**
     4. false, false
155. What is output when the following Java statement is executed? System.out.println(-5%-2);
156. 1
157. **–1**
158. 0
159. 2
160. In Java, the operator "+" can be used for which of the following purposes? Addition of two integers Concatenation of two strings Addition of two floating point variables
161. II and III only
162. I only
163. I and III only
164. **I, II, and III**
165. In Java, for primitives, the assignment operator is the symbol \_\_\_\_\_ and the equality operator is the symbol \_\_\_\_\_.
166. **\=, \=\=**
167. \:\=, \=
168. \=, equals()
169. \=\=, \=
170. What can be some unethical practices on the internet?
171. Phishing
172. Hacking
173. **Both a and b**
174. None
175. Which of the following Java constructs loop infinitely? while (true) i \= 0; while (false) i \= 1; while (!false) i \= 0;
     1. I, II and III
     2. I only
     3. III only
     4. **I and III only**
176. What is the value of variable product at the end of any execution of the following Java program segment? int i \= 3; int product \= 1; while (i !\= 0) \{ product \= product \* i; i \= i - 1; \}
     1. 1
     2. **6**
     3. 0
     4. 4
177. When the following code segment is executed, how many times will the string "Hello!" be printed?   for (int i \= 0; i 6; i++) for (int j \= i; j 6 - i; j++) System.out.print("Hello!"); {
     1. 21
     2. 36
     3. **12**
     4. 11
178. How many times will this loop execute? int  y \= 1; int  i; for (i \= 10; i 0; i \= i - 1) y \= i + 2;
     1. 9
     2. 10
     3. **0 The loop test is false because i is not less than 0**
     4. 11
179. Which of the following is not a valid Java identifier?
180. **2square**
181. money\_bag
182. myName
183. value4
184. Each Java program is made up of \_\_\_\_\_ class.
     1. exactly one
     2. **at least one**
     3. a constructor
     4. at most one
185. The type of the number 2.0 in Java can be
186. **double**
187. int
188. boolean
189. Panel
190. Which of the following data types is a Java primitive type?
     1. class
     2. void
     3. applet
     4. **boolean**
191. Which of the following Java statements assigns the bigger of x and y to the variable max. if (x y) max \= x; else max \= y; if (y - x \= 0) max \= x; else max \= y; max \= x; if (x y) max \= y;
192. III only
193. I only
194. I and II only
195. **I, II and III**
196. In Java, non-sequential execution of code is achieved by using \_\_\_\_\_ statements.
197. **control**
198. ordering
199. branching
200. concurrent