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### J2SE – Core Java (60 Minutes)

1. Which of the following statement is true?
  1. An object will be garbage collected when it becomes unreachable
  2. An object will be garbage collected if it has null assigned to it
  3. The finalize method will be run before an object is garbage collected
  4. Garbage collection assures that a program will never run out of memory
2. The command 'codebase' is used in applets \_\_\_\_\_.
  1. When the applet class file is not in the same directory
  2. When the applet class file is in the same directory
  3. When we need to get the parameters of the applet
  4. None of the above
3. Given the following code, which of the following option if inserted after the comment //here will allow the code to compile without error?
 

```
interface Remote{
    public void test();
}
public class Moodle{
    public static void main(String argv[]){
        Moodle m = new Moodle();
    }
    public void go(){
        //here
    }
}
```

  1. Remote r = new Remote(){ public void test(){} };
  2. Remote remote = new Remote();
  3. test();
  4. this.main();
4. Which of the following initializes boolean primitive?
  1. Boolean flag=true;
  2. boolean flag=true;
  3. boolean flag=TRUE;
  4. Boolean flag=TRUE;
5. Which of the following is not correct?
  1. int a [][] = new int [20][20];
  2. int [] a [] = new int [20][];
  3. int [][] a = new int [10][];
  4. int [][] a = new int [][][10];
6. instanceof operator can be used with \_\_\_\_\_.
  1. Arrays
  2. Final Class
  3. Classes
  4. All of the above
7. The switch() construct is used to make a choice based upon \_\_\_\_\_.
  1. char value
  2. An int value
  3. A String value
  4. None of the above
8.
 

```
public class CDAC{
    public static void main(String a[]){
        String s1 = "Sun";
        System.out.println(s1.substring(5));
    }
}
```
- ```
}
What is output?
1. -1
2. 0
3. StringIndexOutOfBoundsException
4. ArrayIndexOutOfBoundsException
```
9. Which of the following modifiers can be applied to a constructor?
  1. Private
  2. abstract
  3. volatile
  4. All of the above
10. Which of the following class is thread safe?
  1. ArrayList
  2. HashMap
  3. Hashtable
  4. HashSet
11.
 

```
class DAC {
    public static void main(String[] s) {
        String s1 = "A", s2 = " B ", s3 = "C";
        s2.trim(); s3.concat("D");
        System.out.print(s1 + s2 + s3);
    }
}
```
- What is the result of the program?
  1. Prints: ABC
  2. Prints: A B C
  3. Prints: ABCD
  4. Prints: ABDC
12.
 

```
class A {A(int i) {} // 1
class B extends A {} // 2
```
- Which of the following statement is true?
  1. The compiler attempts to create a default constructor for class A
  2. No any error, everything will work fine
  3. Compile-time error at 1
  4. Compile-time error at 2
13. Inner classes can not declare \_\_\_\_\_ variables
  1. static
  2. protected
  3. final
  4. transient
14. Please select a true statement about delete() method of java.io.File.
  1. It can delete a file
  2. It can delete an empty directory
  3. Both of the above
  4. Neither of the above
15.
  - a. Entries are organized as key/value pairs
  - b. Duplicate entries replace old entries
- Which interface of the java.util package offer the specified behaviour?
  1. List
  2. Map
  3. Set
  4. None of the above
16. Which type of variables cannot be serialized?
  1. transient
  2. final
  3. private
  4. None of the above

17. There are two computers are connected to internet, one computer is trying to open a socket connection to read the home page of another computer, what are the possible exceptions thrown while connection and reading InputStream?
1. IOException
  2. MalformedURLException
  3. Both 1 and 2
  4. None of the above
18. class CDAC {  
public static void main (String[] args) {  
    StringBuffer sb1 = new StringBuffer("ABC");  
    StringBuffer sb2 = new StringBuffer("ABC");  
    System.out.print("Prints:"+(sb1==sb2)+"", "+sb1.equals(sb2));  
    }  
}  
What is the result of attempting to compile and run the program?
1. Prints: false, true
  2. Prints: false, false
  3. Prints: true, false
  4. Prints: true, true
19. How many methods are defined in the Cloneable interface?
1. None
  2. One
  3. Two
  4. None of the above
20. The term "instance variable" is another name for \_\_\_\_.
1. Static field
  2. Non-static field
  3. Local variable
  4. None of the above
21. Which of the following modifier can be applied to a class that is not a nested class?
1. abstract
  2. private
  3. static
  4. final
22. Which of these lists contains at least one word that is not a Java keyword?
1. abstract, default, if, private, this
  2. do, implements, protected, boolean, throw
  3. import, break, double, exception, throws
  4. byte, else, return, transient
23. class X implements Runnable  
{  
    public static void main(String args[])  
    {  
        /\* Missing code? \*/  
    }  
    public void run() {}  
}  
Which of the following line of code is suitable to start a thread?
1. Thread t = new Thread(X);
  2. Thread t = new Thread(X); t.start();
  3. Thread t = new Thread(); x.run();
  4. X run = new X(); Thread t = new Thread(run);
24. Which cannot directly cause a thread to stop executing?
1. Calling notify() method on an object
  2. Calling the SetPriority() method on a Thread object
  3. Calling the wait() method on an object
  4. Calling read() method on an InputStream object
25. What will happen if you register more than one ActionListener in a button component?
1. Compile time error
  2. Runtime error
  3. All the registered listeners will be notified when the button is clicked
  4. The last registered listener will be notified when the button is clicked
26. Which of the following is the valid placement constraint when using BorderLayout?
1. The string "NORTH"
  2. BorderLayout.MIDDLE
  3. BorderLayout.BOTTOM
  4. BorderLayout.CENTER
27. Which of the following layout managers can only accommodate a limited number of components?
1. BorderLayout
  2. FlowLayout
  3. CardLayout
  4. None of these
28. Which method must be defined by a class implementing the java.lang.Runnable interface?
1. void run()
  2. public void run()
  3. public void start()
  4. void run(int priority)
29. Which of the following subclass of the Component class will display the MenuBar?
1. Window, Applet
  2. Applet, Panel
  3. Frame
  4. Menu, Dialog
30. There are 20 threads are waiting in the waiting pool with same priority, how can you invoke 15th thread from the waiting pool?
1. By calling resume() method
  2. Calling call() method
  3. By calling notify(15) method on the thread instance
  4. None of the above
31. What will be the output of the program?
- ```
try
{
    int x = 0;
    int y = 5 / x;
}
catch (Exception e)
{
    System.out.println("Exception");
}
catch (ArithmeticException ae)
{
    System.out.println(" Arithmetic Exception");
}
System.out.println("finished");
```
1. Finished
  2. Exception
  3. Compilation fails
  4. Arithmetic Exception
32. void start() {  
    A a = new A();  
    B b = new B();  
    a.s(b);  
    b = null; /\* Line 5 \*/  
    a = null; /\* Line 6 \*/  
    System.out.println("start completed"); /\* Line 7 \*/  
}

- }  
 When is the B object created in line 3, eligible for garbage collection?  
 1. after line 5  
 2. after line 6  
 3. after line 7  
 4. There is no way to be absolutely certain
33. Which of the following would compile without error?
- int a = Math.abs(-5);
  - int b = Math.abs(5.0);
  - int c = Math.abs(5.5F);
  - int d = Math.abs(5L);
34. Which one of the keyword cannot be used with instance variables?
- transient
  - volatile
  - abstract
  - None of the above
35. This of the following code correctly creates an array of four initialized string objects?
- String players[] = new String[4];
  - String players[] = {"", "", "", ""};
  - String players[];  
players = new String[4];
  - None of the above
36. public class Myfile  
{  
    public static void main (String[] args)  
    {  
        String biz = args[1];  
        String baz = args[2];  
        String rip = args[3];  
        System.out.println("Arg is " + rip);  
    }  
}
- Select how you would start the program to cause it to print: Arg is 2
- java Myfile 222
  - java Myfile 1 2 2 3 4
  - java Myfile 1 3 2 2
  - java Myfile 0 1 2 3
37. Which of the following statement is false?
- Interface methods cannot be static
  - Interface methods must have a return type of void
  - An interface cannot extend another class
  - An interface method cannot be marked as final
38. What will be the output of the program?
- ```

class Equals
{
    public static void main(String [] args)
    {
        int x = 100;
        double y = 100.1;
        boolean b = (x = y); /* Line 7 */
        System.out.println(b);
    }
}

```
- True
  - False
  - Compilation fails
  - An exception is thrown at runtime
39. Which modifier is used to stop overriding a method?
- final
  - static
  - abstract
  - None of the above
40. Which of the following keywords can be applied to constructors?
- private
  - public
  - void
  - All the above
41. Can we find the list of all the class and interface using java reflection?
- Yes
  - No
  - Can't say
  - None of the above
42. In a RMI Client Program, which of the exception might be handled?
- MalformedURLException
  - NotBoundException
  - RemoteException
  - All of the above
43. What is the default port used by RMI Registry?
- 1024
  - 1099
  - 8080
  - 0127
44. Which are the valid ways to create DataInputStream streams?
- new DataInputStream();
  - new DataInputStream("in.dat", "r");
  - new DataInputStream("in.dat")
  - new DataInputStream(new FileInputStream("in.dat"));
45. Which of the following is not a Structural Patterns?
- Adapter pattern
  - Bridge Pattern
  - Command Pattern
  - Composite Pattern
46. What allows the programmer to destroy an object x?
- x.delete()
  - x.finalize()
  - Runtime.getRuntime().gc()
  - Only the garbage collection system can destroy an object
47. Which of the follow are true statements?
- An anonymous class can extend only the Object class
  - An anonymous class can not implement an interface
  - An anonymous class is implicitly final
  - An anonymous class can be abstract
48. Is it possible to use more than one design pattern in application?
- Yes
  - No
  - Can't say
  - None of the above
49. The "Singleton" design pattern \_\_\_\_\_.
- Creates only one class of a particular type
  - Allows unified access to a single instance of a particular class
  - Should always be used in place of global variables
  - All of the above
50. Which exception is thrown by the read() method of InputStream class?
- Exception
  - IOException
  - FileNotFoundException
  - ReadException