Practice Paper: Set 2

Module Name   Object Oriented Programming with Java

1. Given the following declaration:
    String s = " Example ";
    Which is legal code?

    a. s >>>= 3;
    b. s[3] = "x";
    c. int I = s.length;
    d. String t = "For " + s;

2. **Which contains objects without ordering, duplication and any lookup/retrieval mechanism?**
    a. Map
    b. Set
    c. List
    d. Collections
    e. Enumeration

3. **Which statements declare a variable which is suitable for referring to an array of 50 String objects?**
    a. char a[][];
    b. String a[];
    c. Object a[50];
    d. String a[50];

4. **Which of the following statements accurately describe the use of access modifiers within a class definition?**
    a. They can be applied to both data & methods
    b. They can follow a class's data variables or methods
    c. They must be applied to data variables first and then to methods.
    d. None of the above

5. **Which cannot be used in declaring and initializing an automatic (method call) variable?**
    a. initialized arrays (such as {"Hello","Goodbye"})
    b. final
    c. public
    d. constant of non-primitive type
    e. inner class from other scopes

6. **What might form part of correct inner class declaration and installation?**
    a. new simpleInterface(){}
    b. private final abstract class c
    c. MyClass extends OtherClass
    d. new MyClass() extends OtherClass{}

7. **Find java keywords**
    a. Sizeof
    b. implements
    c. TRUE
    d. NULL

8. **What does the following code produce?**

```java
public class test02
{
   public static void main(String args[])
   {
      Integer i1 = new Integer(9);
      Integer i2 = new Integer(9);
     Long    l1 = new Long(9L);

    if ( i1 == i2)
        System.out.println("Test1");

    if ( i1.equals(i2))
       System.out.println( " Test2");

    if ( i1.equals(new Integer(9)) )
        System.out.println("Test3");
    }
  }
}
```

   a. Test1
   b. Test2,Test3
   c. Test2,Test1
   d. None of the above

9. **Here is pseudo code:**

```java
1 String s = null;
2 if ( s != null & s.length() > 0)
3 System.out.println("s != null & s.length() > 0");

4 if ( s != null && s.length() > 0)
5 System.out.println("s != null & s.length() > 0");

6 if ( s != null || s.length() > 0)
7 System.out.println("s != null & s.length() > 0");

8  if ( s != null | s.length() > 0)
9 System.out.println("s != null | s.length() > 0");
```

   Which of the following lines throwing null pointer exception?

   a. 2,4
   b. 6,8

c. 2,4,6,8

d. 2,6,8

10. **We have the following code?**

```java
public class Test {
  String animals = null;
  public static void main(String []args) {
    <<statement>>
  }
}
java Test cat horse
```

How can you assign 'cat' to the animals vairable?

a. animals = args[0];

b. String animals = args(0);

c. animals =args[1];

d. String animals = args(1);

11. **Which is a valid literal for an integer?**

a. 1_00_000

b. 1,00,000

c. 1 00 000

d. None of the above

12. **We have the following code:**

```java
if (a >4)
      System.out.println("test1");
else if (a >9)
      System.out.println("test2");
else
      System.out.println("test3");
```

What will print 'test 2'?

a. less than 0

b. less than 4

c. between 4 and 9

d. greater than 9

e. none

13. **What will the code piece print?**

```java
outer: for( int i_=1; i<3 ;i++)
  {    inner : for ( j= 1;j<3;j++)
        { if (j==2) continue outer:
          System.out.prinltn("i= " + i ",j = " + j)
        }
  }
```

a. 1,1 2,1
b. 1,2 1,2
c. 2,1 3,1
d. 2,2 3,2

14. **Given the following function?**

```
void withinsomefunc() {
     if (functionfailed())
          //to confuse --given it as failed but returns true
          {
          // some code
          <<statement>>
                    }
}
```

If functionfailed is true it will throw someexception? What are valid changes to the code? (SomeException is not Select be answer(s)?

a. void withinsomefunc() throw SomeException and throws new SomeException()
b. void withinsomefunc() throw Exception and throws new SomeException();
c. void withinsomefunc() throws SomeException and throw new SomeException();
d. throw new Exception();

15. **What will be the output of following code?**

```
void func() {
   String str = null;
   try {
        if (str.length() == 0) {
             System.out.print("The");
        }
        System.out.print(" Cow");
   } catch (Exception e) {
        System.out.print(" and");
        System.exit(0);
   } finally {
        System.out.print(" Chicken");

   }
   System.out.println(" show");
}
```
a. The
b. Cow
c. And
d. Chicken
e. Show

16. **Which of the following class is thread safe?**
a. ArrayList
b. Vector

c. Hashmap
d. HashSet

17. **Which of the following may throw an exception?**
    a. if ((s !=null) | (i =s.length()))
    b. if ((s ==null) | (i =s.length()))
    c. if ((s !=null) || (i =s.length()))
    d. if ((s ==null) || (i =s.length()))

18. **Choose the correct sentence for fully encapsulated class:**
    a. All member variables are private
    b. All member variables declared private and provide public accessor methods for each variable.
    c. Declare all variables without any access modifier.
    d. Make all the methods private

19. **Choose correct declarations of two-dimensional String array**
    a. String[][] a = String[20][20]
    b. String[][] a = new String[20,20]
    c. String[] a[] = new String[20]20]
    d. You cannot define two-dimensional array in Java

20. **Choose the correct one about thread:**
    a. The threads from one class ends at the same time.
    b. when JVM exists the main method, it will stop only after all the threads include daemon threads are stopped.
    c. if there are multiple threads, reading or writing of data of class is inconsistent.
    d. programmer has to write a special program for garbage collection in multiple threads.

21. **String s = "Test"; Select all correct answers:**

```
1. char c = "s";
2. s= s.append("For ")
3. s.length();
4. s.trim();
5.s = "For " + s;
```

    a. 1,3,5
    b. 2.3.5
    c. 3,4,5
    d. 1,4

22. **>> and >>> are?**
    a. unsigned tright shift and right rotate
    b. unsigned right shift and signed right shift

c. signed right shift and unsigned right shift

d. signed left shift and unsigned right shift

e. signed left shift and unsigned left shift

23. Which of the following is true?

```
class exSuper {
        public void func(String p, String s) {
                System.out.println(p);
        }
}
public class example extends exSuper {
        public void func(String p, String s) {
                System.out.println(p + " : " + s);
        }
        static public void main(String arg[]) {
                exSuper e1 = new exSuper();
                e1.func("hello1", "hi1");
                exSuper e2 = new example();
                e2.func("hello2", "hi2");
        }
}
```

a. The code compiles and prduces output to stdout: hello1 h1 hello2 hi2

b. The code compiles and prduces output to stdout: hello1 hello2: hi2

c. The code compiles and prduces output to stdout: hello1 hello2

d. The code compiles and prduces output to stdout: hello1 h1 hello2

e. The code doesn't compile

24. Which of the following statements is valid?

a. The JVM runs till the main method exits, even if there are other user threads running.

b. An InterruptedException occurs when the sleep() method is called on a thread.

c. A thread can be suspended for an indefinite duration of time.

d. A thread can be made in Java only by subclassing the Thread class.

e. The synchronize keyword can be used only in a method that is part of a class that is derived from Thread

25. Given the following declaration:

String s = "Example";

Which are legal code?

a. s >>> = 3;

b. s[3] = "x";

c. String t = s – 10;

d. String t = s + 10;

26. Given the following incomplete method.

```
1. public void method(){
2.
```

```
3. if (someTestFails()){
4.
5. }
6.
7.}
```

You want to make this method throw an IOException if, and only if, the method someTestFails() returns a value of true. Which changes achieve this?
   a. Add at line 2: IOException e;
   b. Add at line 4: throw e;
   c. Add at line 4: throw new IOException();
   d. Add at line 6: throw new IOException();

27. **Which modifier should be applied to a method for the lock of the object this to be obtained prior to executing any of the method body?**
   a. Final
   b. Static
   c. Abstract
   d. Protected
   e. Synchronized

28. **Which are keywords in Java?**
   a. NULL
   b. true
   c. sizeof
   d. instanceof

29. **Consider the following code:**

```
Integer s = new Integer(9);
Integer t = new Integer(9);
Long u = new Long(9);
```

Which test would return true?
   a. (s==u)
   b. (s==t)
   c. (s.equals(t))
   d. (s.equals(9))

30. **String is a wrapper class**
   a. True
   b. False

31. **The concept of multiple inheritance is implemented in Java by**
   a. extending two or more classes
   b. extending one class and implementing one or more interfaces

c. implementing two or more interfaces

d. both B and C

32. Suppose a given instance variable has been declared private. Can this instance variable be manipulated by methods outside its class?

   a. Yes

   b. No

33. Inner classes cannot declare _____ variables

   a. final

   b. const

   c. static

   d. transient

34. Identify the true statements about finalization.

   a. A class may have only one finalize method

   b. Finalizers are mostly used with simple classes

   c. Finalizer overloading is allowed

   d. None of the above

35. Which of the following statements correctly describes an interface?

   a. It's a concrete class

   b. it's a type of a super class

   c. It's a pure abstract Class

36. Which of the following can you perform using the File class?

   a. Delete a file

   b. Make Directory

   c. Return name of containing directory

   d. All of the above

37. Methods can be overloaded with a difference only in the type of the return value.

   a. Yes

   b. No

38. How do you forcefully invoke the Garbage Collector in Java?

   a. You cannot invoke the Garbage Collector in Java

   b. GC.collect()

   c. GC.invoke()

   d. System.gc()

39. java.lang.Exception is the root base class to all exceptions in Java

   a. True

   b. False

40. Functinoal Interfaces can contain multiple default methods but only 1 abstract method

   a. True

   b. False