

1. Which of the following is true about inheritance in Java?

- 1) Private methods are final.
- 2) Protected members are accessible within a package and inherited classes outside the package.
- 3) Protected methods are final.
- 4) We cannot override private methods.

A) 1, 2 and 4

B) Only 1 and 2

C) 1, 2 and 3

D) 2, 3 and 4

2. Predict the output of following program. Note that fun() is public in base and private in derived.

```
class Base {  
    public void foo() { System.out.println("Base"); }  
}  
  
class Derived extends Base {  
    private void foo() { System.out.println("Derived"); }  
}  
  
public class Main {  
    public static void main(String args[]) {  
        Base b = new Derived();  
        b.foo();  
    }  
}
```

A) Base

B) Derived

C) Compiler Error

D) Run TIME Error

3. Which of the following is true about inheritance in Java.

1) In Java all classes inherit from the Object class directly or indirectly. The Object class is root of all classes.

2) Multiple inheritance is not allowed in Java.

3) Unlike C++, there is nothing like type of inheritance in Java where we can specify whether the inheritance is protected, public or private.

A.1,2,3

B.1, 2

C.2. 3

D.1 and 3

4. Which of the following is FALSE about abstract classes in Java?

A. If we derive an abstract class and do not implement all the abstract methods, then the derived class should also be marked as abstract using 'abstract' keyword.

B. Abstract classes can have constructors

C. A class can be made abstract without any abstract method

D. A class can inherit from multiple abstract classes.

5. Which of the following is true about interfaces in java.

1) An interface can contain following type of members.

....public, static, final fields (i.e., constants)

....default and static methods with bodies

2) An instance of interface can be created.

3) A class can implement multiple interfaces.

4) Many classes can implement the same interface.

A.1,3,4

B. 1,2,4

C.2,3,4

D.1,2,3,4

6. Which of the following statement(s) with regard to an abstract class in JAVA is/are TRUE ?

- I. An abstract class is one that is not used to create objects.
- II. An abstract class is designed only to act as a base class to be inherited by other classes.

A. ONLY I

B. ONLY II

C. NEITHER I NOR II

D. BOTH I AND II

7. Which of the following is used to make an Abstract class?

A. Making atleast one member function as pure virtual function

B. Making atleast one member function as virtual function

C. Declaring as Abstract class using virtual keyword

D. Declaring as Abstract class using static keyword

8. We can make a class abstract by

A. Declaring it abstract using the virtual keyword

B. Making at least one member function as virtual function

C. Making at least one member function as pure virtual function

D. Making all member function const

9. Which of the following is FALSE about arrays on Java

A. A java array is always an object

B. Length of array can be changed after creation of array

C. Arrays in Java are always allocated on heap

10. Output of following Java program?

```
import java.util.Arrays;
class Test
{
    public static void main (String[] args)
    {
```

```

int arr1[] = {1, 2, 3};
int arr2[] = {1, 2, 3};
if (Arrays.equals(arr1, arr2))
    System.out.println("Same");
else
    System.out.println("Not same");
}
}

```

- A. SAME
- B. NOT SAME-

11.

```

class Main {
    public static void main(String args[]) {
        int t;
        System.out.println(t);
    }
}

```

- A. 0
- B. GARBAGE VALUE
- C. COMPILE ERROR
- D. RUNTIME ERROR

12. Predict the output of following Java program.

```

class Test {
    public static void main(String[] args) {
        for(int i = 0; 0; i++)
        {
            System.out.println("Hello");
            break;
        }
    }
}

```

- A. HELLO
- B. EMPTY OUTPUT
- C. COMPILE ERROR

D RUNTIME ERROR

13. Predict the output of the following program.

```
class Test
{
    public static void main(String[] args)
    {
        Double object = new Double("2.4");
        int a = object.intValue();
        byte b = object.byteValue();
        float d = object.floatValue();
        double c = object.doubleValue();

        System.out.println(a + b + c + d );
    }
}
```

A. 8

B. 8.8

C. 8.800000095367432

14. Which of the following statements is/are TRUE regarding JAVA ?

(a) Constants that cannot be changed are declared using the 'static' keyword.

(b) A class can only inherit one class but can implement multiple interfaces.

A. Only (a) is TRUE

B. Only (b) is TRUE.

C. Both (a) and (b) are TRUE.

D. Neither (a) nor (b) are TRUE.

15. Predict the output?

```
package main;
class T {
    int t = 20;
}
class Main {
    public static void main(String args[]) {
        T t1 = new T();
        System.out.println(t1.t);
    }
}
```

```
}  
}
```

A 20

B 0

C COMPILE ERROR

16. Predict the output of following Java program

```
class Main {  
    public static void main(String args[]) {  
        try {  
            throw 10;  
        }  
        catch(int e) {  
            System.out.println("Got the Exception " + e);  
        }  
    }  
}
```

A. Got the Exception 10

B. Got the Exception 0

C Compiler Error

17) What does the expression float a = 35 / 0 return?

- a. 0
- b. Not a Number
- c. Infinity-
- d. Run time exception

18. Which package contains the Random class?

- a. java.util package
- b. java.lang package
- c. java.awt package
- d. java.io package

19. An interface with no fields or methods is known as a _____.

- a. Runnable Interface
- b. Marker Interface-

- c. Abstract Interface
- d. CharSequence Interface

20. Which of these classes are the direct subclasses of the **Throwable** class?

- a. RuntimeException and Error class
- b. Exception and VirtualMachineError class
- c. Error and Exception class
- d. IOException and VirtualMachineError class

