

Q 1. What is the output of the following

```
StringBuffer sb1 = new StringBuffer("Amit");
StringBuffer sb2= new StringBuffer("Amit");
String ssl = "Amit";
System.out.println(sb1==sb2);
System.out.println(sb1.equals(sb2));
System.out.println(sb1.equals(ssl));
System.out.println("Poddar".substring(3));
```

Ans:

- a) false  
false  
false  
dar
- b) false  
true  
false  
Poddar
- c) Compiler Error
- d) true  
true  
false  
dar

**Correct Answer is a)**

\*\*\*\*\* Look carefully at code and answer the following questions  
( Q2 to Q8)

```
1  import java.applet.Applet;
2  import java.awt.*;
3  import java.awt.event.*;
4  public class hello4 extends Applet {
5      public void init(){
6          add(new myButton("BBB"));
7      }
8      public void paint(Graphics screen) {
9      }
10     class myButton extends Button{
11         myButton(String label){
12             super(label);
13         }
14         public String paramString(){
15             return super.paramString();
16         }
17     }
18     public static void main(String[] args){
19         Frame myFrame = new Frame(
```

```
20         "Copyright Amit");
21     myFrame.setSize(300,100);
22     Applet myApplet = new hello4();
23     Button b = new Button("My Button");
24     myApplet.add(b);
25     b.setLabel(b.getLabel()+"New");
26     // myButton b1 =(new hello4()).new myButton("PARAMBUTTON");
27     System.out.println(b1.paramString());
28     myFrame.add(myApplet);
29     myFrame.setVisible(true);
30     myFrame.addWindowListener(new WindowAdapter(){
31         public void windowClosing(WindowEvent e){
32             System.exit(0);}});
33     }
34 } //End hello4 class.
```

Q2. If you run the above program via appletviewer ( defining a HTML file), You see on screen.

- a) Two buttons
- b) One button with label as "BBB"
- c) One button with label as "My ButtonNew"
- d) One button with label as "My Button"

**Correct answer is b)**

Q3. In the above code if line 26 is uncommented and program runs as standalone application

- a) Compile Error
- b) Run time error
- c) It will print the the label as PARAMBUTTON for button b1

**Correct answer is c)**

Q4 In the code if you compile as "javac hello4.java" following files will be generated.

- a) hello4.class, myButton.class,hello41.class
- b)hello4.class, hello4\$myButton.class,hello4\$1.class
- c)hello4.clas,hello4\$myButton.class

**Correct answer is b)**

Q5. If above program is run as a standalone application. How many buttons will be displayed

- a) Two buttons
- b) One button with label as "BBB"
- c) One button with label as "My ButtonNew"

d) One button with label as "My Button"

**correct answer is C)**

Q6. If from line no 14 keyword "public" is removed, what will happen.( Hint :paramString() method in java.awt.Button is a protected method. (Assume line 26 is uncommented)

- a) Code will not compile.
- b) Code will compile but will give a run time error.
- c) Code will compile and no run time error.

**Correct answer is a).** As you can not override a method with weaker access privileges

Q7. If from line no 14 keyword "public" is replaced with "protected", what will happen.(Hint :paramString() method in java.awt.Button is a protected method.(Assume line 26 is uncommented)

- a) Code will not compile.
- b) Code will compile but will give a run time error.
- c) Code will compile and no run time error.

**Correct answer is c)** . As you can access a protected variable in the same package.

Q8.If line no 26 is replaced with Button b1 = new Button ("PARAMBUTTON").(Hint :paramString() method in java.awt.Button is a protected method.(Assume line 26 is uncommented)

- a) Code will not compile.
- b) Code will compile but will give a run time error.
- c) Code will compile and no run time error.

**Correct answer is a)** Because protected variables and methods can not be accessed in another package directly. They can only be accessed if the class is subclassed and instance of subclass is used.

Q9. What is the output of following if the return value is "the value 0 if the argument string is equal to this string; a value less than 0 if this string is lexicographically less than the string argument; and a value greater than 0 if this string is lexicographically greater than the string argument" (Assuming written inside main)

```
String s5 = "AMIT";  
String s6 = "amit";
```

```
System.out.println(s5.compareTo(s6));  
System.out.println(s6.compareTo(s5));  
System.out.println(s6.compareTo(s6));
```

Ans

```
a> -32  
    32  
    0  
b> 32  
    32  
    0  
c> 32  
   -32  
    0  
d> 0  
    0  
    0
```

**Correct Answer is a)**

Q 10) What is the output (Assuming written inside main)

```
String s1 = new String("amit");  
String s2 = s1.replace('m', 'i');  
s1.concat("Poddar");  
System.out.println(s1);  
System.out.println((s1+s2).charAt(5));
```

- a) Compile error
- b) amitPoddar  
o
- c) amitPoddar  
i
- d) amit  
i

**Correct answer is d)** As String is immutable. so s1 is always "amit". and s2 is "aiit".

Q 11) What is the output (Assuming written inside main)

```
String s1 = new String("amit");  
System.out.println(s1.replace('m', 'r'));  
System.out.println(s1);  
String s3="arit";  
String s4="arit";  
String s2 = s1.replace('m', 'r');  
System.out.println(s2==s3);  
System.out.println(s3==s4);
```

- a)   arit  
      amit  
      false  
      true
- b)   arit  
      arit  
      false  
      true
- c)   amit  
      amit  
      false  
      true
- d)   arit  
      amit  
      true  
      true

**Correct answer is a)** s3==s4 is true because java points both s3 and s4 to same memory location in string pool

Q12) Which one does not extend java.lang.Number

- 1) Integer
- 2) Boolean
- 3) Character
- 4) Long
- 5) Short

**Correct answer is 2) and 3)**

Q13) Which one does not have a valueOf(String) method

- 1) Integer
- 2) Boolean
- 3) Character
- 4) Long
- 5) Short

**Correct answer is 3)**

Q.14) What is the output of following (Assuming written inside main)

```
String s1 = "Amit";  
String s2 = "Amit";  
String s3 = new String("abcd");  
String s4 = new String("abcd");  
System.out.println(s1.equals(s2));  
System.out.println((s1==s2));  
System.out.println(s3.equals(s4));  
System.out.println((s3==s4));
```

- a)   true  
      true

- true
- false
- b) true
- true
- true
- true
- c) true
- false
- true
- false

**Correct answer is a)**

Q15. Which checkbox will be selected in the following code ( Assume with main and added to a Frame)

```
Frame myFrame = new Frame("Test");
CheckboxGroup cbg = new CheckboxGroup();
Checkbox cb1 = new Checkbox("First",true,cbg);
Checkbox cb2 = new Checkbox("Scond",true,cbg);
Checkbox cb3 = new Checkbox("THird",false,cbg);
cbg.setSelectedCheckbox(cb3);
myFrame.add(cb1);
myFrame.add(cb2);
myFrame.add(cb3);
```

- a) cb1
- b) cb2, cb1
- c) cb1, cb2, cb3
- d) cb3

**Correct Answer is d)** As in a CheckboxGroup only one can be selected

Q16) Which checkbox will be selected in the following code ( Assume with main and added to a Frame)

```
Frame myFrame = new Frame("Test");
CheckboxGroup cbg = new CheckboxGroup();
Checkbox cb1 = new Checkbox("First",true,cbg);
Checkbox cb2 = new Checkbox("Scond",true,cbg);
Checkbox cb3 = new Checkbox("THird",true,cbg);
myFrame.add(cb1);
myFrame.add(cb2);
myFrame.add(cb3);
```

- a) cb1
- b) cb2, cb1
- c) cb1, cb2, cb3
- d) cb3

**Correct Answer is d)** As in a CheckboxGroup only one can be selected

Q17) What will be the output of line 5

```
1 Choice c1 = new Choice();
2 c1.add("First");
3 c1.addItem("Second");
4 c1.add("Third");
5 System.out.println(c1.getItemCount());
```

- a) 1
- b) 2
- c) 3
- d) None of the above

**Correct Answer is c)**

Q18) What will be the order of four items added

```
Choice c1 = new Choice();
c1.add("First");
c1.addItem("Second");
c1.add("Third");
c1.insert("Lastadded", 2);
System.out.println(c1.getItemCount());
```

- a) First, Second, Third, Fourth
- b) First, Second, Lastadded, Third
- c) Lastadded, First, Second, Third

**Correct ANswer is b)**

Q19) Answer based on following code

```
1 Choice c1 = new Choice();
2 c1.add("First");
3 c1.addItem("Second");
4 c1.add("Third");
5 c1.insert("Lastadded", 1000);
6 System.out.println(c1.getItemCount());
```

- a) Compile time error
- b) Run time error at line 5
- c) No error and line 6 will print 1000
- d) No error and line 6 will print 4

**Correct ANswer is d)**

Q20) Which one of the following does not extends java.awt.Component

- a) CheckBox
- b) Canvas
- c) CheckbocGroup
- d) Label

**Correct answer is c)**

Q21) What is default layout manager for panels and applets?

- a) Flowlayout
- b) GridLayout
- c) BorderLayout

**Correct answer is a)**

Q22) For awt components which of the following statements are true?

- a) If a component is not explicitly assigned a font, it uses the same font that its container uses.
- b) If a component is not explicitly assigned a foreground color, it uses the same foreground color that its container uses.
- c) If a component is not explicitly assigned a background color, it uses the same background color that its container uses.
- d) If a component is not explicitly assigned a layout manager, it uses the same layout manager that its container uses.

**correct answer is a),b),c)**

Q23) java.awt.Component class method getLocation() returns Point (containing x and y coordinate). What does this x and y specify

- a) Specify the position of component's lower-left corner in the coordinate space of the component's parent.
- b) Specify the position of component's upper-left corner in the coordinate space of the component's parent.
- c) Specify the position of component's upper-left corner in the coordinate space of the screen.

**correct answer is b)**

Q24. Q. What will be the output of following

```
{
double d1 = -0.5d;
System.out.println("Ceil for d1 " + Math.ceil(d1));
System.out.println("Floor for d1 " + Math.floor(d1));
}
```

Answers:

- a) Ceil for d1 0  
Floor for d1 -1;
- b) Ceil for d1 0  
Floor for d1 -1.0;
- c) Ceil for d1 0.0  
Floor for d1 -1.0;



- d) Ceil for d1 -0.0  
Floor for d1 -1.0;

**correct answer is d) as 0.0 is treated differently from -0.0**

Q25. What is the output of following

```
{
float f4 = -5.5f;
float f5 = 5.5f;
float f6 = -5.49f;
float f7 = 5.49f;
System.out.println("Round f4 is " + Math.round(f4));
System.out.println("Round f5 is " + Math.round(f5));
System.out.println("Round f6 is " + Math.round(f6));
System.out.println("Round f7 is " + Math.round(f7));
}
```

a) Round f4 is -6  
Round f5 is 6  
Round f6 is -5  
Round f7 is 5

b) Round f4 is -5  
Round f5 is 6  
Round f6 is -5  
Round f7 is 5

**Correct answer is b)**

Q26. Given Integer.MIN\_VALUE = -2147483648  
Integer.MAX\_VALUE = 2147483647

What is the output of following

```
{
float f4 = Integer.MIN_VALUE;
float f5 = Integer.MAX_VALUE;
float f7 = -2147483655f;
System.out.println("Round f4 is " + Math.round(f4));
System.out.println("Round f5 is " + Math.round(f5));
System.out.println("Round f7 is " + Math.round(f7));
}
```

a) Round f4 is -2147483648  
Round f5 is 2147483647  
Round f7 is -2147483648

b) Round f4 is -2147483648

Round f5 is 2147483647  
Round f7 is -2147483655

**correct answer is a)**

//Reason If the argument is negative infinity or any value less than or equal to the value of Integer.MIN\_VALUE, the result is equal to the value of Integer.MIN\_VALUE.

If the argument is positive infinity or any value greater than or equal to the value of Integer.MAX\_VALUE, the result is equal to the value of Integer.MAX\_VALUE. // From JDK api documentation

Q27)

```
1 Boolean b1 = new Boolean("TRUE");
2 Boolean b2 = new Boolean("true");
3 Boolean b3 = new Boolean("JUNK");
4 System.out.println("" + b1 + b2 + b3);
```

- a) Comiler error
- b) RunTime error
- c) true true false
- d) true true true

**Correct answer is c)**

Q 28) In the above question if line 4 is changed to  
System.out.println(b1+b2+b3); The output is

- a) Compile time error
- b) Run time error
- c) true true false
- d) true true true

**Correct answer is a) As there is no method to support Boolean + Boolean**

```
Boolean b1 = new Boolean("TRUE");
```

**Think ----->System.out.println(b1); // Is this valid or not?**

Q 29. What is the output

```
{
Float f1 = new Float("4.4e99f");
Float f2 = new Float("-4.4e99f");
Double d1 = new Double("4.4e99");
System.out.println(f1);
System.out.println(f2);
System.out.println(d1);
}
```

- a) Runtime error

- b) Infinity  
-Infinity  
4.4E99
- c) Infinity  
-Infinity  
Infinity
- d) 4.4E99  
-4.4E99  
4.4E99

**Correct answer is b)**

Q30 Q. Which of the following wrapper classes can not take a "String" in constructor

- 1) Boolean
- 2) Integer
- 3) Long
- 4) Character
- 5) Byte
- 6) Short

**correct answer is 4)**

Q31. What is the output of following

```
Double d2 = new Double("-5.5");  
Double d3 = new Double("-5.5");  
System.out.println(d2==d3);  
System.out.println(d2.equals(d3));
```

- a) true  
true
- b) false  
false
- c) true  
false
- d) false  
true

**Correct answer is d)**

Q32) Which one of the following **always** honors the components's preferred size.

- a) FlowLayout
- b) GridLayout
- c) BorderLayout

**Correct answer is a)**

**Q33)** Look at the following code

```
import java.awt.*;
public class visual extends java.applet.Applet{
    static Button b = new Button("TEST");
    public void init(){
        add(b);
    }
    public static void main(String args[]){
        Frame f = new Frame("Visual");
        f.setSize(300,300);
        f.add(b);
        f.setVisible(true);
    }
}
```

What will happen if above code is run as a standalone application

- a) Displays an empty frame
- b) Displays a frame with a button covering the entire frame
- c) Displays a frame with a button large enough to accomodate its label.

**Correct answer is b) Reason- Frame uses Border Layout which places the button to CENTRE**

**(By default) and ignores Button's preferred size.**

**Q34 If the code in Q33 is compiled and run via appletviewer what will happen**

- a) Displays an empty applet
- b) Displays a applet with a button covering the entire frame
- c) Displays a applet with a button large enough to accomodate its label.

**Correct answer is c) Reason- Applet uses FlowLayout which honors Button's preferred size.**

**Q35.** What is the output

```
public static void main(String args[]){
    Frame f = new Frame("Visual");
    f.setSize(300,300);
    f.setVisible(true);
    Point p = f.getLocation();
    System.out.println("x is " + p.x);
    System.out.println("y is " + p.y);
}
```

- a) x is 300  
y is 300
- b) x is 0  
y is 0
- c) x is 0  
y is 300

**correct answer is b) Because position is always relative to parent container and in this case Frame f is the topmost container**

Q36) Which one of the following **always** ignores the components's preferred size.

- a) FlowLayout
- b) GridLayout
- c) BorderLayout

**Correct answer is b)**

Q37) Consider a directory structure like this (NT or 95)

```
C:\JAVA\12345.msg --FILE
\dir1\IO.class -- IO.class is under dir1
```

Consider the following code

```
import java.io.*;
public class IO {
    public static void main(String args[]) {
        File f = new File("../\12345.msg");
        try{
            System.out.println(f.getCanonicalPath());
            System.out.println(f.getAbsolutePath());
        }catch(IOException e){
            System.out.println(e);
        }
    }
}
```

What will be the output of running "java IO" from C:\java\dir1

- a) C:\java\12345.msg  
C:\java\dir1\..\12345.msg
- b) C:\java\dir1\12345.msg  
C:\java\dir1\..\12345.msg
- c) C:\java\dir1\..\12345.msg  
C:\java\dir1\..\12345.msg

**correct answer is a)** as `getCanonicalPath` Returns the canonical form of this File object's pathname. The precise definition of canonical form is system-dependent, but it usually specifies an absolute pathname in which all relative references and references to the current user directory have been completely resolved.

WHERE AS

`getAbsolutePath` Returns the absolute pathname of the file represented by this object. If this object represents an absolute pathname, then return the pathname. Otherwise, return a pathname that is a concatenation of the current user directory, the separator character, and the pathname of this file object.

Q 38) Suppose we copy `IO.class` from `C:\java\dir1` to `c:\java`  
What will be the output of running "`java IO`" from `C:\java`.

- a) `C:\java\12345.msg`  
`C:\java\..\12345.msg`
- b) `C:\12345.msg`  
`C:\java\..\12345.msg`
- c) `C:\java\..\12345.msg`  
`C:\java\..\12345.msg`

**correct answer is b)**

Q39) Which one of the following methods of `java.io.File` throws `IOException` and why

- a) `getCanonicalPath` and `getAbsolutePath` both require filesystem queries.
- b) Only `getCanonicalPath` as it require filesystem queries.
- c) Only `getAbsolutePath` as it require filesystem queries.

**Correct answer is b)**

Q40) What will be the output if  
Consider a directory structure like this (NT or 95)

```
C:\JAVA\12345.msg  --FILE
  \dir1\IO.class   -- IO.class is under dir1
```

```
import java.io.*;
public class IO {
    public static void main(String args[]) {
        File f = new File("12345.msg");
        String arr[] = f.list();
        System.out.println(arr.length);
    }
}
```

```
    }
}
```

- a) Compiler error as 12345.msg is a file not a directory
- b) java.lang.NullPointerException at run time
- c) No error , but nothing will be printed on screen

**Correct answer is b)**

Q41) What will be the output

Consider a directory structure like this (NT or 95)

C:\JAVA\12345.msg --FILE

```
import java.io.*;
public class IO {
    public static void main(String args[]) {
        File f1 = new File("\\12345.msg");
        System.out.println(f1.getPath());
        System.out.println(f1.getParent());
        System.out.println(f1.isAbsolute());
        System.out.println(f1.getName());
        System.out.println(f1.exists());
        System.out.println(f1.isFile());
    }
}
```

- a) \12345.msg  
\  
true  
12345.msg  
true  
true
- b) \12345.msg  
\  
true  
\12345.msg  
false  
false
- c) 12345.msg  
\  
true  
12345.msg  
false  
false
- d) \12345.msg  
\

```
true
12345.msg
false
false
```

**correct answer is d)**

Q42) If in question no 41 the line  
File f1 = new File("\\12345.msg"); is replaced with File f1 =  
new File("12345.msg");  
What will be the output

- a) 12345.msg  
\  
true  
12345.msg  
true  
true
- b) 12345.msg  
null  
true  
12345.msg  
true  
true
- c) 12345.msg  
null  
false  
12345.msg  
true  
true
- d) \12345.msg  
\  
true  
12345.msg  
false  
false

**Correct answer is c)**