

# **MOCK EXAM 1**

# Mock Exam—1

## QUESTION 1

Q 1: Which of the following statements are correct for variable length arguments?

- A. The **variable length arguments** should be the single argument in a method's argument list.
- B. The **variable length arguments** should be first argument in a method's argument list.
- C. The **variable length arguments** should be last argument in a method's argument list.
- D. The **variable length arguments** can be used at any place in a method's argument list.

## QUESTION 2

Q 2: Imagine you are working as a software engineer and you have written the following program:

```
import java.util.*;
public class TestQuestion {
    public static void main(String[] args) {
        List <String> mylist = new ArrayList<String>();
        mylist.add("niraj");
        mylist.add("kumar");
        mylist.add("verma");
        Collections.sort(mylist);
        System.out.println(mylist);
    }
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as: [kumar, niraj, verma]
- B. The program will generate compilation error.
- C. The program will display the output as: [niraj, kumar, verma]
- D. The program will throw a runtime exception.

## QUESTION 3

Q 3: Imagine that you are a Java programmer and during a lab session you have written a program as:

```
class Test {
    int a;
    Test(int i) {
        a = i;
    }
    Test inc( ) {
        Test temp = new Test(a+10);
        return temp;
    }
}
class TestQuestion {
    public static void main(String s[]) {
        Test ref1 = new Test(10);
        Test ref2;
        ref2 = ref1.inc();
        System.out.println(ref1.a);
        System.out.println(ref2.a);
        ref2 = ref1.inc();
        System.out.println(ref2.a);
    }
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
10  
10  
10
- B. The program will generate compilation error.
- C. The program will display the output as:
- D. The program will throw a runtime exception.

10  
20  
20

#### QUESTION 4

**Q 4:** Imagine that you are a software programmer and write code for students. During one of the courses you have written the following code:

```
class TestQuestion {
    static int i = 10;
    static {
        i+= 10;
    }
    public static void main(String s[]) {
        System.out.println("i:" +i);
    }
    static {
        i+=12;
    }
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
i:32
- B. The program will generate compilation error.
- C. The program will display the output as:  
i:10
- D. The program will throw a runtime exception.

#### QUESTION 5

**Q 5:** Imagine that you are a software programmer and write code for students. During one of the courses you have written the following code:

```
class UseStatic {
    static int a=3;
    static int b;
    static void meth(int x) {
        System.out.println("x = " + x);
        System.out.println("a = " + a);
        System.out.println("b = " + b);
    }
    static {
        System.out.println("Static block initialized.");
        b = a * 4;
    }
    public static void main(String args[]) {
        meth(42);
    }
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
Static block initialized.  
x = 42  
a = 3  
b = 12
- B. The program will generate compilation error.
- C. The program will display the output as:  
Static block initialized.  
x = 42  
a = 12  
b = 3
- D. The program will throw a runtime exception.

### QUESTION 6

Q 6: What will be the output when the following program is executed?

```
class TestQuestion {
    String s1 = "overloading main Strng s[]";
    String s2 = "overloading main int s[]";
    public static void main(String args[]) {
        System.out.println("inside main 1");
    }
    public static void main(int args[]) {
        System.out.println("inside main 2");
    }
}
```

- A. The program will display the output as:  
inside main 2
- C. The program will display the output as:  
inside main 1
- B. The program will generate compilation error.
- D. The program will throw a runtime exception.

### QUESTION 7

Q 7: Which of the following collections allows priority-based access, which is either user defined or in natural order?

- A. TreeSet    B. Queue    C. List    D. PriorityQueue

### QUESTION 8

Q 8: Imagine that you have declared two classes as shown in the following code:

```
class TestQuestion {
    int test(int[ ]... vars) {
        int sum =0;
        for(int i=0;i<vars.length;i++) {
            for(int j=0;j<vars[i].length;j++) {
                sum = sum + vars[i][j];
            }
        }
        return sum;
    }
    public static void main(String s[ ]) {
        TestQuestion ob = new TestQuestion();
        int sum = ob.test(new int [ ] {1, 2, 3, 4},new int[ ]{4,5,6});
        System.out.println(sum);
    }
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as: 25
- C. The program will display the output as: 10
- B. The program will generate compilation error.
- D. The program will throw a runtime exception.

### QUESTION 9

Q 9: Imagine that you are a software developer in a company. During a training session for new hires you have demonstrated the following program:

```
class TestQuestion {
    public static void main(String s[ ]) {
        for(int p=1;p<=2;p++) {
            for(int q=1;q<=3;q++) {
                if(p==q)
                    continue;
                System.out.print(+p);
                System.out.println(+q);
            }
        }
    }
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
11  
13  
11  
31
- B. The program will generate compilation error.
- C. The program will display the output as:  
11  
12  
11  
21
- D. The program will display the output as:  
12  
13  
21  
23

### QUESTION 10

**Q 10:** Imagine that you are a freelance course coordinator for programmers. In one of your class, you have analyzed the following code:

```
class TestQuestion implements Runnable {
    public void start() {
        System.out.println("start");
    }
    public static void main(String s[]) {
        TestQuestion ob = new TestQuestion();
        Thread th = new Thread();
        th.start();
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the output as:  
start
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

### QUESTION 11

**Q 11:** Maria is reading a book on Java programming. In one of the chapters, she found the following program:

```
class DemoTest {
    private DemoTest() {
        System.out.println("in constructor");
    }
}
class TestQuestion extends DemoTest {
    public static void main(String s[]) {
        TestQuestion obj = new TestQuestion();
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the output as:  
in constructor
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

### QUESTION 12

**Q 12:** In a popular workbook for programmers, a program was found written as:

```
class TestQuestion {
    public static void main(String s[]) {
        Integer i1 = new Integer(10);
        Integer i2 = new Integer(10);
        System.out.println(i1==i2);
    }
}
```

```

system.out.println(i1.hashCode() == i2.hashCode());
}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
true  
true
- B. The program will generate compilation error.
- C. The program will display the output as:  
false  
true
- D. The program will display the output as:  
false  
false

### QUESTION 13

Q 13: Jones is a software developer in an MNC. In one of his projects he wrote a program as:

```

class TestQuestion {
static int a = 10;
public static void main(String s[]) {
TestQuestion ob = new TestQuestion();
ob.test(20);
}
static {
System.out.println(a);
}
static void test(int a) {
a+= 12;
System.out.print(a);
}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
10  
32
- B. The program will generate compilation error.
- C. The program will display the output as:  
20  
32
- D. The program will display the output as:  
20  
32

### QUESTION 14

Q 14: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```

class TestQuestion {
public static void main(String s[]) {
Boolean a = new Boolean("false");
if(a) {
system.out.println("false");
}
else {
system.out.println("true");
}
}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
false
- B. The program will generate compilation error.
- C. The program will display the output as:  
True
- D. The program will throw a runtime exception.

**QUESTION 15**

**Q 15:** Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class TestQuestion {
    public static void main(String s[]) {
        Integer i = new Integer(9);
        Integer j = new Integer(13);
        Integer k = i + j;
        System.out.println(k);
    }
}
```

Which of the following reason is behind the successful execution of the preceding program?

- A. Overloading      B. Overriding      **C. Autoboxing**      D. Casting

**QUESTION 16**

**Q 16:** Jennie is a software developer in an MNC. In one of her projects she wrote a program as:

```
import java.util.*;
class TestQuestion {
    public static void main(String args[]) {
        String input = "1 fish 2 fish red fish blue fish";
        Scanner s = new Scanner(input).useDelimiter("\\s*f\\s*");
        System.out.println(s.nextInt());
        System.out.println(s.nextInt());
        System.out.println(s.next());
        System.out.println(s.next());
        s.close();
    }
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:**      B. The program will generate compilation error.

```
1
2
red
blue
```

- C. The program will display the output as:
- ```
1
2
fish
fish
```
- D. The program will display the output as:
- ```
fish
fish
fish
fish
```

**QUESTION 17**

**Q 17:** Jennie is a software developer in an MNC. In one of her projects she wrote a program as:

```
import java.util.*;
class TestQuestion {
    String input = "hi maria hi dick hi all";
    Scanner s = new Scanner(input).useDelimiter("\\s*hi\\s*");
    System.out.println(s.nextInt());
    System.out.println(s.nextInt());
    System.out.println(s.next());
    System.out.println(s.next());
    System.out.println(s.next());
    s.close();
}
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:
- ```
maria
dick
```
- B. The program will generate compilation error.

- all
- C. The program will display the output as:  
hi  
hi  
hi
- D. The program will throw a runtime exception.

### QUESTION 18

Q 18: Tom and Jerry are students of software programming. In one of the lab manual, they found a program as:

```
import java.util.*;
class TestQuestion {
public static void main(String args[]) {
    String input = "hi maria hi dick hi all";
    Scanner s = new Scanner(input).useDelimiter("\\s*hi\\s*");
    System.out.println(s.next());
    System.out.println(s.next());
    System.out.println(s.next());
    s.close();
}
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
maria  
dick  
all
- B. The program will generate compilation error.
- C. The program will display the output as:  
hi  
hi  
hi
- D. The program will throw a runtime exception.

### QUESTION 19

Q 19: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```
import java.util.*;
class TestQuestion {
public static void main(String args[]) {
    Boolean b1 = new Boolean(true);
    Boolean b2 = false;
    if(b1.equals(b2))
        System.out.println("equal");
    else
        System.out.println("not-equal");
}
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
equal
- B. The program will generate compilation error.
- C. The program will display the output as:  
not-equal
- D. The program will throw a runtime exception.

### QUESTION 20

Q 20: What happens when a constructor is not defined for a user-defined class?

- A. You cannot instantiate the class.
- B. There is a default constructor, which takes arguments of the same type as the data members in order.
- C. There is a default constructor which initializes data members of the class with the default values.
- D. There is a default constructor which does not initialize the data members of the class.



**QUESTION 21**

**Q 21:** Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class TestQuestion {
    public static boolean funcA(int a) {
        boolean b = (a==10)?true:false;
        System.out.println(b);
        return b;
    }
    public static void main(String args[]) {
        if(funcA(10) && funcA(5))
            System.out.println("pass");
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the output as:  
true  
false
- B. The program will generate compilation error.
- C. The program will display the output as:  
pass
- D. The program will throw a runtime exception.

**QUESTION 22**

**Q 22:** Jaya is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class MyClass implements Runnable {
    void run(String str) {
        System.out.println(str);
    }
}
class TestQuestion {
    public static void main(String s[]) {
        MyClass obj = new MyClass();
        Thread t = new Thread(obj);
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the output as: str
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

**QUESTION 23**

**Q 23:** Jennie is a software developer in an MNC. In one of her projects she wrote a program as:

```
class TestQuestion {
    int funcA(int a, int b) {
        System.out.println(a + b);
        char temp = 'a';
        return temp;
    }
    public static void main(String s[]) {
        TestQuestion obj = new TestQuestion();
        obj.funcA(1, 2);
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the output as: 3
- B. The program will generate compilation error.
- C. The program will display the output as:  
3  
1
- D. The program will display the output as:  
3  
a

### QUESTION 24

Q 24: Jaya is a software developer in an MNC. In one of her projects she wrote a program as:

```
class TestQuestion {
    static char x, y;
    public static void main(String s[]) {
        int sum = x+y;
        System.out.println(sum);
    }
}
```

During compilation and execution of the preceding program, what will happen?

- A. The program will compile and execute successfully, but no output will be shown.
- B. The program will generate compilation error.
- C. The program will display the output as: 0
- D. The program will throw a runtime exception.

### QUESTION 25

Q 25: Parul is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class TestQuestion {
    /* insert code here */
}
```

Which of the following options can be inserted at the specified comment line as /\* insert code here \*/ ?

- A. x(int z..., int y)
- B. abstract x()
- C. final()
- D. TestQuestion(int x , int y)

### QUESTION 26

Q 26: Tom and Jerry are software developers in an MNC. In one of the projects, they wrote a program as:

```
interface MyInterface {
    public void method1();
    public void method2();
}
class Test implements MyInterface //1
{
    public void method1() {
    }
}
class TestQuestion extends Test implements MyInterface //2
{
    public static void main(String s[])
    {}
    public void method2()
    {}
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will compile and execute successfully, but no output will be shown.
- B. The program will generate compilation error at the line marked as //2.
- C. The program will generate compilation error at the line marked as //1.
- D. The program will throw a runtime exception.

### QUESTION 27

Q 27: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class Block1 {
    Block1() {
        System.out.println("in Block1");
    }
}
```

```

class Block2 extends Block1 {
    Block2() {
        System.out.println("in Block2");
    }
}

public class TestQuestion extends Block2 {
    TestQuestion() {
        System.out.println("in TestQuestion");
    }
    public static void main(String s[]) {
        new TestQuestion();
    }
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
in Block1  
in Block2  
in TestQuestion
- B. The program will generate compilation error.
- C. The program will display the output as:  
in Block2  
in Block1  
in TestQuestion
- D. The program will throw a runtime exception.

### QUESTION 28

Q 28: Which of the following statements are correct?

- A. The DateFormat class is used to format dates.
- B. The Calendar class belongs to text package
- C. The Locale class is used to format date and numbers
- D. The Date class is used to bridge the gap between the Calendar and DateFormat classes.

### QUESTION 29

Q 29: Hari is a software developer in an MNC. In one of his projects, he wrote a program as:

```

class TestQuestion {
    public static void main(String s[]) {
        int num1 = 0102;
        int num2 = -10;
        int operation = num1 % num2;
        System.out.println(+operation);
    }
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
6
- B. The program will generate compilation error.
- C. The program will display the output as:  
-6
- D. The program will throw a runtime exception.

### QUESTION 30

Q 30: Maya is a software developer in an MNC. In one of her projects she wrote a program as:

```

class TestQuestion {
    public static void main(String s[]) {
        System.out.println(s[0] + s[1]);
    }
}

```

What will be the output when the preceding program is run with the following command line argument:

```
>java TestQuestion 12 24
```

- A. The program will display the output as:  
36
- C. The program will display the output as:  
1224
- B. The program will generate compilation error.
- D. The program will throw a runtime exception.

### QUESTION 31

Q 31: Which of the following statements are correct about the Pattern class?

- A. It is a not final class.
- B. It's compile(). method is used to create a pattern.
- C. It is used to create and define regular expression.
- D. It is a member of java.text package.

### QUESTION 32

Q 32: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class TestQuestion implements Runnable {  
    public void start() {  
        System.out.println("Executing start method");  
    }  
    public static void main(String s[]) {  
        Thread th = new Thread();  
        th.start();  
    }  
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
Executing start method
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

### QUESTION 33

Q 33: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class TestQuestion extends Thread {  
    public void run() {  
        System.out.println("calculating run method");  
    }  
    public static void main(String s[]) {  
        Thread th = new Thread();  
        th.start();  
    }  
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as: calculating run method
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

### QUESTION 34

Q 34: Hemant works as a Programmer for SoftTech In. He writes the following program:

```
class TestQuestion extends Thread {  
    public void run() {
```

```

    System.out.println("calculating run method");
}
public static void main(String s[]) {
    TestQuestion th = new TestQuestion();
    th.start();
}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
calculating run method
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

### QUESTION 35

Q 35: Maria organizes software classes for the students. In one of her class she wrote a program as:

```

class TestQuestion implements Runnable {
    public void run() {
        System.out.println("run() method is invoked");
    }
    public static void main(String ar[]) {
        TestQuestion ob = new TestQuestion();
        Thread th = new Thread(ob);
        th.start();
    }
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will compile and execute successfully, but no output will be shown.
- B. The program will generate compilation error.
- C. The program will display the output as: run() method is invoked
- D. The program will throw a runtime exception.

### QUESTION 36

Q 36: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```

import java.util.*;
class TestQuestion {
    public static void main(String s[]) {
        List<String> alist = new ArrayList<String>();
        alist.add("Z");
        alist.add(1);
        alist.add(true);
        Collections.sort(alist);
        System.out.println(alist);
    }
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
[Z 1 true]
- B. The program will generate compilation error.
- C. The program will display the output as:  
Z  
1  
True
- D. The program will throw a runtime exception.

### QUESTION 37

Q 37: Maria organizes software classes for the students. In one of her class, she wrote a program as:

```

import java.util.*;
class TestQuestion {

```

```
public static void main(String s[]) {  
    List alist = new ArrayList ();  
    alist.add("Z");  
    alist.add(1);  
    alist.add(true);  
    Collections.sort(alist);  
    System.out.println(alist);  
}  
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the output as:  
[Z 1 true]
- B. The program will generate compilation error.
- C. The program will display the output as:  
Z  
1  
true
- D. The program will throw a runtime exception with warning message.

#### QUESTION 38

**Q 38: John is a software developer in an MNC. In one of his projects he wrote a program as:**

```
import java.text.DateFormat;  
import java.util.Date;  
public class TestQuestion{  
    public static void main(String[] args) {  
        Date now = new Date();  
        System.out.println(now.toString());  
    }  
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the current date and time.
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

#### QUESTION 39

**Q 39: Joy is a software developer in an MNC. In one of his projects, he wrote a program as:**

```
import java.text.DateFormat;  
import java.util.Date;  
public class TestQuestion{  
    public static void main(String[] args) {  
        Date now = new Date();  
        System.out.println(DateFormat.getInstance().format(now));  
    }  
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the current date and time, in a formatted way.
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

#### QUESTION 40

**Q 40: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:**

```
import java.text.DateFormat;  
import java.util.Date;  
public class TestQuestion{  
    public static void main(String[] args) {
```

```
Date now = new Date();
System.out.println(DateFormat.getTimeInstance(DateFormat.SHORT).format(now));}}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the current date and time, in a formatted way.
- B. The program will generate compilation error.
- C. The program will display the current date, in a formatted way.
- D. The program will display the current time, in the SHORT formatted way.

#### QUESTION 41

**Q 41: John is a software developer in an MNC. In one of his projects, he wrote a program as:**

```
import java.text.DateFormat;
import java.util.Date;
public class TestQuestion{
    public static void main(String[] args) {
        Date now = new Date();
        System.out.println(DateFormat.getTimeInstance(DateFormat.MEDIUM).format (now));
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the current date and time, in a formatted way.
- B. The program will generate compilation error.
- C. The program will display the current date, in a formatted way.
- D. The program will display the current time, in the MEDIUM formatted way.

#### QUESTION 42

**Q 42: Karun is a software developer in an MNC. In one of his projects, he wrote a program as:**

```
import java.text.DateFormat;
import java.util.Date;
public class TestQuestion{
    public static void main(String[] args) {
        Date now = new Date();
        System.out.println(DateFormat.getTimeInstance(DateFormat.LONG).format(now));
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will display the current date and time, in a formatted way.
- B. The program will generate compilation error.
- C. The program will display the current date, in a formatted way.
- D. The program will display the current time, in the LONG formatted way.

#### QUESTION 43

**Q 43: Maya is a software developer in an MNC. In one of her projects, she wrote a program as:**

```
import java.text.DateFormat;
import java.util.Date;
public class TestQuestion{
    public static void main(String[] args) {
        // Make a new Date object. It will be initialized to the current time.
        Date now = new Date();
        // See what toString() returns
        System.out.println("1. " + now.toString());
        DateFormat dt = new DateFormat();
    }
}
```

**What will be the output when the preceding program is compiled and executed?**

- A. The program will compile and execute successfully, but no output will be shown.

B. The program will generate compilation error.

C. The program will display the output as 1 followed by current date and time.

D. The program will throw a runtime exception.

#### QUESTION 44

Q 44: Neil is a software developer in an MNC. In one of his projects he wrote a program as:

```
import java.text.DateFormat;
import java.util.Date;
public class TestQuestion{
    public static void main(String[] args) {
        // Make a new Date object. It will be initialized to the current time.
        Date now = new Date();
        // See what toString() returns
        System.out.println("1. " + now.toString());
        DateFormat dt = new DateFormat();
    }
}
```

What will be the output when the preceding program is compiled and executed?

A. The program will compile and execute successfully, but no output will be shown.

B. The program will generate compilation error.

C. The program will display the output as 1 followed by current date and time.

D. The program will throw a runtime exception.

#### QUESTION 45

Q 45: Which of the following statements are correct about initialization blocks?

A. Initialization blocks run every time a class is loaded.

B. Static initialization run only once.

C. Initialization blocks have return types.

D. Initialization blocks execute in the order of appearance.

#### QUESTION 46

Q 46: Jyoti is a software developer in an MNC. In one of her projects she wrote a program as:

```
public class TestQuestion{
    public static void main(String[] args) {
        String str = "PQR";
        int len = str.length();
        switch (len) {
            case 1: System.out.println("January"); break;
            case 2: System.out.println("February"); break;
            case 3: System.out.println("March"); break;
            default: System.out.println("Invalid month.");break;
        }
    }
}
```

What will be the output when the preceding program is compiled and executed?

A. The program will display the output as:  
March

B. The program will generate compilation error.

C. The program will display the output as:  
January

D. The program will throw a runtime exception.

#### QUESTION 47

Q 47: Jennie is a software developer in an MNC. In one of her projects, she wrote a program as:

```
class Test{
    static Test msg() {
        return new Test();
    }
}
class TestQuestion extends Test {
```



```

static TestQuestion msg(String s) {
    System.out.println(s);
    return new TestQuestion();
}
public static void main(String s[]) {
    msg("hello");
    System.out.println("niraj");
}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
hello  
niraj
- B. The program will generate compilation error.
- C. The program will display the output as:  
niraj  
hello
- D. The program will throw a runtime exception.

#### QUESTION 48

Q 48: Maya is a programmer and in a lab session she has declared an interface as:

```

interface MyInterface {
    int funcA(int a);
    int funcB(String s);
}

```

Which of the following code snippets are syntactically correct to use MyInterface?

- A. class test implements **MyInterface**{}
- B. interface yourinterface extends **MyInterface**{}
- C. interface yourinterface implements myinterface
- D: None of these

#### QUESTION 49

Q 49: Maya is a software engineer and she has written a program as:

```

class TestQuestion {
    public static void main(String s[]) {
        try {
            int x = 6/0;
        }
        catch(Exception e) {
            System.out.println("Exception:"+e);
        }
        catch(ArithmeticException e1) {
            System.out.println("Arithmetic Exception:"+e1);
        }
    }
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as: 0
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

#### QUESTION 50

Q 50: Neha works as a Programmer for Kogent Solutions Inc. She writes the following program:

```

class TestQuestion {
    public static void main(String s[]) {
        try {
            int x = 6/0;
        }
        catch(ArithmeticException e1) {

```

```

    System.out.println("Arithmetic Exception is thrown");
}
}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
Arithmetic Exception is thrown
- B. The program will generate compilation error.
- C. The program will display the output as: 0
- D. The program will compile and execute successfully, but no output will be shown.

### QUESTION 51

Q 51: Which of the following events are susceptible for throwing an exception?

- A. Dividing any number by 0
- B. Attempt to search array beyond index position
- C. trying to open a file which does not exists
- D. attempt to add two integer objects by + operator

### QUESTION 52

Q 52: In a textbook, a student found a program as:

```

interface A{}
class superclass implements A
{
}
class TestQuestion extends superclass {
public static void main(String s[]) {
superclass superob = new superclass();
TestQuestion subob = new TestQuestion();
System.out.println(superob instanceof A);
System.out.println(superob instanceof TestQuestion);
System.out.println(subob instanceof A);
}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as:  
true  
false  
true
- B. The program will generate compilation error.
- C. The program will display the output as:  
false  
true  
false
- D. The program will throw a runtime exception.

### QUESTION 53

Q 53: In a lab manual, a student found one program as:

```

interface I {
void m1();
}
class TestQuestion implements I {
public void m1(){ System.out.println("hi");}
public static void main(String... a){new TestQuestion().m1();}
}

```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as: hi
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

**QUESTION 54**

**Q 54:** Maya works as a Programmer in a MNC. She writes the following program:

```
interface I {
    void m1();
}
class TestQuestion implements I {
    void m1(){ System.out.println("hi");}
    public static void main(String... a){new
    TestQuestion().m1();}
}
```

What will be the output when the preceding program is compiled and executed?

- A. The program will display the output as: hi
- B. The program will generate compilation error.**
- C. The program will compile and execute successfully, but no output will be shown.
- D. The program will throw a runtime exception.

**QUESTION 55**

**Q 55:** Mahima works as a Programmer in a MNC. She writes the following program:

```
class TestQuestion {
    public static void main(String s[]) {
        try {
            for(int i=0;i<5;++i) {
                System.out.println(s[i]);
            }
        }
        catch(ArrayIndexOutOfBoundsException e) {
            System.out.println("Exception Generated:"+e);
        }
        finally
        {}
    }
}
```

What will happen if the preceding program is compiled successfully, and executed by the following command line:

```
java TestQuestion niraj
?
```

- A. The program will display the output as: niraj  
Exception Generated:java.lang.ArrayIndexOutOfBoundsException: 1
- B. The program will display the output as:  
Exception Generated:java.lang.ArrayIndexOutOfBoundsException: 1**
- C. The program will display the output as: niraj
- D. The program will compile and execute successfully, but no output will be shown.

**QUESTION 56**

**Q 56:** Which of the following exception is generated by assertion statements?

- A. ArrayIndexOutOfBoundsException
- B. RuntimeException
- C. Error
- D. AssertionError**

**QUESTION 57**

**Q 57:** Which is the following class is the superclass of AssertionError?

- A. Throwable**
- B. Object
- C. Error
- D. AssertionError

### QUESTION 58

Q 58: Rama is a software engineer and has written a code as :

```
class TestQuestion {
    public static void main(String s[]) {
        String str = new String("java");
        Object ob = str;
        System.out.println(ob.length());
    }
}
```

What will be the output when the preceding code is compiled and executed?

- A. The program will display the output as:  
4
- B. The program will generate compilation error.
- C. The program will display the output as:  
java
- D. The program will throw a runtime exception.

### QUESTION 59

Q 59: Which of the following statement(s) is/are correct?

- A. The 'extends' clause is used to specify inheritance.
- B. A final class can be an abstract class.
- C. If all the members of a class are private, then this class cannot be declared public.
- D. The "implements" clause is used to specify inheritance.

### QUESTION 60

Q 60: Which of the following statement(s) is/are correct?

- A. Every java object has a public method equals().
- B. Every java object has a public method length().
- C. A class can extend any number of classes.
- D. Every java object has a public method println().

### QUESTION 61

Q 61: Parul is a student of computer science and has written a program as:

```
class Super
{
}
class Sub extends Super
{
}
class TestQuestion
{
    boolean method1(Super obja){ return true;}
    boolean method1(Sub objb){return false;}

    public static void main(String[] args) {
        Super ob1 = new Super();
        Sub ob2 = new Sub();
        TestQuestion obj = new TestQuestion();
        System.out.println(obj.method1(ob1));
        System.out.println(obj.method1(ob2));
    }
}
```

What will be the output when the preceding code is compiled and executed?

- A. The program will display the output as:  
false  
true
- B. The program will generate compilation error.
- C. The program will display the output as:  
true  
false
- D. The program will throw a runtime exception.

**QUESTION 62**

**Q 62:** Which of the following statement(s) is/are correct?

- A. The keyword 'super' is used by subclass to invoke an overridden method in superclass.
- B. An instance method can override a static method in a superclass.
- C. A final method cannot be overridden.
- D. An abstract class can be instantiated.

**QUESTION 63**

**Q 63:** Parul is a student of computer science and she has written a program as:

```
class TestQuestion {
    public static void main(String[] args) {
        try {
            if(args.length == 0)
                return;
            System.out.println(args[0]);
        }
        Finally {
            System.out.println("bye!");
        }
    }
}
```

**What will be the output when the preceding code is compiled and executed?**

- A. The program will compile and execute with 0 command line argument successfully, but no output will be shown.
- B. The program will generate compilation error.
- C. The program will compile and execute with 0 command line argument successfully, and display the output as:  
bye!
- D. The program will throw a runtime exception.

**QUESTION 64**

**Q 64:** Rahul is a student of computer science and he has written a program as:

```
class TestQuestion
{
    public static void main(String[] args) {
        int k = 0;
        try {
            int i = 5/k;
        }
        catch(ArithmeticException e) {
            System.out.println("1");
        }
        catch(RuntimeException e) {
            System.out.println("2");
        }
        catch(Exception e) {
            System.out.println("3");
        }
        Finally {
            System.out.println("4");
        }
        System.out.println("5");
    }
}
```

**What will be the output when the preceding code is compiled and executed?**

- A. The program will display the output as:  
1  
3  
4
- B. The program will generate compilation error.
- C. The program will display the output as:
- D. The program will display the output as:

1  
2  
31  
4  
5

### QUESTION 65

Q 65: Which of the statements are correct for inner class?

- A. Inner class can be declared inside method code.
- B. Inner class instance can exist within outer class instance.
- C. Inner class is an anonymous class can implement multiple interface.
- D. Inner class can be private, default or public.

### QUESTION 66

Q 66: Kunal is a student of computer science and has written a program as:

```
class A {
    void a() {
        System.out.println("inside method a");
    }
}
class B extends A {
    void b() {
        System.out.println("inside method b");
    }
}
public class TestQuestion {
    public static void main(String s[]) {
        A obj1 = new A();
        B obj2 = new B();
        A obj = obj2;
        obj = obj1;
        System.out.println((B)obj.b());
    }
}
```

What will be the output when the preceding code is compiled and executed?

- A. The program will display the output as:  
inside method a
- B. The program will generate compilation error.
- C. The program will display the output as:  
inside method b
- D. The program will throw a runtime exception.

### QUESTION 67

Q 67: Uma is a student of computer science and has written a program as:

```
public class TestQuestion {
    public static void main(String s[]) {
        boolean a;
        boolean p = false;
        boolean q = false;
        if(a = p == q) {
            System.out.println("equal");
        }
        else
            System.out.println("not-equal");
    }
}
```

What will be the output when the preceding code is compiled and executed?

- A. The program will display the output as:  
equal
- B. The program will generate compilation error.
- C. The program will display the output as:  
not-equal
- D. The program will throw a runtime exception.

**QUESTION 68**

**Q 68:** In a magazine for software developers, a student found the following program:

```
interface Int1 {
    public void meth();
}
interface Int2 {
}
class TestQuestion implements Int1, Int2 {
    public void meth() {
        System.out.println("invoking a method");
    }
    public static void main(String s[]) {
    }
}
```

**What will be the output when the preceding code is compiled and executed?**

- A. The program will display the output as:  
invoking a method
- B. The program will generate compilation error.
- C. The program will compile and execute successfully, but no output will be shown.**
- D. The program will throw a runtime exception.

**QUESTION 69**

**Q 69:** In a magazine for software developers, a student found the following program:

```
import java.util.*;
public class TestQuestion{
    public static void main(String[] args) {
        NavigableSet <Integer> nset = new TreeSet<Integer>();
        nset.add(10);
        nset.add(15);
        nset.add(7);
        Iterator descendingIterator = nset.descendingIterator();
        if(descendingIterator.hasNext()) {
            System.out.println(descendingIterator.next());
        }
    }
}
```

**What will be the output when the preceding code is compiled and executed?**

- A. The program will display the output as:  
10
- B. The program will generate compilation error.
- C. The program will display the output as:  
7
- D. The program will display the output as:  
15**

**QUESTION 70**

**Q 70:** In a magazine for software developers, a student found the following program:

```
import java.util.*;
public class TestQuestion {
    public static void main(String[] args) {
        NavigableTest nset = new NavigableTest();
        nset.add("one");
        nset.add("two");
        nset.add("three");
    }
}
class NavigableTest extends TreeSet<Object> {
    public boolean test(Object value) {
        System.out.println(this.add(value));
        return super.add(value);
    }
}
```

**What will be the output when the preceding code is compiled and executed?**

- A. The program will display the output as:  
one  
two  
three
- B. The program will generate compilation error.
- C. The program will display the output as:  
one
- D. The program will compile and execute successfully, but no output will be shown.

### QUESTION 71

**Q 71:** Imagine you are a software developer in ABC. Company and write the following program for your project:

```
class BooleanRep {  
    public static void main(String ar[]) {  
        boolean status=1; // this statement will generate error  
        if(status) {  
            system.out.println("Here Status= "+status);  
        }  
    }  
}
```

**What will happen when you compile and execute the preceeding program?**

- A. The program generates compile time error.
- B. The program compiles successfully and displays nothing as output.
- C. The program compiles successfully but generates runtime exception.
- D. The program compiles successfully and displays Here Status= 1 as output.

### QUESTION 72

**Q 72:** Imagine during your preparation of the SCJP exam, you came across the following program:

```
class AssignRep {  
    public static void main(String ar[]) {  
        short b1=2;  
        short b2=3;  
        short b3=b1+b2; // error in this statement  
        System.out.println("Result= "+b3);  
    }  
}
```

**What will happen when you compile and execute the preceeding program?**

- A. The program generates compile time error.
- B. The program compiles successfully and displays nothing as output.
- C. The program compiles successfully but generates runtime exception.
- D. The program compiles successfully and displays Result= 5 as output.