

# **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**

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**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**

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**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:<br>inside main 2 | B. The program will generate compilation error. |
| C. The program will display the output as:<br>inside main 1 | 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 | B. The program will generate compilation error. |
| C. The program will display the output as: 10 | 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:<br>true<br>true  | B. The program will generate compilation error.              |
| C. The program will display the output as:<br>false<br>true | D. The program will display the output as:<br>false<br>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:<br>10<br>32 | B. The program will generate compilation error.        |
| C. The program will display the output as:<br>20<br>32 | D. The program will display the output as:<br>20<br>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:<br>false | B. The program will generate compilation error. |
| C. The program will display the output as:<br>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);
    }
}
```

// error prior to JDK 1.5

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*fi sh\\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: | D. The program will display the output as:      |
| 1  | fish  |
| 2  | fish  |
| 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: | B. The program will generate compilation error. |
| maria                                      |   |
| dick                                       |   |

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

**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: 1  
 D. The program will display the output as: 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
- B. The program will generate compilation error.
- C. The program will display the output as:  
1224
- 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.getInstance(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.getInstance(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.getInstance(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("ni raj ");
}
}

```

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

- A. The program will display the output as:  
hello  
ni raj
- B. The program will generate compilation error.
- C. The program will display the output as:  
ni raj  
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 obj a){ return true;}
    boolean method1(Sub obj b){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.