Q1.

**public** **class** Test {

**int** id=10;

**public** **static** **void** main(String[] args)

{

Test temp=**new** Test().doGet(**new** Test());

System.***out***.println("Get "+temp.id);

}

**public** Test doGet(Test t){

t.id=100;

id++;

System.***out***.println("Do Get "+id);

**return** t;

}

}

Select the correct one:

1. Do Get 11

Get 100

1. Do Get 101

Get 100

1. Do Get 0

Get 100

1. Compile time error

Q2. Given:

2. class MyException extends Exception { }

3. class Tire {

4. void doStuff() { }

5. }

6. public class Retread extends Tire {

7. public static void main(String[] args) {

8. new Retread().doStuff();

9. }

10. // insert code here

11. System.out.println(7/0);

12. }

13. }

And given the following four code fragments:

I. void doStuff() {

II. void doStuff() throws MyException {

III. void doStuff() throws RuntimeException {

IV. void doStuff() throws ArithmeticException {

When fragments I–IV are added, independently, at line 10, which are true? (Choose all that apply.)

A. None will compile

B. They will all compile

C. Some, but not all, will compile

D. All of those that compile will throw an exception at runtime

E. None of those that compile will throw an exception at runtime

F. Only some of those that compile will throw an exception at runtime

Q3 Given:

3. public class OverAndOver {

4. static String s = "";

5. public static void main(String[] args) {

6. try {

7. s += "1";

8. throw new Exception();

9. } catch (Exception e) { s += "2";

10. } finally { s += "3"; doStuff(); s += "4";

11. }

12. System.out.println(s);

13. }

14. static void doStuff() { int x = 0; int y = 7/x; }

15. }

What is the result?

A. 12

B. 13

C. 123

D. 1234

E. Compilation fails

F. 123 followed by an exception

G. 1234 followed by an exception

H. An exception is thrown with no other output

Q4.

Given:

3. public class Circles {

4. public static void main(String[] args) {

5. int[] ia = {1,3,5,7,9};

6. for(int x : ia) {

7. for(int j = 0; j < 3; j++) {

8. if(x > 4 && x < 8) continue;

9. System.out.print(" " + x);

10. if(j == 1) break;

11. continue;

12. }

13. continue;

14. }

15. }

16. }

What is the result?

A. 1 3 9

B. 5 5 7 7

C. 1 3 3 9 9

D. 1 1 3 3 9 9

E. 1 1 1 3 3 3 9 9 9

F. Compilation fails

Q5 Given:

3. class SubException extends Exception { }

4. class SubSubException extends SubException { }

5.

6. public class CC { void doStuff() throws SubException { } }

7.

8. class CC2 extends CC { void doStuff() throws SubSubException { } }

9.

10. class CC3 extends CC { void doStuff() throws Exception { } }

11.

12. class CC4 extends CC { void doStuff(int x) throws Exception { } }

13.

14. class CC5 extends CC { void doStuff() { } }

What is the result? (Choose all that apply.)

A. Compilation succeeds

B. Compilation fails due to an error on line 8

C. Compilation fails due to an error on line 10

D. Compilation fails due to an error on line 12

E. Compilation fails due to an error on line 14

Q6 Given:

try { int x = Integer.parseInt("two"); }

Which could be used to create an appropriate catch block? (Choose all that apply.)

A. ClassCastException

B. IllegalStateException

C. NumberFormatException

D. IllegalArgumentException

E. ExceptionInInitializerError

F. ArrayIndexOutOfBoundsException

**Q7.** Given:

public class Flip2 {

public static void main(String[] args) {

String o = "-";

String[] sa = new String[4];

for(int i = 0; i < args.length; i++)

sa[i] = args[i];

for(String n: sa) {

switch(n.toLowerCase()) {

case "yellow": o += "y";

case "red": o += "r";

case "green": o += "g";

}

}

System.out.print(o);

}

}

And given the command-line invocation:

Java Flip2 RED Green YeLLow

Which are true? (Choose all that apply.)

A. The string rgy will appear somewhere in the output

B. The string rgg will appear somewhere in the output

C. The string gyr will appear somewhere in the output

D. Compilation fails

E. An exception is thrown at runtime

Q8 Given:

1. import java.util.\*;

2. class Fortress {

3. private String name;

4. private ArrayList<Integer> list;

5. Fortress() { list = new ArrayList<Integer>(); }

6.

7. String getName() { return name; }

8. void addToList(int x) { list.add(x); }

9. ArrayList getList() { return list; }

10. }

Which lines of code (if any) break encapsulation? (Choose all that apply.)

A. Line 3

B. Line 4

C. Line 5

D. Line 7

E. Line 8

F. Line 9

G. The class is already well encapsulated

Q9.

Given:

3. class Box {

4. int size;

5. Box(int s) { size = s; }

6. }

7. public class Laser {

8. public static void main(String[] args) {

9. Box b1 = new Box(5);

10. Box[] ba = go(b1, new Box(6));

11. ba[0] = b1;

12. for(Box b : ba) System.out.print(b.size + " ");

13. }

14. static Box[] go(Box b1, Box b2) {

15. b1.size = 4;

16. Box[] ma = {b2, b1};

17. return ma;

18. }

19. }

What is the result?

A. 4 4

B. 5 4

C. 6 4

D. 4 5

E. 5 5

F. Compilation fails

Q10

Given:

public class Tailor {

public static void main(String[] args) {

byte[][] ba = {{1,2,3,4}, {1,2,3}};

System.out.println(ba[1].length + " " + ba.length);

}

}

What is the result?

A. 2 4

B. 2 7

C. 3 2

D. 3 7

E. 4 2

F. 4 7

G. Compilation fails

Q11

Given:

import java.util.\*;

public class Sequence {

public static void main(String[] args) {

ArrayList<String> myList = new ArrayList<String>();

myList.add("apple");

myList.add("carrot");

myList.add("banana");

myList.add(1, "plum");

System.out.print(myList);

}

}

What is the result?

A. [apple, banana, carrot, plum]

B. [apple, plum, carrot, banana]

C. [apple, plum, banana, carrot]

D. [plum, banana, carrot, apple]

E. [plum, apple, carrot, banana]

F. [banana, plum, carrot, apple]

G. Compilation fails

Q12

Given:

public class Mutant {

public static void main(String[] args) {

StringBuilder sb = new StringBuilder("abc");

String s = "abc";

sb.reverse().append("d");

s.toUpperCase().concat("d");

System.out.println("." + sb + ". ." + s + ".");

}

}

Which two substrings will be included in the result? (Choose two.)

A. .abc.

B. .ABCd.

C. .ABCD.

D. .cbad.

E. .dcba.

Q13.

Given:

3. interface Vessel { }

4. interface Toy { }

5. class Boat implements Vessel { }

6. class Speedboat extends Boat implements Toy { }

7. public class Tree {

8. public static void main(String[] args) {

9. String s = "0";

10. Boat b = new Boat();

11. Boat b2 = new Speedboat();

12. Speedboat s2 = new Speedboat();

13. if((b instanceof Vessel) && (b2 instanceof Toy)) s += "1";

14. if((s2 instanceof Vessel) && (s2 instanceof Toy)) s += "2";

15. System.out.println(s);

16. }

17. }

What is the result?

A. 0

B. 01

C. 02

D. 012

E. Compilation fails

F. An exception is thrown at runtime

Q14

Given:

4. public class SpecialOps {

5. public static void main(String[] args) {

6. String s = "";

7. boolean b1 = true;

8. boolean b2 = false;

9. if((b2 = false) | (21%5) > 2) s += "x";

10. if(b1 || (b2 == true)) s += "y";

11. if(b2 == true) s += "z";

12. System.out.println(s);

13. }

14. }

Which are true? (Choose all that apply.)

A. Compilation fails

B. x will be included in the output

C. y will be included in the output

D. z will be included in the output

E. An exception is thrown at runtime

Q15

Given:

class Feline {

public static void main(String[] args) {

long x = 42L;

long y = 44L;

System.out.print(" " + 7 + 2 + " ");

System.out.print(foo() + x + 5 + " ");

System.out.println(x + y + foo());

}

static String foo() { return "foo"; }

}

What is the result?

A. 9 foo47 86foo

B. 9 foo47 4244foo

C. 9 foo425 86foo

D. 9 foo425 4244foo

E. 72 foo47 86foo

F. 72 foo47 4244foo

G. 72 foo425 86foo

H. 72 foo425 4244foo

I. Compilation fails

Q16

Given:

class Fork {

public static void main(String[] args) {

if(args.length == 1 | args[1].equals("test")) {

System.out.println("test case");

} else {

System.out.println("production " + args[0]);

}

}

}

And the command-line invocation:

java Fork live2

What is the result?

A. test case

B. production live2

C. test case live2

D. Compilation fails

E. An exception is thrown at runtime