1. Which is true?

A. "X extends Y" is correct if and only if X is a class and Y is an interface

B. "X extends Y" is correct if and only if X is an interface and Y is a class

C. "X extends Y" is correct if X and Y are either both classes or both interfaces

D. "X extends Y" is correct for all combinations of X and Y being classes and/or interfaces

Answer: Option C

Explanation: A is incorrect because classes implement interfaces, they don't extend them. B is incorrect because interfaces only "inherit from" other interfaces. D is incorrect based on the preceding rules.

2. Which of the following is true?

1. **A class can extend more than one class.**
2. **A class can extend only one class but many interfaces.**
3. **An interface can extend many interfaces.**
4. **An interface can implement many interfaces.**
5. **A class can extend one class and implement many interfaces.**

A. 1 and 2

B. 2 and 4

C. 3 and 5

D. 3 and 4

E. 2 and 5

Answer: Option C

3. What is the result of compiling and running the following code?

```
class Base{
	public Base(){
		System.out.print("Base");
	}
}
public class Derived extends Base{
	public Derived(){
		this("Examveda");
		System.out.print("Derived");
	}
	public Derived(String s){
		System.out.print(s);
	}
	public static void main(String[] args){
		new Derived();
	}
}
```

A. ExamvedaDerived

B. ExamvedaBaseDerived

C. BaseExamvedaDerived

D. ExamvedaDerivedBase

E. Compilation Error

Answer: Option C

Explanation:

1. new Derived(); statement executes and invoke the non-parametrized constructor of derived class i.e.
public Derived();
2. As Derived class is a subclass of class Base so super(); executes and calls the super class constructor and prints **"Base"**.

3. After that
this("Examveda"); executes and call the parametrized constructor
public Derived(String s); of Derived class as this always refer to the current object. So, it prints **"Examveda"**.
4. Lastly the print statement executes and prints **"Derived"**
Hence output is **BaseExamvedaDerived**.

4. What is the output of the following program code?

```
abstract class C1{
        public C1(){
                System.out.print(1);
        }
}
class C2 extends C1{
        public C2(){
                System.out.print(2);
        }
}
class C3 extends C2{
        public C3(){
                System.out.println(3);
        }
}
public class Test{
        public static void main(String[] a){
                new C3();
        }
}
```

A. 12

B. 23

C. 123

D. 321

Answer: Option C

5. The concept of multiple inheritance is implemented in Java by

I. Extending two or more classes.

II. Extending one class and implementing one or more interfaces.

III. Implementing two or more interfaces.

A. Only (II)

B. (I) and (II)

C. (II) and (III)

D. Only (I)

E. Only (III)

Answer: Option C

6. What will be the output?

```
interface A{
        public void method1();
}
class One implements A{
        public void method1(){
                System.out.println("Class One method1");
        }
}
class Two extends One{
        public void method1(){
                System.out.println("Class Two method1");
        }
}
public class Test extends Two{
        public static void main(String[] args){
                A a = new Two();
                a.method1();
        }
}
```

A. Compilation Error

B. Class One method1

C. Class Two method1

D. Throws a NoSuchMethodException at runtime.

E. None of these

Answer: Option C

7. What is the result of compiling and running this program?

```
class Mammal{
    void eat(Mammal m){
        System.out.println("Mammal eats food");
    }
}
class Cattle extends Mammal{
    void eat(Cattle c){
        System.out.println("Cattle eats hay");
    }
}
class Horse extends Cattle{
    void eat(Horse h){
        System.out.println("Horse eats hay");
    }
}
public class Test{
    public static void main(String[] args){
        Mammal h = new Horse();
        Cattle c = new Horse();
        c.eat(h);
    }
}
```

A. prints "Mammal eats food"

B. prints "Cattle eats hay"

C. prints "Horse eats hay"

D. Class cast Exception at runtime.

E. None of these

Answer: Option A

8.Determine output:

```
class A{
        public void method1(){
                System.out.print("Class A method1");
        }
}
class B extends A{
        public void method2(){
                System.out.print("Class B method2");
        }
}
class C extends B{
        public void method2(){
                System.out.print("Class C method2");
        }
        public void method3(){
                System.out.print("Class C method3");
        }
}
public class Test{
        public static void main(String args[]){
                A a = new A();
                C c = new C();
                c.method2();
                a = c;
                a.method3();        // error is heare
        }
}
```

A. Class B method2 Class C method3

B. Class C method2 Class C method3

C. Compilation Error

D. Runtime exception

E. None of these

Answer: Option C

Explanation:

It is important to understand that it is the type of reference variable - not the type of the object that it refers to - that which determines what members can be accessed. That is, when a reference to a subclass object is assigned to a super class reference variable, we will have access only to those parts of the object defined by the superclass.
In the above program method **method3()** is defined in the class **C** which is a subclass of **B** and so **A**. Even the reference variable a refers to c, a can't access **method3()** as this method is unknown to class **A**.

9. What will be printed after executing following program code?

```
class Base{
        int value = 0;
    Base(){
        addValue();
    }
    void addValue(){
        value += 10;
    }
    int getValue(){
        return value;
    }
}
class Derived extends Base{
        Derived(){
                addValue();
        }
        void addValue(){
                value +=  20;
        }
}
```

```
public class Test{
        public static void main(String[] args){
                Base b = new Derived();
                System.out.println(b.getValue());
        }
}
```

A. 30

B. 10

C. 40

D. 20

E. None of these

Explanation:

When object of new **derived** is called, the flow goes to Derived() first, by default super(); is present in Derived() as the first statement, so the flow now goes to Base. Here value is initialised to 0 and then addValue() is called. The addValue has been overridden in Derived() hence The Base's addValue() will perform value+20(0+20) .After this control flows back to Derived()'s addValue() where again value+20 is done (20+20). Hence Answer is 40

10. What will be the output?

```
class Parent{
    public void method(){
        System.out.println("Hi i am parent");
    }
}
public class Child extends Parent{
    protected void method(){
        System.out.println("Hi i am Child");
    }
    public static void main(String args[]){
        Child child = new Child();
        child.method();
    }
```

```
}
```

A. Compiles successfully and print

B. Compiles successfully and print

C. Compile time error

D. Run Time error

E. None of This

Answer: Option C

Explanation:

We cannot reduce the visibility of the inherited method from super class. If the overridden or hidden method is public, then the overriding or hiding method must be public; otherwise, a compile-time error occurs. If the overridden or hidden method is protected, then the overriding or hiding method must be protected or public; otherwise, a compile-time error occurs. If the overridden or hidden method has default (package) access, then the overriding or hiding method must not be private; otherwise, a compile-time error occurs.

11. What will be the output?

```
class One{
    final int a = 15;
}

class Two extends One{
    final int a = 20;
}

public class Test extends Two{
    final int a = 30;

    public static void main(String args[]){
        Test t = new One();
        System.out.print(t.a);
    }
}
```

A. 15

B. 20

C. 30

D. Compiler Error

E. None of these

Answer: Option D

Explanation:

We can't store super class object in subclass reference But we can store subclass object in super class reference.

12. What will be the output?

```
class A{
    int i = 10;
    public void printValue(){
        System.out.print("Value-A");
    }
}

class B extends A{
    int i = 12;
    public void printValue(){
        System.out.print("Value-B");
    }
}

public class Test{
    public static void main(String args[]){
        A a = new B();
        a.printValue();
        System.out.print(a.i);
    }
}
```

A. Value-B 11

B. Value-B 10

C. Value-A 10

D. Value-A 11

E. None of these

Answer: Option B

Explanation:

If you create object of subclass with reference of super class like (A a = new B();) then subclass method and super class variable will be executed.

13. What will be the result after compiling this code?

```
class SuperClass{
    public int doIt(String str, Integer... data)throws Exception{
        String signature = "(String, Integer[])";
        System.out.println(str + " " + signature);
        return 1;
    }
}

public class Test extends SuperClass{
    public int doIt(String str, Integer... data){
        String signature = "(String, Integer[])";
        System.out.println("Overridden: " + str + " " +signature);
        return 0;
    }

    public static void main(String... args){// throws Exception must be used
        SuperClass sb = new Test();
        sb.doIt("hello", 3);
    }
}
```

A. Overridden: hello (String, Integer[])

B. hello (String, Integer[])

C. Compilation fails

D. None of these

Answer: Option C

Explanation:

Exception must be caught or declared to be thrown.

14.
```
class A{
    A(String s){}

    A(){}
}
```

```
1. class B extends A{
2.     B(){}
3.     B(String s){
4.         super(s);
5.     }
6.     void test(){
7.         // insert code here
8.     }
9. }
```

Which of the below code can be insert at line 7 to make clean compilation ?

A. A a = new B();

B. A a = new B(5);

C. A a = new A(String s);

D. All of the above

E. None of these

Answer: Option A

.

16. Determine output:

```
class A{
    public void printName(){
        System.out.println("Name-A");
    }
}
class B extends A{
    public void printName(){
        System.out.println("Name-B");
    }
}
class C extends A{
    public void printName(){
        System.out.println("Name-C");
    }
}

1. public class Test{
2.      public static void main (String[] args){
3.          B b = new B();
4.          C c = new C();
5.          b = c;
6.          newPrint(b);
7.      }
8.      public static void newPrint(A a){
9.          a.printName();
10.     }
11. }
```

A. Name B

B. Name C

C. Compilation fails due to an error on lines 5

D. Compilation fails due to an error on lines 9

E. None of these

Answer: Option C

Explanation:

17. What is the output for the below code ?

```
class A{
    private void printName(){
        System.out.println("Value-A");
    }
}
class B extends A{
    public void printName(){
        System.out.println("Name-B");
    }
}
public class Test{
    public static void main (String[] args){
        B b = new B();
        b.printName();
    }
}
```

A. Value-A

B. Name-B

C. Value-A Name-B

D. Compilation fails - private methods can't be override

E. None of these

Answer: Option B

Explanation:

You can not override private method , private method is not availabe in subclass . In this case printName() method a class A is not overriding by the printName() method of class B. printName() method of class B is a different method. So you can call printName() method of class B.

18. What will be the result of compiling and running the given code?

```
class A{
    int b=10;
    private A(){
        this.b=7;
    }
    int f(){
        return b;
    }
}
class B extends A{
    int b;
}
public class Test{
    public static void main(String[] args){
        A a = new B();
        System.out.println(a.f());
    }
}
```

A. Compilation Fails

B. Prints 0

C. Prints 10

D. Prints 7

E. None of these

Answer: Option A

Solution(By Examveda Team)

Choice A is the correct answer.

The code does not compile because the constructor of class A is declared as private. This creates a problem when the subclass constructor makes an implicit super() call to the parent class constructor at the time B is instantiated.

Since the code does not compile, all the other choices are incorrect. If the constructor of A had not been private, the output would have been 7.

Explanation:

19. What will be the result of compiling and executing the following program code?

```
class Vehicle{
    public void printSound(){
        System.out.print("vehicle");
    }
}
class Car extends Vehicle{
    public void printSound(){
        System.out.print("car");
    }
}
class Bike extends Vehicle{
    public void printSound(){
        System.out.print("bike");
    }
}
public class Test{
    public static void main(String[] args){
        Vehicle v = new Car();
        Bike b = (Bike) v;// run time error

        v.printSound();
        b.printSound();
    }
}
```

A. Compilation fails.

B. ClassCastException exception is thrown at runtime.

C. "vehiclecar" is printed.

D. "vehiclebike" is printed.

E. "carcar" is printed.

Answer: Option B

Explanation:

Array

1. In Java arrays are

A. objects

B. object references

C. primitive data type

D. None of the above

Answer: Option A

In java an **array** is a container object that holds a fixed number of values of a single type. The length of an array is established when the array is created. After creation, its length is fixed.

2. Which one of the following is a valid statement?

A. char[] c = new char();

B. char[] c = new char[5];

C. char[] c = new char(4);

D. char[] c = new char[];

Answer: Option B

The syntax for declaring and creating an array variable in java is:
dataType[] arrayRefVar = new dataType[arraySize];

Thus, option (A) and option (C) is syntactically wrong as parentheses(**( )**) is used instead of square brackets(**[ ]**).
Option (D) is incorrect as the size of the array is missing.

3. What is the result of compiling and running the following code?

```
public class Test{
    public static void main(String[] args){
        int[] a = new int[0];
        System.out.print(a.length);
    }
}
```

A. 0

B. Compilation error, arrays cannot be initialized to zero size.

C. Compilation error, it is a.length() not a.length

D. None of the above

Answer: Option A

4. What will be the output?

```
public class Test{
    public static void main(String[] args){
        int[] x = new int[3];
        System.out.println("x[0] is " + x[0]);
    }
}
```

A. The program has a compile error because the size of the array wasn't specified when declaring the array.

B. The program has a runtime error because the array elements are not initialized.

C. The program runs fine and displays x[0] is 0.

D. The program has a runtime error because the array element x[0] is not defined.

Answer: Option C

Program is syntactically correct, so no error.
In java, if the array is not initialized at the time of declaration and creation then all the elements of the array are initialized to 0 by default.

5. What is the output of the following code?

```
public class Test{
    public static void main(String args[]){
        double[] myList = {1, 5, 5, 5, 5, 1};
        double max = myList[0];
        int indexOfMax = 0;
        for(int i = 1; i < myList.length; i++){
            if(myList[i] > max){
                max = myList[i];
                indexOfMax = i;
            }
        }
        System.out.println(indexOfMax);
    }
}
```

A. 0

B. 1

C. 2

D. 3

E. 4

Answer: Option B

In the given program.
Line 7 : if(myList[i] > max) execute only on time when i =1;
when i = 1 then myList[i] = 5 and max = 1(**so the statement is true and if block will be**

executed).
Then, **max** = myList[i] = 5 and **indexOfMax** = i = 1.
After that **if** statement always false. so **indexOfMax** value remain 1.

Therefore the value of **indexOfMax is 1** at end of the for loop.

6. What is output of the following code:

```
public class Test{
    public static void main(String[] args){
        int[] x = {120, 200, 016 };
        for(int i = 0; i < x.length; i++)
            System.out.print(x[i] + " ");
    }
}
```

A. 120 200 16

B. 120 200 14

C. 120 200 016

D. 016 is a compile error. It should be written as 16.

Answer: Option B

016 is an octal number. The prefix 0 indicates that a number is in octal.

7. Determine output:

```
public class Test{
    public static void main(String[] args){
        int[] x = {1, 2, 3, 4};
        int[] y = x;

        x = new int[2];

        for(int i = 0; i < x.length; i++)
            System.out.print(y[i] + " ");
    }
}
```

A. 1 2 3 4

B. 0 0 0 0

C. 1 2

D. 0 0

E. None of these

Answer: Option C

8. Analyze the following code and choose the correct answer.

```
int[] arr = new int[5];
arr = new int[6];
```

A. The code has compile errors because the variable arr cannot be changed once it is assigned.

B. The code has runtime errors because the variable arr cannot be changed once it is assigned.

C. The code can compile and run fine. The second line assigns a new array to arr.

D. The code has compile errors because we cannot assign a different size array to arr.

Answer: Option C

9.What will be the output?

```
public class Test{
    public static void main(String[] args){
        int[] a = new int[4];
        a[1] = 1;
        a = new int[2];
        System.out.println("a[1] is " + a[1]);
    }
}
```

A. The program has a compile error because new int[2<sp< p=""> </sp<>

B. The program has a runtime error because a[1

C. a[1] is 0

D. a[1] is 1

Answer: Option C

After executing the statement a = new int[2], a refers to int[2]. The default value for a[0] and a[1] is 0. 10. When you pass an array to a method, the method receives _____ .

A. A copy of the array.

B. A copy of the first element.

C. The reference of the array.

D. The length of the array.

Answer: Option C

11. What would be the result of attempting to compile and run the following code?

```
public class HelloWorld{
    public static void main(String[] args){
        double[] x = new double[]{1, 2, 3};
        System.out.println("Value is " + x[1]);
    }
}
```

A. The program has a compile error because the syntax new double[]{1, 2, 3} is wrong and it should be replaced by {1, 2, 3}.

B. The program has a compile error because the syntax new double[]{1, 2, 3} is wrong and it should be replaced by new double[3]{1, 2, 3};

C. The program has a compile error because the syntax new double[]{1, 2, 3} is wrong and it should be replaced by new double[]{1.0, 2.0, 3.0};

D. The program compiles and runs fine and the output

Answer: Option D

new double[]{1, 2, 3} is correct. This is the syntax I have not covered in this edition, but will be covered in the future edition. In this question, double[] x = new double[]{1, 2, 3} is equivalent to double[] x = {1, 2, 3};

12. Which will legally declare, construct, and initialize an array?

A. int [] myList = {};

B. int [] myList = (5, 8, 2);

C. int myList [] [] = {4,9,7,0};

D. int myList [] = {4, 3, 7};

Answer: Option D

The only legal array declaration and assignment statement is Option D
Option A is wrong because it initializes an int array with **String** literals.
Option B is wrong because it uses something other than curly braces for the initialization.
Option C is wrong because it provides initial values for only one dimension, although the declared array is a two-dimensional array.

13. What will be the output of the program?

```
public class Test{
    public static void main(String [] args){
        String s1 = args[1];
        String s2 = args[2];
        String s3 = args[3];
        String s4 = args[4];
        System.out.print(" args[2] = " + s2);
    }
}
```

and the command-line invocation is C:Java> java Test 1 2 3 4

A. args[2] = 2

B. args[2] = 3

C. args[2] = null

D. An exception is thrown at runtime.

Answer: Option D

An exception is thrown because in the code String s4 = args[4];, the array index (the fifth element) is out of the bounds. The exception thrown is the **ArrayIndexOutOfBoundsException**.

14. What is the value of a[1] after the following code is executed?

```
int[] a = {0, 2, 4, 1, 3};
for(int i = 0; i < a.length; i++)
a[i] = a[(a[i] + 3) % a.length];
```

A. 0

B. 1

C. 2

D. 3

E. 4

Answer: Option B

when i = 0;
a[i] = a[(a[i]+3)%a.length] //a.length =5;
a[0] = a[(a[0]+3)%5];
a[0] = a[(0+3)%5] ; // 3
a[0] = a[3] = 1
when i = 1;
a[1]=a[(a[1]+3)%5];
a[1]=a[(2+3)%5];
a[1]=a[0];
a[1]=1;
Therefore a[1] is equal to 1

1.

Suppose a class has public visibility. In this class we define a protected method. Which of the following statements is correct?

A. This method is only accessible from inside the class itself and from inside all subclasses.

B. In a class, you cannot declare methods with a lower visibility than the visibility of the class in which it is defined.

C. From within protected methods you do not have access to public methods.

D. This method is accessible from within the class itself and from within all classes defined in the same package as the class itself.

Answer: Option D

2.

Choose all the lines which if inserted independently instead of "//insert code here" will allow the following code to compile:

```
public class Test{
    public static void main(String args[]){
        add();
        add(1);
        add(1, 2);
    }

    // insert code here
}
```

A. void add(Integer... args){}

B. static void add(int... args, int y){}

C. static void add(int args...){}

D. static void add(int[]... args){}

E. static void add(int...args){}

Answer: Option E

3.

What is the result of compiling and running the following code?

```
class Base{
    private Base(){
        System.out.print("Base");
    }
}
public class test extends Base{
    public test(){
        System.out.print("Derived");
    }
    public static void main(String[] args){
        new test();
    }
}
```

A. BaseDerived

B. Derived

C. Exception is thrown at runtime

D. Compilation Error

Answer: Option D

4.

What is the result of compiling and running the following code?

```
public class Tester{
    static int x = 4;
    public Tester(){
        System.out.print(this.x); // line 1
```

```
        Tester();
    }
    public static void Tester(){ // line 2
        System.out.print(this.x); // line 3
    }
    public static void main(String... args){ // line 4
        new Tester();
    }
}
```

A. Compile error at line 1 (static x must be only accessed inside static methods)

B. Compile error at line 2 (constructors can't be static)

C. Compile error at line 3 (static methods can't invoke this)

D. Compile error at line 4 (invalid argument type for method main)

E. 44

Answer: Option C

5.

What is the result of compiling and running the following code?

```
public class Tester{
    static int x = 4;
    int y = 9;
    public Tester(){
        System.out.print(this.x); // line 1
        printVariables();
    }
    public static void printVariables(){
        System.out.print(x); // line 2
        System.out.print(y); // line 3
```

```
    }
    public static void main(String... args) { // line 4
        new Tester();
    }
}
```

A. Compile error at line 1 (static x must be only accessed inside static methods)

B. Compile error at line 3 (static methods can't make reference to non-static variables)

C. Compile error at line 4 (invalid argument type for method main)

D. 49

E. Compile error at line 2 (must access x by writing Tester.x)

Answer: Option B

6.

The object is created with new keyword

A. At Compile-time

B. At run-time

C. Depends on the code

D. None of these

Answer: Option B

7.

Consider the following two classes declared and defined in two different packages, what can be added in class B to form what considered a correct access to class A from main() method of class B?

```
package subPackage;

public class A { }
```

```
package anotherPackage;

// line 1
```

```
        public class B{
                public static void main(String[] args){
                // line 2
        }
}
```

1. At line1 add noting; At line2 add: new A();
2. At line 1 add: import package.*; at line 2 add : new subPackage.A();
3. At line 1 add: import subPackage.*; at line 2 add : new A();
4. At line 1 add: import subPackage.A; at line 2 add : new A();

A. 1 and 2

B. 2 and 4

C. 3 and 4

D. 1 and 3

Answer: Option C

8.

Determine output:

```
public class InitDemo{
        static int i = demo();
        static{
           System.out.print(i);
      }
        InitDemo(){
                System.out.print("hello1");
        }
        public static void main(String... args){
           System.out.print("Hello2");
        }
        static int demo(){
```

```
        System.out.print("InsideDemo");
                return 10;
        }
}
```

A. Compilation error.

B. IllegalArgumentException is thrown at runtime.

C. InsideDemo 10 Hello2

D. Hello2 InsideDemo 10

E. InsideDemo 10 Hello2 hello1

Answer: Option C

9.

Which statements are most accurate regarding the following classes?

```
class A{
    private int i;
    protected int j;
}

class B extends A{
    private int k;
    protected int m;
}
```

A. An object of B contains data fields i, j, k, m.

B. An object of B contains data fields j, k, m.

C. An object of B contains data fields j, m.

D. An object of B contains data fields k, m.

Answer: Option B

10.

A package is a collection of

A. Classes

B. Interfaces

C. Editing tools

D. Classes and Interfaces

E. Editing tools and Interfaces

Answer: Option D

11.

A method within a class is only accessible by classes that are defined within the same package as the class of the method. Which one of the following is used to enforce such restriction?

A. Declare the method with the keyword public.

B. Declare the method with the keyword private.

C. Declare the method with the keyword protected.

D. Do not declare the method with any accessibility modifiers.

E. Declare the method with the keyword public and private.

Answer: Option D

12.

Choose the correct statement

```
public class Circle{
    private double radius;
    public Circle(double radius){
        radius = radius;
    }
}
```

A. The program has a compilation error because it does not have a main method.

B. The program will compile, but we cannot create an object of Circle with a specified radius. The object will always have radius 0.

C. The program has a compilation error because we cannot assign radius to radius.

D. The program does not compile because Circle does not have a default constructor.

Answer: Option B

13.

Choose the correct statement. Restriction on staticmethods are:

I. They can only call other staticmethods.
II. They must only access static data.
III. They cannot refer this or super in any way.

A. Only (I)

B. (I) and (II)

C. (II) and (III)

D. Only (III)

E. (I), (II) and (III)

Answer: Option E

14.

You have the following code in a file called Test.java

```
class Base{
    public static void main(String[] args){
        System.out.println("Hello");
    }
}
public class Test extends Base{}
```

What will happen if you try to compile and run this?

A. It will fail to compile.

B. Runtime error

C. Compiles and runs with no output.

D. Compiles and runs printing

Answer: Option D

15.

What will be the output?

```
public class Test{
        static{
                int a = 5;
        }

        public static void main(String args[]){
                new Test().call();
        }

        void call(){
                this.a++;
                System.out.print(this.a);
        }
}
```

A. Compile with error

B. Runtime Exception

C. 5

D. 6

E. 0

Answer: Option A

16.

Determine Output:

```
class MyClass{
    static final int a = 20;
```

```
    static final void call(){
        System.out.println("two");
    }

    static{
        System.out.println("one");
    }
}

public class Test{
    public static void main(String args[]){
        System.out.println(MyClass.a);
    }
}
```

A. one

B. one two

C. one two 20

D. 20

E. one 20

Answer: Option E

17.

What is the output for the below code ?

```
public class A{
    static{
        System.out.println("static");
    }
```

```
    {
        System.out.println("block");
    }

    public A(){
        System.out.println("A");
    }

    public static void main(String[] args){
        A a = new A();
    }
}
```

A. A block static

B. static block A

C. static A

D. A

E. None of these

Answer: Option B

18.

What will be the output?

```
public class Test{
    public static void main(String[] args){
        String value = "abc";
        changeValue(value);
        System.out.println(value);
    }
```

```
    public static void changeValue(String a){
        a = "xyz";
    }
}
```

A. abc

B. xyz

C. Compilation fails

D. Compilation clean but no output

E. None of these

Answer: Option A

19.

Name the keyword that makes a variable belong to a class, rather than being defined for each instance of the class.

A. static

B. final

C. abstract

D. native

E. volatile

Answer: Option A

20.

What will be the output for the below code?

```
public class Test{
    static{
        int a = 5;
    }
```

```
    public static void main(String[] args){
        System.out.println(a);
    }
}
```

A. Compile with error

B. 5

C. 0

D. Runtime Exception

E. None of these

Answer: Option A

21.

Determine output:

```
class A{
        {
                System.out.print("b1 ");
        }
        public A(){
                System.out.print("b2 ");
        }
}

class B extends A{
        static{
                System.out.print("r1 ");
        }
        public B(){
                System.out.print("r2 ");
```

```
        }
        {
                System.out.print("r3 ");
        }
        static{
                System.out.print("r4 ");
        }
}

public class Test extends B{
        public static void main(String[] args){
                System.out.print("pre ");
                new Test();
                System.out.println("post ");
        }
}
```

A. r1 r4 pre b1 b2 post

B. pre r1 r4 b1 b2 r2 r3 post

C. r1 r4 pre b1 b2 r3 r2 post

D. r1 r4 pre b1 b2 post r3 r2

E. Compilation fail

Answer: Option C

22.

What will be the output for the below code?

```
static public class Test{
```

```
    public static void main(String[] args){
        char c = 'a';

        switch(c){
            case 65 : System.out.println("one");break;
                case 'a': System.out.println("two");break;
                case 3  : System.out.println("three");
        }
    }
}
```

A. one

B. two

C. Compile error - char can't be permitted in switch statement.

D. Compile error - Illegal modifier for the class Test; only public, abstract & final are permitted.

E. None of these

Answer: Option D

23.

What will be the output after compiling and running following program code?

```
public class Test{
    static int a;
    public static void main(String[] args){
        System.out.println("one");
        call(1);
    }

    static void call(int a){
        this.a=10;
```

```
        System.out.println("two "+a);
    }
}
```

A. one two 1

B. one two 10

C. one two 0

D. Compile time error.

E. None of these

Answer: Option D

24.

What can directly access and change the value of the variable qusNo?

```
package com.mypackage;


public class Test{
   private int qusNo = 100;
}
```

A. Only the Test class.

B. Any class.

C. Any class in com.mypackage package.

D. Any class that extends Test.

E. None of these

Answer: Option A

25.

What will be the output after the following program is compiled and executed?

```
public class Test{
    public static void main(String args[]){
        int x = 10;
           x = myMethod(x--);
           System.out.print(x);
    }

    static int myMethod(final int x){
        return x--;
    }
}
```

A. The will compile successfully and display 9 as output.

B. The program will lead to compilation error.// final parameter not be assieng

C. The program will lead to runtime error.

D. The program will compile successfully and display 10 as output.

E. None of these

Answer: Option B

Oparators

1. **int x = 0, y = 0 , z = 0 ;**

x = (++x + y--) * z++;

What will be the value of "x" after execution ?

A. -2

B. -1

C. 0

D. 1

E. 2

Answer: Option C

2. **int ++a = 100 ;**

System.out.println(++a) ;

What will be the output of the above fraction of code ?

A. 100

B. Displays error as ++a is not enclosed in double quotes in println statement

C. Compiler displays error as ++a is not a valid identifier

D. None of these

Answer: Option C

3. **What is the output of the following program ?**

```
class Numbers{
    public static void main(String args[]){
        int a=20, b=10;
        if((a < b) && (b++ < 25)){
            System.out.println("This is any language logic");
        }
        System.out.println(b);
```

```
    }
}
```

A. 12

B. 11

C. 10

D. Compilation Error

Answer: Option C

4 . Select from among the following character escape code which is not available in Java.

A. t

B. r

C. a

D. \

E. v

Answer: Option C

5. What will be the output?

```
if(1 + 1 + 1 + 1 + 1 == 5){
    System.out.print("TRUE");
}
else{
    System.out.print("FLASE");
}
```

A. TRUE

B. FALSE

C. Compiler Error

D. None of these

Answer: Option A

6. Which of the following is the correct expression that evaluates to true if the number x is between 1 and 100 or the number is negative?

A. 1 < x < 100 || x < 0

B. ((x < 100) && (x > 1)) || (x < 0)

C. ((x < 100) && (x > 1)) && (x < 0)

D. (1 > x > 100) || (x < 0)

Answer: Option B

7. public class Test{

```
public static void main(String args[]){

    System.out.print(""=="");

    System.out.print(" ");

    System.out.print("A"=="A");

    System.out.print(" ");

    System.out.print("a==A");

}
```

}

A. "==" A"=="A a==A

B. true true false

C. true true a==A

D. Compilation Fails

E. None of the above

Answer: Option C

8. What will be the output?

```
public class Test{
    public static void main(String args[]){
        int a = 42;
        double b = 42.25;
        System.out.print((a%10)+" "+(b%10));
    }
}
```

A. 42 42.5

B. 2 2.5

C. 4.2 4.225

D. 2 4.225

E. Compilation Error

Answer: Option B

Solution:

The modulus operator, % returns the remainder of a division operation. It can be applied on floating-point types as well as integer types. (This differs from C/C++, in which the % can only be applied on integer types.)

9. What will be the output after compiling and running following code?

```
1. public class Test{
2.     public static void main(String... args){
3.         int x =5;
4.         x *= 3 + 7;
5.         System.out.println(x);
6.     }
7. }
```

A. 22

B. 50

C. 10

D. Compilation fails with an error at line 4

E. None of these

Answer: Option B

Solution:

x *= 3 + 7; is same as x = x * (3 +7) = 5 * (10) = 50 because expression on the right side is always placed inside parentheses.

10.

```
public class Test{
    public static void main(String... args){
        int a=5 , b=6, c=7;
        System.out.println("Value is "+ b + c);
        System.out.println(a + b + c);
        System.out.println("String " + (b+c));
    }
}
```

A. Value is 67 18 String 13

B. Value is 13 18 String 13

C. Value is 13 18 String

D. Compilation fails

E. None of these

Answer: Option A

Solution:

If the left hand operand is not a String then + operator treat as plus BUT if the left hand operand is a String then + perform String concatenation.

11. What will be the output for the below code ?

```
class A{
    public void printValue(){
        System.out.println("A");
    }
}
class B extends A{
    public void printValue(){
        System.out.println("B");
    }
}
```

```
1. public class Test{
2.     public static void main(String... args){
3.         A b = new B();
```

```
4.          newValue(b);
5.      }
6.      public static void newValue(A a){
7.          if(a instanceof B){
8.              ((B)a).printValue();
9.          }
10.     }
11. }
```

A. A

B. B

C. Compilation fails with an error at line 4

D. Compilation fails with an error at line 8

E. None of these

Answer: Option B

Solution:

Instanceof operator is used for object reference variables to check whether an object is of a particular type. In newValue(b); b is instance of B so it works properly.

```
12. public class Test{
static int i = 5;
public static void main(String... args){
    System.out.println(i++);
    System.out.println(i);
    System.out.println(++i);
    System.out.println(++i+i++);
}
```

}

A. 6 6 6 16

B. 6 7 6 16

C. 5 6 7 16

D. 5 6 6 16

E. None of these

Answer: Option C

Solution:

i++ : print value then increment (postfix - increment happens after the value of the variable is used) ++i : increment the print (prefix - increment happens before the value of the variable is used).

CHAPTER-Input OutPut

1.System class is defined in .....

A. java.util package

B. java.lang package

C. java.io package

D. java.awt package

E. None of these

Answer: Option B

2.

```
try{
    File f = new File("a.txt");
}catch(Exception e){
```

```
}catch(IOException io){
}
```

Is this code create new file name a.txt ?

A. true
B. false
C. Compilation Error
D. None of these
Answer: **Option C**
Solution(By Examveda Team)

IOException is unreachable to compiler because all exception are going to catch up by Exception block.

3.Which of these classes defined in java.io and used for file-handling are abstract?
A. InputStream
B. PrintStream
C. Reader
D. FileInputStream
E. FileWriter

A. Only A

B. Only C

C. A and C

D. B and D

E. A, B and E

Answer: **Option C**

4. **When comparing java.io.BufferedWriter and java.io.FileWriter, which capability exist as a method in only one of two ?**

A. closing the stream
B. flushing the stream
C. writting to the stream
D. writting a line separator to the stream
E. None of these
Answer: **Option D**

Solution(By Examveda Team)

A newLine() method is provided in BufferedWriter which is not in FileWriter.

1. **Determine output:**

```
public class Test{
    public static void main(String args[]){
        int i;
        for(i = 1; i < 6; i++){
            if(i > 3) continue ;
        }
        System.out.println(i);
    }
}
```

A. 2

B. 3

C. 4

D. 5

E. 6

Answer & Solution

Answer: Option E

2. **In java, ... can only test for equality, where as ..... can evaluate any type of the Boolean expression.**

A. switch, if

B. if, switch

C. if, break

D. continue, if

Answer: Option A

3. What will be the output of the following program?

```
public class Test{
    public static void main(String args[]){
        int i = 0, j = 5 ;
        for( ; (i < 3) && (j++ < 10) ; i++ ){
            System.out.print(" " + i + " " + j );
        }
        System.out.print(" " + i + " " + j );
    }
}
```

A. 0 6 1 7 2 8 3 8

B. 0 6 1 7 2 8 3 9

C. 0 6 1 5 2 5 3 5

D. Compilation Error

Answer: Option A

4. Consider the following program written in Java.

```
class Test{
    public static void main(String args[]){
        int x=7;
        if(x==2); // Note the semicolon
        System.out.println("NumberSeven");
        System.out.println("NotSeven");
    }
}
```

What would the output of the program be?

A. NumberSeven NotSeven

B. NumberSeven

C. NotSeven

D. Error

E. 7

Answer: Option A

5. **Determine output:**

```
public class Test{
    public static void main(String args[]){
        int i, j;
        for(i=1, j=0;i<10;i++) j += i;
        System.out.println(i);
    }
}
```

A. 10

B. 11

C. 9

D. 20

E. None of these

Answer: Option A

In giving a program for loop will be break when i=10. Since after for only one statement execute (j += i;) because brace is not mentioned and after that print statement will execute and print i=10

6. **What will be the output?**

```
public class Test{
    public static void main(String[] args){
```

```
        int x=10, y=0;
        if(x && y){
            System.out.print("TRUE");
        }
        else{
            System.out.print("FALSE");
        }
    }
}
```

A. FALSE

B. TRUE

C. Compilation Error

D. Runtime Error

Answer: Option C

bad operand types for binary operator '&&'
if(x **&&** y)

7. What will be the value of y after execution of switch statement?

```
public class Test{
    public static void main(String[] args){
        int x = 3, y = 4;
        switch(x + 3){
            case 6: y = 0;
            case 7: y = 1;
            default: y += 1;
        }
    }
}
```

A. 1

B. 2

C. 3

D. 4

E. 0

Answer: Option B

Initially 'x' = 3 and y =4
when switch statement execute **switch(x + 3) case 6** will be executed and initialize **y = 0** and after that **case 7** will be executed (because there is no **break** statement so it will execute all the case) and initialize **y = 1** and after that **default** case execute which add 1 in y and **y become 2**.

8. What is the printout of the following switch statement?

```
char ch = 'a';
switch (ch){
    case 'a':
    case 'A': System.out.print(ch); break;
    case 'b':
    case 'B': System.out.print(ch); break;
    case 'c':
    case 'C': System.out.print(ch); break;
    case 'd':
    case 'D': System.out.print(ch);
}
```

A. abcd

B. aa

C. a

D. ab

E. abc

Answer: Option C

9. How many times will the following code print "Welcome to Examveda"?

```
int count = 0;
do {
```

```
    System.out.println("Welcome to Examveda");
    count++;
} while (count < 10);
```

A. 8

B. 9

C. 10

D. 11

E. 0

Answer: Option C

10. Choose the correct statement in context of the following program code.

```
public class Test{
    public static void main(String[] args){
        double sum = 0;
        for(double d = 0; d < 10;){
            d += 0.1;
            sum += sum + d;
        }
    }
}
```

A. The program has a compile error because the adjustment is missing in the for loop.

B. The program has a compile error because the control variable in the for loop cannot be of the double type.

C. The program runs in an infinite loop because d<10 would always be true.

D. The program compiles and runs fine.

Answer: Option D

11. Which of the following for loops will be an infinite loop?

A. for(; ;)

B. for(i=0 ; i<1; i--)

C. for(i=0; ; i++)

D. All of the above

Answer: Option D

12. What will be the result of the following code?

```
public class Test{
    static public void main(String args[]){ //line 2
        int i, j;
        for(i=0; i<3; i++){
            for(j=1; j<4; j++){
                i%=j;
                                System.out.println(j);
                        }
             }
    }
}
```

A. 1 2 3 1

B. 1 2 3 2

C. Repeatedly print 1 2 3 and cause infinite loop.

D. Compilation fails because of line 2

E. None of these

Answer: Option C

13. What is the value of a[1] after the following code is executed?

```
int[] a = {0, 2, 4, 1, 3};
for(int i = 0; i < a.length; i++)
    a[i] = a[(a[i] + 3) % a.length];
```

A. 0

B. 1

C. 2

D. 3

E. 4

Answer: Option B

14. What will be the result of compiling and runnig the following code:

```
public class Test{
    public static void main(String... args) throws Exception{
        Integer i = 34;
        int l = 34;
        if(i.equals(l)){
            System.out.println("true");
        }else{
            System.out.println("false");
        }
    }
}
```

A. true

B. false

C. Compiler error

D. None of these

Answer: Option A

Equals() method for the integer wrappers will only return true if the two primitive types and the two values are equal.

15. What all gets printed when the following program is compiled and run.

```
public class Test{
    public static void main(String args[]){
        int i, j=1;
        i = (j>1)?2:1;
        switch(i){
            case 0: System.out.println(0); break;
            case 1: System.out.println(1);
            case 2: System.out.println(2); break;
            case 3: System.out.println(3); break;
        }
    }
}
```

A. 0

B. 1

C. 2

D. 3

E. 1 2

Answer: Option E

16. What all gets printed when the following program is compiled and run?

```
public class Test{
    public static void main(String args[]){
        int i=0, j=2;
        do{
            i=++i;
            j--;
        }while(j>0);
        System.out.println(i);
```

```
    }
}
```

A. 0

B. 1

C. 2

D. The program does not compile because of statement "i=++i;"

E. None of these

Answer: Option C

17. What will be the output?

```
public class Test{
    public static void main(String args[]){
        int i = 1;
        do{
            i--;
        }while(i > 2);
        System.out.println(i);
    }
}
```

A. 1

B. 2

C. -1

D. 0

E. None of these

Answer: Option D

18.

```
1. public class Test{
2.     public static void main(String [] args){
3.         int x = 0;
4.         // insert code here
5.         do{ } while(x++ < y);
6.         System.out.println(x);
7.     }
8. }
```

Which option, inserted at line 4, produces the output 12?

A. int y = x;

B. int y = 10;

C. int y = 11;

D. int y = 12;

E. None of the above will allow compilation to succeed.

Answer: Option C

x reaches the value of 11, at which point the while test fails.
x is then incremented (after the comparison test!), and the println() method runs.
Hence, choice A, B, D, E, and F are incorrect based on the above point.

19. What will be the result?

```
1. int i = 10;
2. while(i++ <= 10){
3.     i++;
4. }
5. System.out.print(i);
```

A. 10

B. 11

C. 12

D. 13

E. Line 5 will be never reached.

Answer: Option D

Initially i=10, when it reaches to while statement i++ <= 10 here i = 10 so condition become ture. For next use i become 11 and i++ statment will excuted and i become 12.
Then again its go to while loop and check i++ <=10 here i = 12 so condition becomes fail and i become 13.
Therefore when print statement will execute after while loop it Print 13

1. **What is output of the program?**

```
class Test{
    public void display(int x, double y){
        System.out.println(x+y);
    }
    public double display(int p, double q){
        return (p+q);
    }
    public static void main(String args[]){
        Test test = new Test();
        test.display(4, 5.0);
        System.out.println(test.display(4, 5.0));
    }
}
```

A. 9.0 9.0
B. 9 9
C. Compilation Error
D. None of these
Answer: Option C

2. **what is the result of the following piece of code:**

```
public class Person{
    public void talk(){
        System.out.print("I am a Person");
    }
}

public class Student extends Person{
    public void talk(){
```

```
            System.out.print("I am a Student");
        }
}

public class Test{
        public static void main(String args[]){
            Person p = new Student();
            p.talk();
        }
}
```

A. I am a Person
B. I am a Student
C. I am a Person I am a Student
D. I am a Student I am a Person

Answer: Option B

3. **What will be the output?**

```
interface A{
            public void method1();
}
class One implements A{
            public void method1(){
                        System.out.println("Class One method1");
            }
}
class Two extends One{
            public void method1(){
                        System.out.println("Class Two method1");
            }
}
public class Test extends Two{
            public static void main(String[] args){
                        A a = new Two();
                        a.method1();
            }
}
```

A. Class One method1
B. Class Two method1
C. Nothing will be printed
D. Compilation Error

Answer: Option B

What will be the output of the following program code?

```
class Rectangle{
    public int area(int length, int width){
        return  length*width;
    }
}
class Square extends Rectangle{
    public int area(long length, long width){
        return  (int) Math.pow(length, 2);
    }
}
public class Test{
    public static void main(String args[]){
        Square r = new Square();
        System.out.println(r.area(5 , 4));
    }
}
```

A. Will not compile.
B. Will compile and run printing out 20
C. Runtime error
D. Will compile and run printing out 25

Answer: Option B

4. What will be printed after executing following program code?

```
class Base{
        int value = 0;
    Base(){
        addValue();
    }
    void addValue(){
        value += 10;
    }
    int getValue(){
        return value;
    }
}
class Derived extends Base{
        Derived(){
```

```
                addValue();
        }
        void addValue(){
                value +=  20;
        }
}
public class Test{
        public static void main(String[] args){
                Base b = new Derived();
                System.out.println(b.getValue());
        }
}
```

A. 10
B. 20
C. 30
D. 40
E. None of these
Answer: Option D

5. **What will be the output?**

```
class A{
        static void method(){
                System.out.println("Class A method");
        }
}
class B extends A{
        static void method(){
                System.out.println("Class B method");
        }
}
public class Test{
        public static void main(String args[]){
                A a = new B();
                a.method();
        }
}
```

A. Class A method // static can't overrite
B. Class B method
C. Compilation Error

D. Runtime Error
E. None of these
Answer: Option A

7. _____ method cannot be overridden.
A. super
B. static
C. final
D. private
E. None of these
Answer: Option C

8. **What will be the output?**

```
class A{
    int i = 10;
    public void printValue(){
        System.out.print("Value-A");
    }
}

class B extends A{
    int i = 12;
    public void printValue(){
        System.out.print("Value-B");
    }
}

public class Test{
    public static void main(String args[]){
        A a = new B();
        a.printValue();
        System.out.print(a.i);
    }
}
```

A. Value-B 11
B. Value-B 10

C. Value-A 10
D. Value-A 11
E. None of these
Answer: Option B

9. What is the output for the below code?

```
public class Test{
    public static void printValue(int i, int j, int k){
        System.out.println("int");
    }

    public static void printValue(byte...b){
        System.out.println("long");
    }

    public static void main(String... args){
        byte b = 9;
        printValue(b,b,b);
    }
}
```

A. long
B. int
C. Compilation fails
D. Compilation clean but throws RuntimeException
E. None of these
Answer: Option B

10. Determine output:

```
class A{
    public void printValue(){
        System.out.println("Value-A");
    }
}
class B extends A{
    public void printNameB(){
        System.out.println("Name-B");
    }
}
class C extends A{
    public void printNameC(){
```

```
        System.out.println("Name-C");
    }
}

 public class Test{
public static void main (String[] args){
B b = new B();
C c = new C();
newPrint(b);
newPrint(c);
}
public static void newPrint(A a){
a.printValue();
}
}
```

A. Value-A Name-B
B. Value-A Value-A
C. Value-A Name-C
D. Name-B Name-C
E. None of these
Answer: Option B

11. What is the output for the below code ?

```
class A{
    private void printName(){
        System.out.println("Value-A");
    }
}
class B extends A{
    public void printName(){
        System.out.println("Name-B");
    }
}
public class Test{
    public static void main (String[] args){
        B b = new B();
        b.printName();
    }
}
```

A. Value-A

B. Name-B
C. Value-A Name-B
D. Compilation fails - private methods can't be override
E. None of these
Answer: Option B

12. What is the output for the below code ?

```
class A{
    public A(){
        System.out.println("A");
    }
    public A(int i){
        this();
        System.out.println(i);
    }
}
class B extends A{
    public B(){
        System.out.println("B");
    }
    public B(int i){
        this();
        System.out.println(i+3);
    }
}
public class Test{
    public static void main (String[] args){
        new B(5);
    }
}
```

A. A B 8
B. A 5 B 8
C. A B 5
D. B 8 A 5
E. None of these
Answer: Option A

The output of the following fraction of code is

1.public class Test{

```
    public static void main(String args[]){
            String s1 = new String("Hello");
                String s2 = new String("Hellow");
                System.out.println(s1 = s2);
        }
}
```

A. Hello

B. Hellow

C. Compilation error

D. Throws an exception

E. None of these

Answer: Option B

2. What will be the output of the following program code?

```
class LogicalCompare{
    public static void main(String args[]){
        String str1 = new String("OKAY");
        String str2 = new String(str1);
        System.out.println(str1 == str2);
    }
}
```

A. true

B. false

C. 0

D. 1

E. Displays error message

Answer: Option B

3. What will be the output of the following program?

```
public class Test{
    public static void main(String args[]){
                String s1 = "java";
                String s2 = "java";
                System.out.println(s1.equals(s2));
                System.out.println(s1 == s2);
    }
}
```

A. false true

B. false false

C. true false

D. true true

Answer: Option D

4. Determine output:

```
public class Test{
    public static void main(String args[]){
                String s1 = "SITHA";
                String s2 = "RAMA";
                System.out.println(s1.charAt(0) > s2.charAt(0));
    }
}
```

A. true

B. false

C. 0

D. Compilation error

E. Throws Exception

Answer: Option A

5. What could be output of the following fragment of code?

```
public class Test{
    public static void main(String args[]){
                String x = "hellow";
                int y = 9;
                System.out.println(x += y);
    }
}
```

A. Throws an exception as string and int are not compatible for addition

B. hellow9

C. 9hellow

D. Compilation error

E. None of these

Answer: Option B

6. toString() method is defined in

A. java.lang.String

B. java.lang.Object

C. java.lang.util

D. None of these

Answer: Option B

7. The String method compareTo() returns

A. true

B. false

C. an int value

D. 1

E. -1

Answer: Option C

8. What will be the output?

```
String str1 = "abcde";
System.out.println(str1.substring(1, 3));
```

A. abc

B. bc

C. bcd

D. abcd

E. None of these

Answer: Option B

9. What is the output of the following println statement?

```
String str1 = "Hellow";
System.out.println(str1.indexOf('t'));
```

A. true

B. false

C. 1

D. -1

E. 0

Answer: Option D

10. What will be the output of the following program?

```
public class Test{
```

```
    public static void main(String args[]){
                String str1 = "one";
                String str2 = "two";
                System.out.println(str1.concat(str2));
    }
}
```

A. one

B. two

C. onetwo

D. twoone

E. None of these

Answer: Option C

String str1 = "Kolkata".replace('k', 'a');

11. In the above statement, the effect on string Kolkata is

A. The first occurrence of k is replaced by a.

B. All characters k are replaced by a.

C. All characters a are replaced by k.

D. Displays error message

Answer: Option B

12. The class string belongs to ..... package.

A. java.awt

B. java.lang

C. java.applet

D. java.string

Answer: Option B

13. What will be the output?

```
public class Test{
      public static void main (String[] args){
                  String test = "a1b2c3";
            String[] tokens = test.split("\\d");
            for(String s: tokens)
                  System.out.print(s);
            }
}
```

A. abc

B. 123

C. Runtime exception thrown

D. Compilation error

Answer: Option A

14. How many objects will be created?

```
String a = new String("Examveda");
String b = new String("Examveda");// replace this time
String c = "Examveda";
String d = "Examveda";
```

A. 4

B. 3

C. 2

D. None of this

Answer: Option B

15. How many Constructor String class have?

A. 2

B. 7

C. 13

D. 11

E. None of this

Answer: Option C

16. What will be output?

```
String S1 = "S1 ="+ "123"+"456";
String S2 = "S2 ="+(123+456);
```

A. S1=123456, S2=579

B. S1=123456,S2=123456

C. S1=579,S2=579

D. None of This

Answer: Option A

17. What will be the output of the following program code?

```
public class Test{
    public static void main(String args[]){
        String s = "what";
        StringBuffer sb = new StringBuffer("what");
        System.out.print(sb.equals(s)+","+s.equals(sb));
    }
}
```

A. true,true

B. false,true

C. true,false

D. false,false

E. None of these

Answer: Option D

18. What will be the output?

```
1. public class Test{
2.     public static void main(String args[]){
3.         Object myObj = new String[]{"one", "two", "three"};
4.         {
5.                 for(String s : (String[])myObj)
6.                         System.out.print(s + ".");
7.             }
8.     }
9. }
```

A. one.two.three.

B. Compilation fails because of an error at line 3

C. Compilation fails because of an error at line 5

D. An exception is thrown at runtime.

E. None of these

Answer: Option A

19. Determine output:

```
public class Test{
    public static void main(String args[]){
        String str = null;
        if(str.length() == 0){
            System.out.print("1");
        }
        else if(str == null){
            System.out.print("2");
        }
        else{
```

```
            System.out.print("3");
        }
    }
}
```

A. Compilation fails.

B. "1" is printed.

C. "2" is printed.

D. "3" is printed.

E. An exception is thrown at runtime.

Answer: Option E

1. The class at the top of exception class hierarchy is .....

A. ArithmeticException

B. Throwable

C. Object

D. Exception

Answer: Option B

2. In which of the following package Exception class exist?

A. java.util

B. java.file

C. java.io

D. java.lang

E. java.net

Answer: Option D

3. Exception generated in try block is caught in ..... block.

A. catch

B. throw

C. throws

D. finally

Answer: Option A

4. Which keyword is used to explicitly throw an exception?

A. try

B. throwing

C. catch

D. throw

Answer: **Option D**

5. Which exception is thrown when divide by zero statement executes?

A. NumberFormatException

B. ArithmeticException

C. NullPointerException

D. None of these

Answer: **Option B**

6. Which keyword is used to specify the exception thrown by method?

A. catch

B. throws

C. finally

D. throw

Answer: **Option B**

7.

```
public class Test{
    public static void main(String args[]){
        try{
            int a = Integer.parseInt("four");
        }
    }
}
```

A. IllegalStateException

B. NumberFormatException

C. ClassCastException

D. ArrayIndexOutOfBoundsException

E. None of these

Answer: **Option B**

8.

```
public class Test{
      public static void main(String args[]){
            try{
                  int i;
                  return;
            }
            catch(Exception e){
                  System.out.print("inCatchBlock");
            }
            finally{
                  System.out.println("inFinallyBlock");
            }
      }
}
```

A. inCatchBlock

B. inCatchBlock inFinallyBlock

C. inFinallyBlock

D. The program will

Answer: **Option C**

9.

```
 public class Test{
    public static void main(String args[]){
        try{
            String arr[] = new String[10];
            arr = null;
            arr[0] = "one";
            System.out.print(arr[0]);
        }catch(Exception ex){
            System.out.print("exception");
        }catch(NullPointerException nex){
            System.out.print("null pointer exception");
        }
```

```
    }
}
```

A. "one" is printed.

B. "exception" is printed.

C. "null pointer exception" is printed.

D. Compilation fails saying NullPointerException has already been caught.

E. None of these

Answer: Option D

10.

```
try{
    File f = new File("a.txt");
}catch(Exception e){
}catch(IOException io){
}
```

Is this code create new file name a.txt ?

A. true

B. false

C. Compilation Error

D. None of these

Answer: Option C

11. Which of the following blocks execute compulsorily whether exception is caught or not.

A. finally

B. catch

C. throws

D. throw

Answer: Option A

12. What happen in case of multiple catch blocks?

A. Either super or subclass can be caught first.

B. The superclass exception must be caught first.

C. The superclass exception cannot caught first.

D. None of these

Answer: Option C

13. Which exception is thrown when an array element is accessed beyond the array size?

A. ArrayElementOutOfBounds

B. ArrayIndexOutOfBoundsException

C. ArrayIndexOutOfBounds

D. None of these

Answer: Option B

15. Given the following piece of code:

```
class SalaryCalculationException extends Exception{}
class Person{
	public void calculateSalary() throws SalaryCalculationException{
		//...
		throw new SalaryCalculationException();
		//...
	}
}
class Company{
	public void paySalaries(){
		new Person().calculateSalary();
	}
}
```

Which of the following statements is correct?
1. This code will compile without any problems.
2. This code will compile if in method paySalaries() we return a boolean in stead of void.
3. This code will compile if we add a try-catch block in paySalaries().

4. This code will compile if we add throws SalaryCalculationException in the signature of method paySalaries().

A. 1 and 4

B. 2 and 3

C. 2 and 4

D. 3 and 4

E. 1 and 2

Answer: Option D

16. What will be the output of the following piece of code:

```
class Person{
   public void talk() {}
}
public class Test{
   public static void main(String args[]){
      Person p = null;
      try{
            p.talk();
      }
      catch(NullPointerException e){
            System.out.print("There is a NullPointerException. ");
      }
      catch(Exception e){
            System.out.print("There is an Exception. ");
      }
      System.out.print("Everything went fine. ");
   }
}
```

A. There is a NullPointerException. Everything went fine.

B. There is a NullPointerException.

C. There is a NullPointerException. There is an Exception.

D. This code will not compile, because in Java there are no pointers.

Answer: Option A

17. Determine output

```
public class Test{
    public static void main(String args[]){
        int i;
        try{
            i = calculate();
            System.out.println(i);
        }catch(Exception e){
            System.out.println("Error occured");
        }
    }

    static int calculate(){
        return (7/2);
    }
}
```

A. 3

B. 3.5

C. Error occured

D. Compilation Error

E. None of these

Answer: Option A

19. What will be the output? l be the output?

```
class MyClass{
    public String test(){
        try{
            System.out.print("One");
            return "";
        }
        finally{
```

```
            System.out.print("Two");
        }
    }
}

public class Test{
    public static void main(String args[]){
        MyClass m =  new MyClass();
        m.test();
    }
}
```

A. One

B. Two

C. One Two

D. Compilation Error

E. None of these

Answer: **Option C**

20. What will be the result after compiling this code?

```
class SuperClass{
    public int doIt(String str, Integer... data)throws Exception{
        String signature = "(String, Integer[])";
        System.out.println(str + " " + signature);
        return 1;
    }
}

public class Test extends SuperClass{
    public int doIt(String str, Integer... data){
        String signature = "(String, Integer[])";
        System.out.println("Overridden: " + str + " " +signature);
        return 0;
    }

    public static void main(String... args){
        SuperClass sb = new Test();
```

```
        sb.doIt("hello", 3);
    }
}
```

A. Overridden: hello (String, Integer[])

B. hello (String, Integer[])

C. Compilation fails

D. None of these

Answer: **Option C**

21. What is the output for the below code ?

```
import java.io.FileNotFoundException;
class A{
    public void printName() throws FileNotFoundException{
        System.out.println("Value-A");
    }
}
class B extends A{
    public void printName() throws NullPointerException{
        System.out.println("Name-B");
    }
}
public class Test{
    public static void main (String[] args) throws Exception{
        A a = new B();
        a.printName();
    }
}
```

A. Value-A

B. Compilation fails-Exception NullPointerException is not compatible with throws clause in A.printName()

C. Name-B

D. Compilation succeed but no output

E. None of these

Answer: **Option C**

24. What will be the result of executing the following code?

```
public class Test{
    public void divide(int a, int b){
        try{
                int c = a / b;
            }catch(Exception e){
                System.out.print("Exception ");
            }finally{
                System.out.println("Finally");
    }

    public static void main(String args[]){
        Test t = new Test();
        t.divide(0,3);
    }
}
```

A. Prints out: Exception

B. Prints out: Exception Finally

C. Compile with error

D. Prints out: Finally

E. None of these

Answer: **Option D**

25. Which of the below statement is/are true about Error?

A. An Error is a subclass of Throwable.
B. An Error is a subclass of Exception.
C. Error indicates serious problems that a reasonable application should not try to catch.
D. An Error is a subclass of IOException.

A. A and D

B. A and B

C. A and C

D. B and C

E. B and D

Answer: **Option B**

27. Given the code. What is the result when this program is executed

```
public class Test{
    static int x[];

    static{
        x[0] = 1;
    }

    public static void main(String args[]){
    }
}
```

A. ArrayIndexOutOfBoundsException is thrown

B. ExceptionInInitializerError is thrown

C. IllegalStateException is thrown

D. StackOverflowException is thrown

E. None of these

Answer: **Option B**

28. What will be the result if NullPointerException occurs at line 2?

```
1. try{
2.     //some code goes here
3. }
4. catch(NullPointerException ne){
5.     System.out.print("1 ");
```

```
6.  }
7.  catch(RuntimeException re){
8.       System.out.print("2 ");
9.  }
10. finally{
11.      System.out.print("3");
12. }
```

A. 1

B. 3

C. 2 3

D. 1 3

E. 1 2 3

Answer: **Option D**

29. What will be the result after the class Test execution?

```
class A{
    public void doA(){
        B b = new B();
        b.dobB();
        System.out.print("doA");
    }
}
class B{
    public void dobB(){
        C c = new C();
        c.doC();
        System.out.print("doB");
    }
}
class C{
    public void doC(){
        if(true)
        throw new NullPointerException();
        System.out.print("doC");
    }
}
```

```
public class Test{
    public static void main(String args[]){
        try{
            A a = new A();
            a.doA();
        }catch(Exception ex){
            System.out.print("error");
        }
    }
}
```

A. "doCdoBdoA" is printed

B. "doAdoBdoC" is printed

C. "doBdoAerror" is printed

D. "error" is printed

E. nothing is printed

Answer: Option D