

Question set 1

Q1.

Which of the following are incorrect forms of StringBuffer class constructor?

- a) StringBuffer()
- b) StringBuffer(int size)
- c) StringBuffer(String str)
- d) StringBuffer(int size , String str)

Answers : d)



Q2.

```
class Test {  
    public void abc() {  
        System.out.println("Hello");  
    }  
}  
  
public class Derived extends Test {  
    public void abc() {  
        System.out.println("Hi");  
    }  
}  
  
public static void main(String[] args) {  
    Derived obj = new Test();  
    obj.abc();  
}
```

What is the output of the given program:

- a) Compilation error
- b) Runtime error
- c) Hi
- d) Hello

Answers : a)



Q3.

```
abstract class Bank {  
    private abstract void withdraw(); // Line 1  
    abstract void deposit();  
    public void balance(){} //Line 2  
}  
  
class Office extends Bank{ // Line 3  
    void deposit() { // Line 4  
        // TODO Auto-generated method stub  
    }  
}
```

What will be the output of given Java code segment :

- a) Error in Line 1
- b) Error in Line 2
- c) Error in Line 4
- d) None of the above

Answers : a)



Q4.

```
class Base {  
    public final void show() {  
        System.out.println("Base::show() called");  
    }  
}
```

What will be the output of the given java code segment ?

- a) Derived::show() called
- b) Base::show() called
- c) Compiler Error

d) Exception

Answers : b c

```
}  
class Derived extends Base {  
    public void show() {  
        System.out.println("Derived::show() called");  
    }  
}  
}  
public class Main {  
    public static void main(String[] args) {  
        Base b = new Derived();  
        b.show();  
    }  
}
```

Q5.

Which is/are the characteristic(s) of Object Oriented Programming?

- a) Swing
- b) Abstraction
- c) Encapsulation
- d) handling

Answers : b, c, d

X

Q6.

```
Class circle {  
int radius;  
  
void getRadius () {  
    }  
}
```

For the code segment, which of the following(s) is/are violating the guidelines for the good programming practice?

- a) Class name
- b) Method name
- c) Variable name
- d) All of the above
- e) No violation of guidelines

Answers : a)

X

Q7.

Which of the following(s) is/are NOT true in case of array in Java?

- a) can not be accessed by the methods of different class
- b) do not need new operator to define
- c) can be declared only for reference type
- d) stored using activation record

Answers : b, c

X

Q8.

```
int f () { . . . }
```

Consider the above method definition in Java. Which of the following(s) can be an example of method overriding

- a) int fun (int x) { . . . }
- b) int fun () { . . . }
- c) void fun () { . . . }
- d) int fun (int x, int y) { . . . }

Declaring int f () { . . . }  
in a subclass would cause  
method overriding.

Answers : Signature of the method will remain same

X

Q9.

Operator overloading in oop means :

- a) adding new functionalities to the existing operators when they are applied for user-defined type variable
- b) adding new functionalities to the existing operators when they are applied for primitive type variable
- c) using a new operator
- d) defining an abstract method as operator

Answers : b)

X

**Q10.**

When the body of a method is associated to its name at compile time, we call it as

- a) Dynamic binding
- b) Late binding
- c) Early binding
- d) No binding

Answer : a, c

X

**Q11.**

FOSS in software community is

- a) Free and Open System Software
- b) Free and Software System
- c) Free and Open Source Software
- d) Free and Software Symposium

Answer : c)

|

**Q12.**

Which package in Java provides support for JButton

- a) Java.lang
- b) Java.net
- c) Java.swing
- d) javax.swing

Answer : d)

|

**Q13.**

As per UML class diagram notation, a public member of a class can be represented by prefixing sign

- a) Hash
- b) Plus
- c) Minus
- d) Star

Answer : b)

|

**Q14.**

Which of the following(s) is/are correct for object oriented programming paradigm?

- a) Instance variables store object specific information
- b) Friend class of a class can access private, protected and public members of the class
- c) Friend class of a class can access only protected and public members of the class
- d) Class specific information can be handled using static members
- e) Final variable cannot be used to declare constants

Answer : acd

X

**Q15.**

Consider the following Java code:

```
interface Base {
    void f();
    int f2(int i);
    double f3(int d);
}
```

Which of the following code segments is/are permissible with the above code?

- a) interface Base2 implements Base { }
- b) class Class2 implements Base { public void f() {} }
- c) abstract class Class2 implements Base { }
- d) abstract class Class2 implements Base{ public void f(){ } }
- e) abstract class Class2 implements Base { protected void f(){} }

Answer : a,b,c,d.

X

**Q16.**

Consider the following Java code segment:

```
public class MyRunnable implements Runnable {
    public void run() {
```

Which of the following(s) will start a new thread?

- a) new Thread(new MyRunnable()).start();
- b) new Thread(MyRunnable()).start();
- c) new Thread(new MyRunnable()).run();
- d) new Thread(MyRunnable()).run();

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

Answer : a)



Q17.

```
public int a []
static int [ ] a
public [ ] int a
private int a [3]
private int [3] a []
public final int [ ] a
```

Which three form part of correct array declarations?

- a) 1, 3, 4
- b) 2, 4, 5
- c) 1, 2, 6
- d) 2, 5, 6

Answer : c)



Q18.

```
interface Car {
    int basePrice=1000;
}
public class Main implements Car {
    void changePrice() {
        basePrice = 2000;
        System.out.print(basePrice);
    }
    public static void main(String[] args) {
        new InterfaceTest2().changePrice();
    }
}
```

What is the output of the given Java program with an Interface?

- a) 1000
- b) 2000
- c) Compiler error
- d) None of the above

Answer : c)



Q19.

```
abstract class MathLibrary {
    static final float PI = 3.1415f;
}
public class Main {
    public static void main(String[] args) {
        System.out.println(MathLibrary.PI);
    }
}
```

What is the output of the given Java program with an abstract class?

- a) No output
- b) Compiler error
- c) 3.1415
- d) None of the above

Answer : c)



Q20.

```
class Amplifier {
    void addGain(int a) {
        System.out.println((a + 10)+"dB");
    }
}
class DigitalAmplifier extends Amplifier {
    void addGain(int a) {
        super.addGain(a+5);
    }
}
public class Main {
    public static void main(String[] args) {
        DigitalAmplifier da = new DigitalAmplifier();
        da.addGain(12);
    }
}
```

What is the output of the given Java program with method overriding?

- a) 22dB
- b) 27dB
- c) 22dB 27dB
- d) Compiler error

Answer : b)



Q21.

```
public class Main {
    int info() {
```

What is the output of the given Java program?

- a) PLANE
- b) AIRPORT

```

        System.out.println("PLANE");
        return 0;
    }

    void info() {
        System.out.println("AIRPORT");
    }

    public static void main(String[] args) {
        Main m = new Main();
        int a = m.info();
    }
}

```

- c) Compiler error  
d) None of the above

**Answer : c)**

**Q22.**

```

public class First_C {
    public void myMethod() {
        System.out.println("Method");
    }

    {
        System.out.println("Instance Block");
    }

    public void First_C() {
        System.out.println("Constructor");
    }

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

    public static void main(String[] args) {
        First_C c = new First_C();
        c.First_C();
        c.myMethod();
    }
}

```

What should be the execution order, if a class has a method, static block, instance block, and constructor, as shown below?

- a) Instance block, method, static block, and constructor
- b) Method, constructor, instance block, and static block
- c) Static block, method, instance block, and constructor
- d) Static block, instance block, constructor, and method

**Answer : c)**

✗

**Q23.**

```

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

```

Find the output of the given program.

- a) 120 200 016
- b) 120 200 14
- c) 120 200 16
- d) None

**Answer : b)**

✓

**Q24.**

```

import java.io.*;
class Chararrayinput {
    public static void main(String[] args) {
        String obj = "abcdefghijkl";
        int length = obj.length();
        char c[] = new char[length];
        obj.getChars(0, length, c, 0);
        CharArrayReader input1 = new CharArrayReader(c);
        CharArrayReader input2 = new CharArrayReader(c, 1, 4);
        int i;
        int j;
        try {
            while ((i = input1.read()) == (j = input2.read())) {
                System.out.print((char)i);
            }
        }
    }
}

```

```
        }
    } catch (IOException e) {
        e.printStackTrace();
    }
}
```

What will be the output of the above Java program?

- a) abc
- b) abcd
- c) abcde
- d) None of the mentioned

Answer : d)

Q25.

```
class A {
    int i;
    void display() {
        System.out.println(i);
    }
}
class B extends A {
    int j;
    void display() {
        System.out.println(j);
    }
}
class inheritance_demo {
    public static void main(String args[]) {
        B obj = new B();
        obj.i=1;
        obj.j=2;
        obj.display();
    }
}
```

What will be the output of the given Java program?

- a) 0
- b) 1
- c) 2
- d) Compilation Error

Answer : c)

Q26.

```
class Bus {
    void seatingCapacity() {
        System.out.println("Superclass Seats=32");
    }
}
class ElectricBus extends Bus {
    void seatingCapacity() {
        System.out.println("Subclass Seats=20");
    }
    void showInfo() {
        seatingCapacity();
        this.seatingCapacity();
    }
}
public class MethodOverriding1 {
    public static void main(String[] args) {
        ElectricBus eb = new ElectricBus();
        eb.showInfo();
    }
}
```

What is the output of the given Java program with Method Overriding?

- a) Subclass Seats=20  
Superclass Seats=32
- b) Superclass Seats=32  
Subclass Seats=20
- c) Superclass Seats=32  
Superclass Seats=32
- d) Subclass Seats=20  
Subclass Seats=20

Answer : d)

**Q27.**

Choose a correct implementation of an Abstract class in the below Java code?

- a) abstract class ClassA {}
- b) abstract class ClassB {
  - abstract void method();
}
- c) abstract class ClassC {
  - void method() {
    - System.out.print("Hello Abstract Class");
}
}
- d) All of the above

Answers : d

**Q28.**

```
abstract class Coffee {
    Coffee() {
        System.out.println("Inside Constructor of Coffee..");
    }
}

class ColdCoffee extends Coffee {
    ColdCoffee() {
        System.out.println("Inside Constructor of ColdCoffee..");
    }
}

public class AbstractClassTesting {
    public static void main(String[] args) {
        ColdCoffee cf = new ColdCoffee();
    }
}
```

What is the output of the above Java program?

- a) Compiler error
- b) Inside Constructor of Coffee..  
Inside Constructor of ColdCoffee..
- c) Inside Constructor of ColdCoffee..
- d) Inside Constructor of Coffee..

Answers : b)

**Q29.**

```
class Sweet {
    void price() {
        System.out.print("Sweet=$10 ");
    }
}

class Sugar extends Sweet {
    void price() {
        super.price();
        System.out.print("Sugar=$20");
    }
}

public class JavaInheritance1 {
    public static void main(String[] args) {
        Sugar su = new Sugar();
        su.price();
    }
}
```

What is the output of the given Java program?

- a) Sweet=\$10 Sugar=\$20
- b) Sweet=\$10 Sugar=\$10
- c) Sweet=\$20 Sugar=\$20
- d) Compiler error

Answers : a)

## Question set 2

Q1.

```
public class Foo {  
    public static void main(String[] args) {  
        try {  
            return;  
        }  
        finally {  
            System.out.println("Finally");  
        }  
    }  
}
```

What will be the output of the given program?

- a) Finally
- b) Compilation fails
- c) The code runs with no output
- d) An exception is thrown at runtime.

Answers : c)



Q2.

```
Class Hello {  
    public static void main(String args[]) {  
        try {  
            System.out.println("Hello" + " " + 1/0);  
        }  
        Catch(ArithmaticException e) {  
            System.out.println("IIIT Guwahati");  
        }  
    }  
}
```

Predict the correct output of the given code segment :

- a) Hello
- b) Hello IIIT Guwahati
- c) IIIT Guwahati
- d) Does not compile

Answers : c)

"Hello" + " " + 1/0 will be a complete string "Hello Yo".



Q3.

```
Class Hello {  
    public static void main(String args[]) {  
        try {  
            int a=0;  
            int b=5/a;  
            System.out.print("Hello" + " " + 1/0);  
        }  
        catch(ArithmaticException e){  
            System.out.print("IIIT");  
        }  
        finally {  
            System.out.print("Guwahati");  
        }  
    }  
}
```

What will be the output of given Java code segment :

- a) IIIT
- b) IIIT Guwahati
- c) Guwahati
- d) Hello IIIT Guwahati

Answers : b)



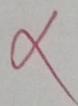
Q4.

```
public class Main {  
    public static void main(String[] args) {  
        System.out.println("I am going to forest");  
        throw new ClassNotFoundException();  
    }  
}
```

What is the output of the Java code with exceptions?

- a) I am going to forest
- b) Compiler error
- c) No output
- d) None of the above

Answers : d)



Q5.

```
public class Main {  
    public static void main(String[] args) throws  
    Exception {  
        System.out.println("Good Morning  
        Cortana");  
    }  
}
```

What is the output of the given Java code with exception handling keywords?

- a) Good Morning Cortana
- b) Good Morning Cortana  
Exception in thread "main"  
java.lang.NoSuchMethodException

```
        throw new NoSuchMethodException();  
    }  
}
```

at Main.main(Main.java:4)

- c) Compiler error
- d) None of the above

Answers : b)

Q6.

```
public class Main {  
    public static void main(String[] args) {  
        for(String str: args) {  
            System.out.println(str);  
        }  
        if(args.length == 0)  
            System.out.println("No arguments  
passed");  
    }  
}
```

What is the output of the given Java program with command-line arguments?

- a) car brake horn
- b) car  
brake  
horn
- c) No arguments passed
- d) Compiler error

Answers : b)

Command-Line:

c:\folder>java Main car brake horn

Q7.

Which exception is thrown when java is out of memory?

- a) Memory Error
- b) Out Of Memory Error
- c) Memory Out Of Bounds Exception
- d) Memory Full Exception

Answers : b)

Q8.

```
class Exception_handling {  
    public static void main(String args[]) {  
        try {  
            System.out.print("A");  
            throw new NullPointerException ("Hello");  
        }  
        catch(ArithmaticException e) {  
            System.out.print("B");  
        }  
    }  
}
```

What will be the output of the given Java code?

- a) A
- b) B
- c) Hello
- d) Runtime Exception

Answers : a), d)

Q9.

```
public class ExceptionTest1 {  
    public static void main(String[] args) {  
        try {  
            int a=9, b=0;  
            int c = a/b;  
            System.out.println("Exception occurred.");  
        } catch(Exception e) {  
            System.out.println("Catching an Exception.");  
        }  
    }  
}
```

What is the output of the given Java code with Exceptions?

- a) Exception occurred.  
Catching an Exception.
- b) Exception occurred.  
c) Catching an Exception.
- d) No output

Answers : c)

Q10.

```
public class Test {  
    public static void main(String[] args) {  
        Object obj = new Integer(3);  
        String str = (String) obj;
```

Consider the Java code segment and choose the correct output(s).

- a) ArrayIndexOutOfBoundsException
- b) ClassCastException
- c) IllegalArgumentException

```
        System.out.println(str);  
    }  
}
```

- d) None of the above

Answers : b)

Q11.

```
public class Test {  
    public static void main(String[] args) {  
        int x = 0;  
        int y = 1;  
        int z = y / x;  
    }  
}
```

Consider the Java code segment and choose the correct output(s).

- a) Compiler Error
- b) Compiles and runs fine
- c) Compiles fine but throws ArithmeticException exception
- d) None of above

Answers : c)

Q12.

```
public class Laptop {  
    public void start() {  
        try {  
            System.out.print("Starting up ");  
            throw new Exception();  
        } catch (Exception e) {  
            System.out.print("Problem ");  
            System.exit(0);  
        } finally {  
            System.out.print("Shutting down ");  
        }  
    }  
  
    public static void main(String[] args) {  
        new Laptop().start();  
    }  
}
```

Consider the Java code segment and choose the correct output(s).

- a) Starting up
- b) Starting up Problem
- c) Starting up Problem Shutting down
- d) Starting up Shutting down

Answers : b)

Q13.

Which of the following(s) streams are automatically gets created in Java?

- a) System.out
- b) System.in
- c) System.default
- d) System.err
- e) System.fin

Answer : c,d,e

Q14.

Which of the following(s) is/are true in case of Java programming language?

- a) Static method cannot access the private variables of the same class
- b) Static method cannot access the non-static variables of the same class
- c) Static variable can only be accessed by a static method
- d) All of the above
- e) None of first three options

Answer : a,b

Q15.

In order to handle exception in Java, which of the following package(s) need to be imported?

- a) java.awt
- b) java.io
- c) java.exception
- d) none of the above

Answer : d)

**Q16.**

During the execution of a Java program, suddenly the execution stopped and following lines are displayed on output screen. Which of the following option(s) is/are true?

Exception in thread "main" java.lang.ArithmaticException: / by zero  
at Function.main(Function.java:99)

- Divide by zero exception occurred at line number 99 of a java program
- Divide by zero exception occurred at line number 99 of a java program inside a method named Function
- We are executing java program Function.java
- Most likely the exception is not handled properly
- The total lines of code in the java program is 99

Answer : ~~b,e~~ a,c,d.

|

**Q17.**

Which of the following(s) is/are true in case of exception in Java?

- Unchecked exceptions are bound to be handled
- Checked exceptions are bound to be handled
- ObjectStreamException is a type of unchecked exception
- MalformedURLException is a type of checked exception

Answer : ~~a,b~~ a,c

X

**Q18.**

```
public static void main(String[] args) {
    int a, b, d, noOfUser=0;
    double totalArea = a+b*Math.PI*2;
    try {
        noOfUser++;
        double bandwidth = totalArea / noOfUser;
        int x = 1;
        int y = 5 / x;
    } catch (Exception e) {
        System.out.println("Exception");
    } catch (ArithmaticException ae) {
        System.out.println(" Arithmetic Exception");
    }
    System.out.println("No exception");
}
```

Which among the following(s) is/are true if we execute the given java code segment?

- Code throws an exception
- Code produces some compilation errors
- Code displays No exception
- Code executes and it does not produce any output

Answer : b)

|

**Q19.**

```
public static void main(String[] args) {
    int a, b, d, noOfUser=0;
    double totalArea = a+b*Math.PI*2;
    try {
        double bandwidth = totalArea / noOfUser;
    } catch (Exception e) {
        System.out.println("Exception");
    } catch (ArithmaticException ae) {
        System.out.println(" Arithmetic Exception");
    }
    System.out.println("No exception");
}
```

Which among the following(s) is/are true if we execute the given java code segment?

- Code throws an exception
- Code produces some compilation errors
- Code displays No exception
- Code executes and it does not produce any output

Answer : b)

|

**Q20.**

```
public class EsQ19 {
    public static void main(String [] args) {
        try {
```

Which among the following(s) is/are true if we execute the given java code?

- Produces output ABCDE
- Produces output ABDE

```

int x = 5;
int y = x/0;
f();
System.out.print("A");
} catch (RuntimeException ex) {
    System.out.print("B");
} catch (Exception ex1) {
    System.out.print("C");
}
finally {
    System.out.print("D");
}
System.out.print("E");
}
public static void f() {
    int x = 5;
    int y = x/0;
    System.out.print("G");
}
}

```

- c) Produces output BDE
- d) Produces output CDE
- e) Execution terminates abruptly without producing any output

Answer : d)

*(Handwritten mark)*

**Q21.**

```

public class EsQ20 {
    public static void main(String [] args) {
        try {
            f();
            System.out.print("A");
        } catch (RuntimeException ex) {
            System.out.print("B");
        } catch (Exception ex1) {
            System.out.print("C");
        }
        finally {
            System.out.print("D");
        }
        System.out.print("E");
    }
    public static void f() {
        System.out.print("G");
        int x = 5;
        int y = x/0;
        throw new RuntimeException();
    }
}

```

Which among the following(s) is/are true if we execute the given java code?

- a) Produces output AGBCDE
- b) Produces output ABDE
- c) Produces output GBDE
- d) Produces output BDE
- e) Execution terminates abruptly without producing any output

Answer :

*G C D E*

*(Handwritten mark)*

**Q22.**

```

public class EsQ21 {
    public static void throwit () {
        System.out.print("throwit ");
        throw new RuntimeException();
    }
    public static void main(String [] args) {
        try {
            System.out.print("hello ");
            throwit();
        } catch (Exception re ) {
            System.out.print("caught ");
        }
    }
}

```

Which among the following(s) is/are true if we execute the given java code?

- a) hello throwit caught
- b) Compilation fails
- c) hello throwit RuntimeException caught after
- d) hello throwit caught finally after
- e) hello throwit finally after

Answers : *ao d)*

*(Handwritten mark)*

```

finally {
    System.out.print("finally ");
}
System.out.println("after ");
}
}

```

**Q23.**

```

public class ESQ22 {
    public static void throwit () {
        System.out.print("throwit ");
        throw new RuntimeException();
    }
    public static void main(String [] args) {
        try {
            System.out.print("hello ");
            throwit();
        } catch (Exception e ) {
            System.out.print("caught ");
        } catch (RuntimeException re ) {
            System.out.print("caught properly ");
        }
        finally {
            System.out.print("finally ");
        }
    }
    System.out.println("after ");
}
}

```

Which among the following(s) is/are true if we execute the given java code?

- a) hello throwit caught
- b) Compilation error
- c) hello throwit caught finally after
- d) hello throwit caught properly finally after
- e) hello throwit finally after

**Answers :** b)

**Q24.**

```

public class EndSemQ {
    public static void main(String[] args) {
        String a = args[0];
        String b = args[1];
        String c = args[2];
        String d = args[3];
        System.out.println("I love "+c+" "+d+" "+ a);
    }
}

```

Consider the Java code and select the correct option that will display "I love my college IIITG" when the program is executed from command prompt.

- a) EndSemQ IIITG is my college
- b) EndSemQ my college is IIITG
- c) EndSemQ I love my college
- d) EndSemQ I love my IIITG
- e) EndSemQ I love my college IIITG

**Answers :** a)

**Q25.**

```

class InetAddressTest {
    public static void main(String args[]) throws
java.net.UnknownHostException {
        java.net.InetAddress address =
java.net.InetAddress.getByName("google.com");
        System.out.println(address);
    }
}

```

Consider the Java code. Which package(s) need to import to make the code running?

- a) java.io
- b) java.net
- c) java.io and java.net
- d) No packages need to be imported.

**Answers :** b)

### Question set 3

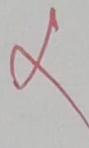
Q1.

```
import java.util.*;
public class Test {
    public static void main(String[] args) {
        TreeSet<Integer> ts = new TreeSet<Integer>();
        ts.add(100);
        ts.add(0);
        ts.add(150);
        ts.add(50);
        ts.add(125);
        ts.add(125);
        System.out.println(ts);
    }
}
```

What is the output of the program :

- a) [150, 125, 100, 50, 0]
- b) [0, 50, 100, 125, 150]
- c) [100, 0, 150, 50, 125]
- d) [100, 0, 150, 50, 125, 125]

Answers : b)



Q2.

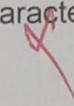
```
import java.io.*;
class filesinputoutput {
    public static void main(String args[]) {
        InputStream obj = new
        FileInputStream("inputoutput.java");
        System.out.print(obj.available());
    }
}
```

What will be the output of the given Java program?

Note: inputoutput.java is stored in the disk.

- a) true
- b) false
- c) prints number of bytes in file
- d) prints number of characters in the file

Answers : a)



Q3.

```
class output {
    public static void main(String args[]) {
        StringBuffer s1 = new StringBuffer("Quiz");
        StringBuffer s2 = s1.reverse();
        System.out.println(s2);
    }
}
```

What is the output of the given code :

- a) QuiziuQ
- b) ziuQQuiz
- c) Quiz
- d) ziuQ

Answers : d)



Q4.

```
import java.util.Stack;
public class Data_Structures {
    public static void main(String args[]) {
        Stack<Integer> iiitg = new Stack<Integer>();
        iiitg.add(100);
        iiitg.push(50);
        System.out.println(iiitg.pop() + " " + iiitg.pop());
    }
}
```

What will be the output of the given Java code segment :

- a) 100 50
- b) 50 100
- c) 0 0
- d) Does not print anything

Answers : b)



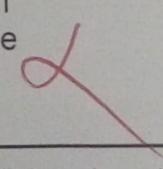
Q5.

```
int Integer = 24;
char String = 'I';
System.out.println(Integer);
System.out.println(String);
```

What will be the output of the java code segment:

- a) Compiler Error
- b) 24 I
- c) Throws Exception
- d) None of the above

Answers : a)



Q6.

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

What will be the output of the given java code segment :

- a) 50

```
final int i;  
i = 50;  
l = 20  
System.out.println(i);  
}  
}
```

- b) 20  
c) Compiler Error  
d) Garbage Value

Answers : c)

Q7.

The method that is used to start a thread execution in Java is -

- a) run()  
b) init()  
c) start()  
d) begin()

Answer : c)

Q8.

Which of the followings are valid constructors of Thread class in Java?

1. Thread(ThreadGroup g, Runnable r)
2. Thread(ThreadGroup g, String n)
3. Thread(Runnable r, String n)
4. Thread(String n, ThreadGroup g)
5. Thread(String n)

- a) 1, 2, 3, 4  
b) 2, 3, 4, 5  
c) 1, 2, 3, 5  
d) 1, 2, 4, 5  
e) All of the above

Answer : c)

Which are the methods of the Object class in Java?

notify();  
yield();  
finalize();  
synchronized();  
notifyAll();  
interrupt();  
wait(long msecs);  
sleep(long msecs);  
clone();

- a) 1, 3, 5, 9  
b) 1, 5, 7, 9  
c) 1, 4, 7, 9  
d) 1, 3, 5, 7, 9  
e) 2, 3, 4, 6, 8, 9

Answer : b)

Q10.

Which method(s) must be defined by a class implementing the java.lang.Runnable interface?

- a) public void init()  
b) public void run()  
c) public void start()  
d) public void runnable()

Answer : b)

Q11.

What is the value of the variable x after this line of code has been executed?

```
double x = Math.round ( 5.5 + Math.random() );
```

- a) 5  
b) 6  
c) Any random number in between 5.5 and 6.4  
d) An arbitrary integer

Answer : d)

**Q12.**

Which of the following statement will calculate the area of a circle when we pass the radius value from command prompt using "Area 5.1". → assuming Area . is the class file name.

- a) double area = Math.PI\*Double.parseDouble(args[0])\*Double.parseDouble(args[0]);
- b) double area = Math.PI\*Double.parseDouble(args[1])\*Double.parseDouble(args[1]);
- c) double area = Math.PI\* args[0]\*args[0];
- d) double area = Math.PI\* args[1]\*args[1];

Answer : a)

**Q13.**

What is the most restrictive access modifier that will allow members of one class to have access to members of another class in the same package?

- a) Public
- b) Abstract
- c) Protected
- d) default access

Answer : c)

X

**Q14.**

Which of the following is/are legal method declarations?

- a) protected abstract void m1();
- b) static final void m1(){};
- c) synchronized public final void m1() {}
- d) private native void m1();

Answer : a b c

X

**Q15.**

Which of the following(s) will cause compiler error?

- a) int[ ] scores = {1, 2, 3};
- b) int [ ][ ] scores = {2,3,6}, {9,3,5};
- c) String cats[ ] = {"Fluffy", "Spot", "Zeus"};
- d) boolean results[ ] = new boolean [] {true, false, true};
- e) Integer results[ ] = {new Integer(3), new Integer(5), new Integer(8)};

Answer : b,d

X

**Q16.**

Which of the following class level variable declarations will not compile?

- a) final protected int a;
- b) transient int b = 3;
- c) private synchronized int e;
- d) volatile int d;

Answer : a, c

X

**Q17.**

Which collection class(es) allows growing or shrinking of its size and provides indexed access to its elements, but the methods are not synchronized?

- a) java.util.HashSet
- b) java.util.LinkedHashSet
- c) java.util.List
- d) java.util.ArrayList

Answer : a, d

X

**Q18.**

Which is valid declaration of a float?

- a) float f = 1F;
- b) float f = 1.0;
- c) float f = "1";
- d) float f = 1.0d;

Answer : b)

|

**Q19.**

- 1. run
- 2. import
- 3. default
- 4. implement
- 5. native
- 6. volatile
- 7. foo

Which of the given are not Java reserved words?

- a) 1 and 2
- b) 2 and 3
- c) 3 and 4
- d) 1, 4 and 7
- e) Only 7

Answer : d)

1

**Q20.**

Which of the following(s) is/are true in case of Java?

- a) Frame is a subclass of Container
- b) Button is class of awt package
- c) JButton is class of swing package
- d) Menu is class of swing package

Answer : a, b, c

1

**Q21.**

The arguments of setBounds(p, q, r, s) method of a GUI component in Java indicates the following

- a) x position, y position, height, width
- b) x position, y position, width, height
- c) height, width, x position, y position
- d) width, height, x position, y position

Answer : b)

✓

**Q22.**

The event class that handles when a component gains or loses keyboard focus is

- a) FocusEvent
- b) MouseEvent
- c) HighlightEvent
- d) KeyboardFocusEvent

Answer : a)

1

**Q23.**

Which of the following(s) is/are true in case of Java?

- a) read() method of FileInputStream reads character by character
- b) read() method of FileInputStream reads byte by byte
- c) read() method of FileReader reads character by character
- d) read() method of FileReader reads byte by byte

Answer : b, c

1

**Q24.**

Which of the following(s) is/are a valid constructor of BufferedReader?

- a) BufferedReader(FileReader fr);
- b) BufferedReader(File f);
- c) BufferedReader(FileReader fr, int x);
- d) BufferedReader(File f, int x);

Answer : a, c

1

**Q25.**

Object serialization in Java is

- a) To assign serial numbers to the objects created
- b) To allow creation of objects that have inbuilt serial numbers
- c) To convert the objects into byte stream for further processing
- d) To save the object in hard-disk

Serialization allows the conversion  
of object into a byte

Answer : c

1

Stream, so that this stream can be  
written to save a file.

**Q26.**

Which of the following(s) is/are true in the context of network programming in Java under TCP model?

- a) Clients wait for a connection from server
- b) Both server and client need to create socket for the connection
- c) Support is available from packages java.net and javax.swing
- d) Both server and client need to open Input stream for establishing connection

Answer : b,d

X

**Q27.**

Which of the following(s) is/are true in the context of network programming in Java under UDP model?

- a) DatagramPacket objects are sent over the network
- b) DatagramPacket objects along with Datagram sockets are sent over the network
- c) Client and server processes must be on the same host
- d) Client and server processes must be on the same network

Answer : b,d

X

**Q28.**

What does the regular expression [a-z&&[^pq]] mean?

- a) a through z, except p and q
- b) a through z, except p or q
- c) a through z, except p concatenated by q
- d) Not a valid expression

Answer : c

X

**Q29.**

What is the return type of the hashCode() method in the Object class?

- a) object
- b) int
- c) long
- d) void

Answer : a)

X

**Q30.**

Which of these method of String class is used to obtain character at specified index?

- a) char()
- b) Charat()
- c) charat()
- d) charAt()

Answer : d)

1

**Q31.**

Which of the following statements are incorrect?

- a) String is a class
- b) Strings in java are mutable
- c) Every string is an object of class String
- d) Java defines a peer class of String, called StringBuffer, which allows string to be altered

Answer : b

1

**Q32.**

Let P be a quicksort program to sort number in ascending order using 1st element as the pivot. Let t1 and t2 be the number of comparisons made by P for the inputs [1 2 3 4 5] and [4 1 5 3 2] respectively. Which one of the following holds?

- a) t1 = 5
- b) t1 < t2
- c) t1 > t2
- d) t1 = t2

X

Answer : b)

Q33.

```
import java.io.*;
class serialization {
    public static void main(String[] args) {
        try {
            Myclass object1 = new Myclass("Hello", -7, 2.1e10);
            FileOutputStream fos = new FileOutputStream("serial");
            ObjectOutputStream oos = new ObjectOutputStream(fos);
            oos.writeObject(object1);
            oos.flush();
            oos.close();
        } catch(Exception e) {
            System.out.println("Serialization" + e);
            System.exit(0);
        }
        try {
            Myclass object2;
            FileInputStream fis = new FileInputStream("serial");
            ObjectInputStream ois = new ObjectInputStream(fis);
            object2 = (Myclass)ois.readObject();
            ois.close();
            System.out.println(object2);
        } catch (Exception e) {
            System.out.print("deserialization" + e);
            System.exit(0);
        }
    }
}
class Myclass implements Serializable {
    String s;
    int i;
    double d;
    Myclass (String s, int i, double d) {
        this.d = d;
        this.i = i;
        this.s = s;
    }
}
```

What will be the output of the above Java program?

- a) s=Hello; i=-7; d=2.1E10
- b) Hello; -7; 2.1E10
- c) s; i; 2.1E10
- d) Serialization

Answer : b)

2

Q34.

```
import java.io.*;
class Fileinputoutput
{
    public static void main(String args[])
    {
        InputStream obj = new
FileInputStream("inputoutput.java");
        System.out.print(obj.available());
    }
}
```

What will be the output of the given Java program?

Note: inputoutput.java is stored in the disk.

- a) true
- b) false
- c) prints number of bytes in file
- d) prints number of characters in the file

Answer : a)

2

**Q35.**

What is the output of the below code snippet with Short class object?

```
Short sh = Short.valueOf(10);  
System.out.println(sh);  
a) 10  
b) 0  
c) Compiler error  
d) None
```

Answer : b)

✗

**Q36.**

```
class Main {  
    public static void main(String args[]) {  
        final int test;  
        test = 20;  
        System.out.println(test);  
    }  
}
```

Consider the Java code segment and choose the correct output(s).

- a) 20
- b) Compiler Error
- c) 0
- d) Garbage value

Answer : b)

✗

**Q37.**

```
class Test {  
    final static int x;  
    static {  
        x = 10;  
    }  
    public static void main(String[] args) {  
        System.out.println(x);  
    }  
}  
  
class Main {  
    public static void main(String args[]) {  
        Test t = new Test();  
        System.out.println(t.test);  
    }  
}
```

Consider the Java code segment above and choose the correct output(s).

- a) Compiler error
- b) Runtime error
- c) Garbage value
- d) 10

Answer : a)

✗

**Q38.**

```
public class Test {  
    public static void main(String[] args) {  
        ArrayDeque<Integer> deque =  
        new ArrayDeque<Integer>();  
        deque.push(1);  
        deque.push(2);  
        deque.push(3);  
        deque.poll();  
        System.out.println(deque);  
    }  
}
```

Consider the Java code segment and choose the correct output(s).

- a) [1, 2, 3]
- b) [1, 2]
- c) [2, 1]
- d) Runtime error

Answer : b)

✗