

(XXXX) 2 MARKS (XXXX)

1.

```
class Building
{
    Building()
    {
        System.out.println("Building");
    }
    Building(String name)
    {
        this();
        System.out.println("Building: String Constructor" + name);
    }
}

public class House extends Building
{
    House()
    {
        System.out.println("House ");
    }
    House(String name)
    {
        this();
        System.out.println("House: String Constructor" + name);
    }
    public static void main(String[] args)
    {
        new House("XYZ");
    }
}
```

(A) Which of these is correct way of inheriting class A by class B ?

- Class B + Class A {
- Class B inherits class A {}
- **Class B extends A {}**
- Class B extends class A {}

(B) All classes in java are inherited from which class?

- Java.lang.class
- Java.class.inherited
- Java.class.object
- **Java.lang.object**

(C) What is the use of "this" method in above code ?

- This is used to initialize constructor
- This keyword refers to the parent object
- **This keyword refers to the current object**
- None

(D) What would be the result if a class implements two interfaces and both have a method with the same name and signature? Let's assume that the class is not implementing that method.

- Runtime Error
- **Compile time error**
- Codes run successfully
- First call method is executed successfully

(E) What is the output of the above code?

- **Building House House: String ConstructorXYZ**
- Building House XYZ
- Building House House: String Constructor
- House House : String Constructor House : String ConstructorXYZ

2. (2 Marks)

```
class display {
    int x;
    void show() {
        if (x > 1)
            System.out.print(x + " ");
    }
}

class packages {
    public static void main(String args[]) {
        display[] arr = new display[3];
        for (int i = 0; i < 3; i++)
            arr[i] = new display();
        arr[0].x = 0;
        arr[1].x = 1;
        arr[2].x = 2;
        for (int i = 0; i < 3; ++i)
```

```
arr[i].show();  
}  
}
```

(A) Packages that are inside another package are known as?

- Packages
- Nested Packages
- Util subpackages
- **Subpackages**

(B) What is the correct output of program?

- 0 1 2
- Compile time error
- 0
- **2**

(C) Which of the following package stores all the standard java classes?

- Lang
- **Java**
- Java.packages
- Util

(D) What will be the output if `if(x>1)` will be changed as `if (x<1)` ?

- 0 1 2
- 2
- **0**
- Compile time error

(E) What will be the result if both for loop will be changed to `for (int i=0;i>3;i++)` ?

- **Java.lang.NullPointerException**
- 0 1 2
- Run time error
- 0

3.

```
class demo  
{  
    int a, b;  
  
    demo()  
    {  
        a = 10;  
        b = 20;  
    }  
}
```

```

    public void print()
    {
        System.out.println ("a = " + a + " b = " + b + "\n");
    }
}

```

```

class Test
{

```

```

    public static void main(String[] args)
    {
        demo obj1 = new demo();
        demo obj2 = obj1;

        obj1.a += 1;
        obj1.b += 1;

        System.out.println ("values of obj1 : ");
        obj1.print();
        System.out.println ("values of obj2 : ");
        obj2.print();
    }
}

```

(A) What is true about private constructor? (2 Marks)

- **Private constructor ensures only one instance of a class exist at any point of time**
- Private constructor ensures multiple instances of a class exist at any point of time
- Private constructor eases the instantiation of a class
- Private constructor allows creating objects in other classes.

(B) Which of the following has the highest memory requirement? (2 Marks)

- Heap
- Stack
- **JVM**
- Class

(C) In order to restrict a variable of a class from inheriting to subclass. How variables should be declared? (2 Marks)

- Protected
- **Private**
- Public
- Static

(D) When object of class is initialized, then which constructor is to be called? (2 Marks)

- Copy constructor
- **Default Constructor**
- Parameterized Constructor
- None of these

(E) Which of this statement is incorrect? (2 Marks)

- All objects of a class are allotted memory for all the variables defined in the class
- If a function is defined public it can be accessed by object of other class by inheritance.
- `main()` method must be made public
- **All objects of a class are allotted memory for the methods defined in the class**

4.

```
import java.io.*;
interface In1
{
    final int a = 10;
    void display();
}
class TestClass implements In1
{
    public void display()
    {
        System.out.print("java");
    }
    public static void main (String[] args)
    {
        TestClass t = new TestClass();
        t.display();
        System.out.println(a);
    }
}
```

(A) Guess the result of your program if object creation will be like `TestClass t= new In1();` ? (2 Marks)

- Java 10
- **In 1 is abstract; cannot be instantiated**
- Runtime Error
- Null

(NOT CONFIRM)

(B) A Java interface can contain \_\_\_\_\_? (2 Marks)

- Public static final variables only
- Public Abstract methods
- Abstract methods (unimplemented) and implemented methods both

- **Public static final variable and abstract methods both**

(C).What will be the output if value of a variable will be changed from 10 to 20 in child class? (2 Marks)

- Java 20
- Compile Time Error
- 20
- Runtime error

(SORRY)

(D) What is the correct output of program? (2 Marks)

- Java 10
- Compile time Error
- **Java10**
- Runtime Error

(E)What is need of interface? (2 Marks)

- **To achieve total abstraction**
- To achieve tight coupling
- Because interface can be instantiated directly
- To inherit parent progress

(XXXX) 1 MARKS (XXXX)

5.

```
class Matrix{
    public static void main(String args[]){
        int a[][]={{1,3,4},{2,4,3},{3,4,5}};
        int b[][]={{1,3,4},{2,4,3},{1,2,4}};
        int c[][]=new int[3][3];
        for(int i=0;i<3;i++){
            for(int j=0;j<3;j++){
                c[i][j]=a[i][j]+b[i][j];
                System.out.print(c[i][j]+" ");
            }
        }
        System.out.println();//new line
    }
}
```

(A) If I want to add `String b[][]={{“priya”, “teena”, “niti”}, {“reema”, “shruti”, “granny”}, { “tipsy”, “shainy”, “amrita”}}` with array `a` then What will be the result?

- Runtime Error
- **Compile Time Error**
- 1+priya 3+teena 4+niti 2+reema 4+shruti 3+granny 3+tipsy 4+shainy 5+amrita
- 1priya 3teena 4niti 2reema 4shruti

(B) What will be the output if instead of `system.out.println(c[i][j]+“ ”)` if `system.out.println(c)` is to be used out?

- **HashCode**
- 4 6 8 2 6 8 4 6 9
- Compile time error
- Runtime Error

(C) What is the correct output of program?

- **2 6 8 4 8 6 4 6 9**
- 2 6 8 4 6 8 4 6 9
- 2 6 8 4 6 9 4 8 6
- 4 6 8 2 6 8 4 6 9

(D) What will be the output if instead of `for(int j=0;j<3;j++)`, `for (int j=0; j>3; j++)` will be used out?

- **No output**
- Compile Time Error
- Runtime Error
- 2 6 8 4 6 9 4 8 6

(E) If I want to add `int b[][]={{1,3,4}, {2,4,3}}` with array `a` then what will be the output?

- Runtime Error
- Compile time error
- **ArrayIndexOutOfBoundsException (correct solution)**
- Syntax Error

6.

```
Abstract class A {  
    Abstract void callme();
```

```
    void callmetoo() {  
        System.out.println("This is a normal method.");  
    }  
}
```

```
class B extends A {  
    void callme() {  
        System.out.println("B's implementation of callme.");  
    }  
}  
  
class XYZ {  
    public static void main(String args[]) {  
        B obj = new B();  
        obj.callme();  
        obj.callmetoo();  
    }  
}
```

(A) Abstract method having?

- Body written inside
- Body written outside
- **No body**
- All of the above

(B) Which of these is not abstract?

- **Thread**
- ArrayList
- List
- None of the mentioned.

(C) Abstract class provide?

- **0-100% abstraction**
- 100% Abstraction
- No abstraction
- All of these

(D) Abstract class is used to create?

- Object,
- **Abstraction**
- Encapsulation
- Inheritance

(E) Abstract class having?

- Abstract Method
- Non- abstract method
- **Both a and b**
- None of these



7.

```
class ABC
{
    public static void main(String args[])
    {
        int x = 2;
        int y = 0;
        for ( ; y < 10; ++y)
        {
            if (y % x == 0)
                continue;
            else if (y == 8)
                break;
            else
                System.out.print(y + " ");
        }
    }
}
```

(A) Which of these are selection statements in java ?

- **If ()**
- For ()
- Continue
- Break

(B) What will be the output of the following java program ?

- 1 3 5 7
- 2 4 6 8
- **1 3 5 7 9**
- 1 2 3 4 5 6 7 8 9

(C) Which of these jump statements can skip processing the remainder of the code in its body for a particular iteration?

- Break
- Return
- Exit
- **Continue**

(D) What is true about a break ?

- Break stops the execution of entire program
- **Break halts the execution and forces the control out of the loop**
- Break forces the control out of the loop and starts the execution of next iteration
- Break halts the execution of the loop for certain time frame

(E) Which of the following is not a valid jump statement ?

- Break
- **Goto**
- Continue
- Return

8.

```
class conversion {
public static void main(String args[])
{
    double a = 295.04;
    int b = 300;
    byte c = (byte) a;
    byte d = (byte) b;
    System.out.println(c + " " + d);
}
}
```

(A)What will be the output of the following java code?

- 38 43
- **39 44**
- 295 300
- 295.04 300

(B)What is the numerical range of a char data type in java?

- -128 to 127
- 0 to 256
- 0 to 32767
- **0 to 65535**

(C)If an expression contains double,int,float,long,then the whole expression will be promoted into which of these data types?

- Long
- Int
- **Double**
- Float

(D) Which of these is necessary condition for automatic type conversion in java?

- The destination type is smaller than source type
- **The destination type is larger than source type**
- The destination type can be larger or smaller than source type
- None of the mentioned

(E)What is the range of bytes data type in java ?

- **( -128 to 127)**
- -32768 to 32767
- (-2147483648 to 2147483647)
- None of the mentioned

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