

# NR-126

November-2017

**T.Y., M.Sc., (CA & IT) Integrated**

**Core Java (OOPJ)**

**Time : 3 Hours]**

**[Max. Marks : 100**

1. (a) Attempt the following : (any **five**) **10**
- (1) What's the difference between constructors and normal methods ?
  - (2) What is Byte code ?
  - (3) Explain super keyword with example.
  - (4) What is the difference between an Abstract class and Interface ?
  - (5) What's the difference between the methods sleep( ) and wait( ) ?
  - (6) Explain Inheritance.
- (b) Find Error if any and Write output : **10**
- (1) 

```
public class Example
{
    Int x = 10;
    public static void main(String args[])
    {
        Example obj;
        System.out.println(obj.x);
    } }
```
  - (2) 

```
class Test {
public static void main(String args[])
{
    try{
        int x = 5 / 0;
    }
    catch (Exception e) {
        System.out.print("Exception");
    }
    catch (ArithmeticException e) {
        System.out.print("ArithmeticException");
    }
    System.out.println("Last Line");
} }
```

```
(3) class selection_statements
{
    public static void main(String args[])
    {
        int var1 = 5;
        int var2 = 6;
        if((var2=1) == var1)
            System.out.print(var2);
        else
            System.out.print(++var2);
    } }
```

```
(4) class Test1 {
public
static void main(String[] args)
{
    Int arr[] = {11,22,33};
    for (int i = 0; i < arr.length; i++)
        System.out.print(arr[i] + " ");
    System.out.println();
    int arr2[] = new int[3];
    arr2[] = {11,22,33};
    for (int i = 0; i < arr2.length; i++)
        System.out.print(arr2[i]+"");
    } }
```

```
(5) class Test1 {
    static int x = 10;
public
    static void main(String[] args)
    {
        Test1 t1 = new Test 1();
        Test1 t2 = newTest1();
        t1.x = 20;
        System.out.print(t1.x+"");
        System.out.println(t2.x);
    } }
```

2. (a) Attempt the following : (any **two**) **14**
- (1) Explain final class and final method with example.
  - (2) What is Wrapper class ? Explain with example.
  - (3) Write the difference between method overloading and method overriding in detail.
- (b) Explain following : (any **two**) **6**
- (1) Static Method
  - (2) This keyword
  - (3) Abstract method
3. (a) Attempt the following : (any **two**) **14**
- (1) What is Exceptional Handling ? Explain multiple catch block with example.
  - (2) What is Dynamic Polymorphism ? Explain with example.
  - (3) Explain Package Access protection.
- (b) Explain following : (any **two**) **6**
- (1) Auto Boxing
  - (2) Adopter class
  - (3) Thread Priority
4. (a) Attempt the following : (any **two**) **14**
- (1) Discuss FileReader class, File Writer class with example.
  - (2) Explain Applet Life Cycle in detail.
  - (3) Define synchronization. Show how problem of synchronization can be resolved with appropriate example.
- (b) Explain following : (any **two**) **6**
- (1) Garbage collection
  - (2) Throws
  - (3) Event Listener

5. Explain following in detail : (any **four**)

**20**

- (1) Interface
  - (2) Layout Manager
  - (3) Abstract class
  - (4) Action Event
  - (5) Custom Exception Handling
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