

Section-A — Marks: 12

Max. Marks: 20

Attempt any 3 questions. All questions carry equal marks.

Q1. Describe different java access specifiers with example. (4 marks)

Q2. State the errors (if any) and give the output (if no errors found) (4 marks)

```
(a) class Main {  
    public static void main(String args[]) {  
        try {  
            throw 10;  
        }  
        catch(int e) {  
            System.out.println("Got the Exception " + e);  
        }  
    }  
}
```

```
(b) class Test  
{  
    public static void main (String[] args)  
    {  
        try  
        {  
            int a = 0;  
            System.out.println ("a = " + a + "\n");  
            int b = 20 / a;  
            System.out.println ("b = " + b);  
        }  
  
        catch(ArithmeticException e)  
        {  
            System.out.println ("Divide by zero error");  
        }  
  
        finally  
        {  
            System.out.println ("inside the finally block");  
        }  
    }  
}
```

Q3. Write a Java Program to reverse a number and check whether it is a palindrome or not. (4 marks)

Q4. (4 marks)

- a) State the difference between method overloading and method overriding.
- b) How Packages differ from Interfaces? Explain it with a suitable program.

Section-B (Compulsory Section) — Mark: 08

Q1. WAP to create a super class called figure that stores the dimensions of a two dimensional object. It also defines a method called area () that computes the area of an object. The program derives two sub classes from figure. The first is rectangle and the second is Triangle. Each of these subclasses overrides area (), so that it returns the area of a rectangle and a triangle respectively. (4 marks)

Q2. What is a constructor in Java? How many types of constructors are there in Java? Explain with examples. (4 marks)