MODULE TEST

LOGIC BUILDING AND PROBLEM SOLVING

Subjective Section

(Marks – 40)

I. What will be the output of the following java codes? [10 X 2 =20]

(a) public class arrayoutput

```
{
public static void main(String args[])
{
    int arr[] = {10, 20, 30, 40, 50};
    for(int i=0; i < arr.length; i++)
    {
        System.out.print(" " + arr[i]);
    }
}
}
```

(b) public class output

```
{
```

```
        public static void main(String args[])
            {
            String c = "Hello i love java";
            boolean var;
            var = c.startsWith("hello");
            System.out.println(var);
            }
    }
```

(c)
```
public class Output
    {
        public static void main(String args[])
            {
            double x = 2.0;
            double y = 3.0;
            double z = Math.pow( x, y );
            System.out.print(z);
            }
    }
```

(d) public 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);
        }
}
```

(e)

```
public class box
    {
        int width;
        int height;
        int length;
        int volume;
        void volume(int height, int length, int width)
        {
        volume = width*height*length;
```

```
        }
    }
    public class Prameterized_method
    {
        public static void main(String args[])
        {
        box obj = new box();
        obj.height = 1;
        obj.length = 5;
            obj.width = 5;
        obj.volume(3,2,1);
        System.out.println(obj.volume);
        }
    }
```

(f) public class output

```
    {
        public static void main(String args[])
        {
        String s1 = "Hello";
        String s2 = s1.replace('l','w');
```

```
            System.out.println(s2);
            }
    }
```

(g) public class output

```
   {
        public static void main(String args[])
        {
        String s1 = "Hello World";
        String s2 = s1.substring(0 , 4);
        System.out.println(s2);
        }
  }
```

(h) public class output

```
    {
            public static void main(String args[])
            {
            String s = "Hello World";
            int i = s.indexOf('o');
            int j = s.lastIndexOf('l');
            System.out.print(i + " " + j);
```

```
        }
    }
```

(i) public class output

```
  {
            public static void main(String args[])
            {
            String chars[] = {"a", "b", "c", "a", "c"};
            for (int i = 0; i < chars.length; ++i)
                        for (int j = i + 1; j < chars.length; ++j)
                              if(chars[i].compareTo(chars[j]) == 0)
                                          System.out.print(chars[j]);
            }
    }
```

(j) public class output

```
  {
            public static void main(String args[])
            {
            String[] nums = new String[] { "1", "9", "10" };
            Arrays.sort(nums);
            System.out.println(Arrays.toString(nums));
```

```
    }
}
```

II. Write Java Programs [4 X5= 20]

(a) To add two matrices using multi-dimensional array

(b) To calculate average taking array elements from user

(c) To extract the first digit from a positive integer using method

(d) To display the middle character of a string