|  |  |
| --- | --- |
| **CSE1206 : Object Oriented Programming Lab Fall 2018** | **Set- A** |

**Online: 3 Date: 7 February, 2019 Group: C1 Time: 25 minutes**

**ID:**

**Marks**

|  |  |
| --- | --- |
| 1. Create a Java Project Named ‘**TestSphere**’. Inside this project (folder) create a new class named ‘**Sphere**’. Inside the **Sphere** class create 3 private variables:   sphereNo (int), color (String), radius (double). Create necessary constructors. | 3 |
| 1. Inside the Sphere Class create two overloaded methods:   public double getArea(Sphere ara[], String findByNum) || Search By sphereNo  public double getArea(Sphere ara[], String findByColor) || Search By color  These methods search for the Sphere object from the Sphere array using the search type given in the 2nd parameter of the method . If object found then calculates the area of the sphere and returns it, otherwise return 0.0  Area of Sphere = 4 x 3.1416 x Radius x Radius | 2+2 |
| 1. Inside the TestSphere class create an array of Class Sphere of size 3.   Assign values as follows:  101, Red, 4  102, Blue, 3  103, Green, 2  Call the two methods of Sphere class by creating a new object.  For the 1st Method, search using value 102  and for the 2nd one, search using “Violet”  **\*you’ll get extra marks if you take the search values as user input.** | 3 |

**Total: 10**

|  |
| --- |
| Sample Output |
| Area of Sphere Searched by ID 102 is 113.0976  Area of Sphere Searched by color is 0.0 |