

SSN College of Engineering
Department of Computer Science and Engineering
UCS1313 – Object Oriented Programming Using Java Lab
II Year CSE - B Section (III Semester)

Academic Year 2019-20

Lab Test (21/09/2019)

For Even Numbers

1. Draw the class diagram for the below problem. (10)
2. Create a package “MyPack” which contains an interface Shape3D with the variable $\pi=3.14$ and the following methods:
calVolume() and calSurfaceArea(). (10)
3. In the same package create a class Sphere, Cube which implements Shape3D. Have constructor to initialize the fields. (10)
Hint: Cube Volume= a^3 ; Cube Surface Area= $6 a^2$;
Sphere Volume= $\frac{4}{3} * \pi * r^3$; Sphere Surface Area= $4 * \pi * r^2$;
4. For the invalid input to side (a) or radius (r), throw “NumberFormatException” and handle the exception. (10)
5. Outside the package create a class named Test which includes the Sphere and Cube. Create an object for Sphere and Cube and display the details of each using polymorphism. Raise the exception for the invalid input. (10)

=====BEST OF LUCK=====