

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 (18/09/2019)

For Odd Numbers

1. Draw the class diagram for the below problem. (10)
2. Create a package named “MyPack” with a Shape as a class. Shape contains dim1 as private member. Have constructor to initialize the field. Declare calVolume(), surfaceArea() as *abstract* methods. (10)
3. In the same package create a class Cylinder inherits from Shape. Cylinder contain color, dim1, dim2 as private fields. Have constructor to initialize the fields. Add the function display() to Cylinder which returns color, dim1, dim2, volume and surface area of the cylinder. (10)
Hint: cylinder volume = $\pi r^2 h$; cylinder surface area = $2 \pi r h + 2 \pi r^2$
4. For the invalid input to dim1, dim2 throw “NumberFormatException” and handle the exception in main. (10)
5. In outside package create a class named Test which includes the Cylinder class in package. Create an object for Cylinder and display the volume and surface area of cylinder. Raise and handle the exception for the invalid input. (10)

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