NATIONAL INSTITUTE OF TRANSPORT (NIT)
ASSIGNMENT 1

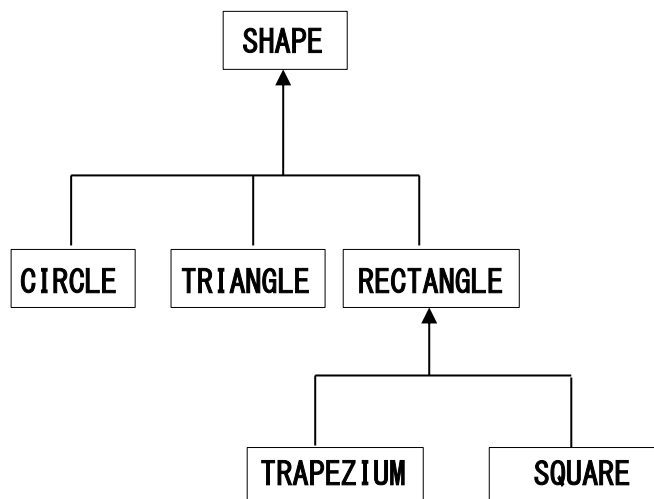| Module Code: ITU 07302 SYSTEM ANALYSIS AND DESIGN	Instructions: Group Work: 5 Participants Deadline: 7th January, 2020

OBJECT ORIENTED PROGRAMMING ASSIGNMENT

Using object-oriented programming language of your choice, create 4 concrete classes of CIRCLE, TRIANGLE, TRAPEZIUM and SQUARE based on a base class named "SHAPE". Using the inheritance and abstraction concept of OOP, define variables and methods in the "SHAPE" class that are common to the Circle, Triangle, Rectangle classes.

Shape class should contain an **abstract** "draw method" that can be used to draw the shape of the particular object. Any class that inherits the shape class must override the draw method, making it peculiar for that particular class.

You can design you classes as follows:

DESIRED RESULTS:

Design your codes in such a way that the following basic characteristics are implemented and clearly illustrated:

1. C Classes
2. O Objects
3. M Methods
4. P Polymorphism
5. I Inheritance
   (Last, but not least)
6. E Encapsulation