**Assigment.**

Fluid Mechanics 1

## Q.NO (01)

   **a)** Derive newton equation of Viscosity.

   **b)** Define density,specific weight and specific volume.Show relation between Density and specific weight.

   **c)** If specific volume of gas is 0.72 $m^3$/kg.What is specific weight in $kN/m^3$ ?

## Q.NO (02)

   a) What is an absolute and guage pressure?

   b) A water tank having dimesions of 1200mm x 1200mm. Depth of the water tank is equal to half of number of your student ID number in mm. What is the net pressure force on wall of water tank? Find the location of force application? IF the water level drops to the half of the depth , what will be the force and point of application of force ?