Practical No.2

OBJECT: To demonstrate on simple manometer.

APPARATUS:

* Vacuum or positive pressure creator
* Simple manometer
* Mercury

THEORY:

A simple all glass manometer, which can be used for measuring the pressures from 0.1mm to 0.001mm. has been described. The manometer consists of a thermometer enclosed in atube. The pressure measurement isdone by measuring the time required to cool the thermometer form agiven temperature to the other under a given condigtion. Using a thermometer of long mercury bulb and limitin the operating temperature tange so narrow that thae Newton’s law of cooling hols.

Let, Z-Z be the datm line.

Let,

Pressure above the datum line in left limb of manometer = *h*

Similarly in right limb………………………………………………………..=

Therefore: h = ⇒ h = -

Calculation:

h = -

h = (60×13.6) – (50×1) = 766mm

h= 0.766m