**OBJECT:**

To study the flow rate with the help of flow meter

**APPARATUS:**

Hydraulic bench. Floe meter

**THEORY**:

**Flow meter**: a flow meter is an instrument used to measure linear, nonlinear, mass or volumetric flow rate of liquid or gas. It consists of tube with scale represent the unit in liter per second.

**THE HYDRAULIC BENCH:**

It provides facilities for performing a number of hydraulic experiments. A small centrifugal pump drawing water from sump which lies blow the bench delivers to experimental apparatus placed on top bench. The flow rate is controlled by valve in supply lin and measured before return to dump from recirculation. Using weight –time method the discharge is measured by timing the filling of a tank that is counter weighted.

**PROCEDURE:**

Check the water is filled in tank.

Attach with tank by help of fast fixture pipes.

Connect supply of pump with input of water flow meter and output of flow meter the channel of hydraulic bench.

Plug the switch to electrical supply.

Start out the pump of hydraulic bench from the panel.

Open the valve first partially then fully and observe the flow rate as indicated by the flow meter display.

Observe the display for at least 20 sec.

Make the low rate is steady.

**Result:**

Reading with partially open valve=

Reading the fully open valve=