**VENTURI METER**

Apparatus used:

Venturi meter, differential manometer, collecting tank, piezometer, stopwatch, measuring scale.

**STEP:➊** A pipe of required diameter is selected and others are kept in the closed position.

**STEP:❷** The main inlet valve is opened to allow water to flow through the selected diameter pipe. Open the pipe valve, and change the knot of manometer from isolate position to air-vent position to remove the air inside the pipe.

**STEP:➌** The knob is then kept in the read position.

**STEP:➍** Water is now allowed to flow through the selected venturimeter and this flow is made constant. At this flow rate the difference in pressure between inlet and throat is measured.

**STEP:➎** The exit valve of the collecting tank is closed and time taken for the tank water to rise by 10cm is noted.

**STEP:➏** The experimental steps mentioned above is repeated in different trials by varying the flow rate by adjusting supply valve.

**STEP:➐** Theoretical discharge, Qth is determined by using the formula



**STEP:➑** A plot of Qact v/s H is plotted and the value of K is determined graphically. Cd is calculated using the formula

