

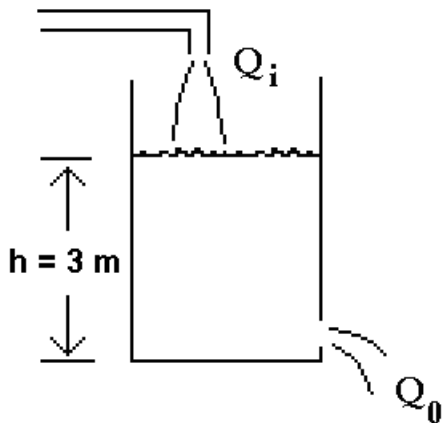
**TOPIC**

Fluids – Section X – Question 5

**QUESTION**

Consider the water storage tank shown below.  $Q_i$  and  $Q_o$  are the volumetric flow rates at the inlet and outlet, respectively and  $h$  is the liquid level height in the tank. The orifice at the bottom of the tank is sharp edged and has a diameter of 2 cm. The inlet flow rate  $Q_i$  required to maintain a constant liquid level of 3 m is (in  $\text{m}^3/\text{s}$ ) most nearly is

- (A) 0.0015
- (B) 0.0024
- (C) 0.0058
- (D) 0.0096

**CONTRIBUTOR**

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