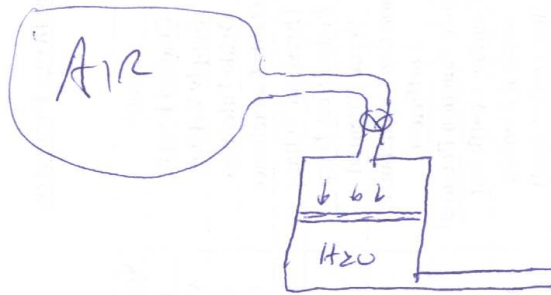


Hemodynamic Simulator II (P09026)

Level 2 Calculations

HELMHOLTZ RESONATOR THEORY

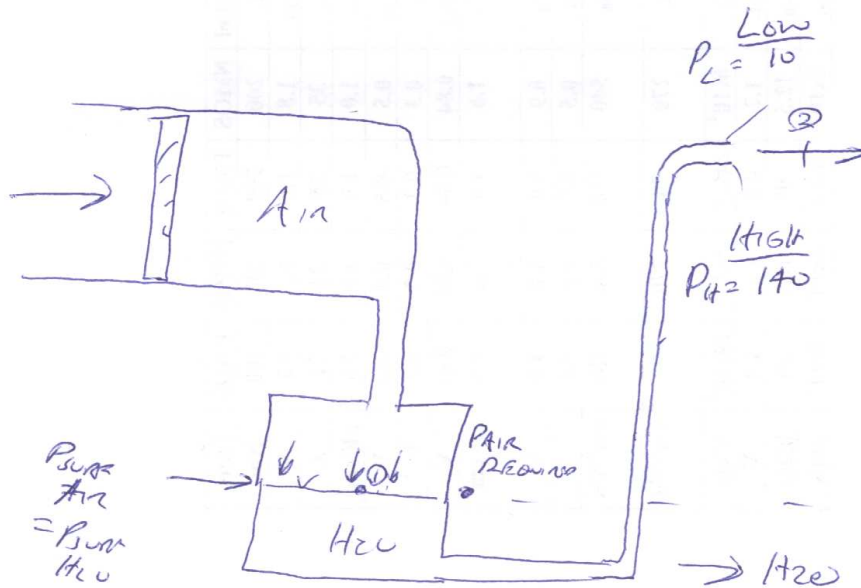
$H_{loss} = H_{inert} + H_{exp}$
Expansion



$$\frac{P_1}{\rho} + \frac{V_1^2}{2g} + Z_1 = \frac{P_2}{\rho} + \frac{V_2^2}{2g} + Z_2 + H_{loss}$$

$$H_{inert} = f \frac{L}{D} V_2^2$$

$H_{inert} \Rightarrow$ Entrance, Exit, Curves, Exit



$$\dot{V} = 5 \frac{L}{min}$$

Compression

$$Z_1 = 0$$

P_{Low}
 P_{High}