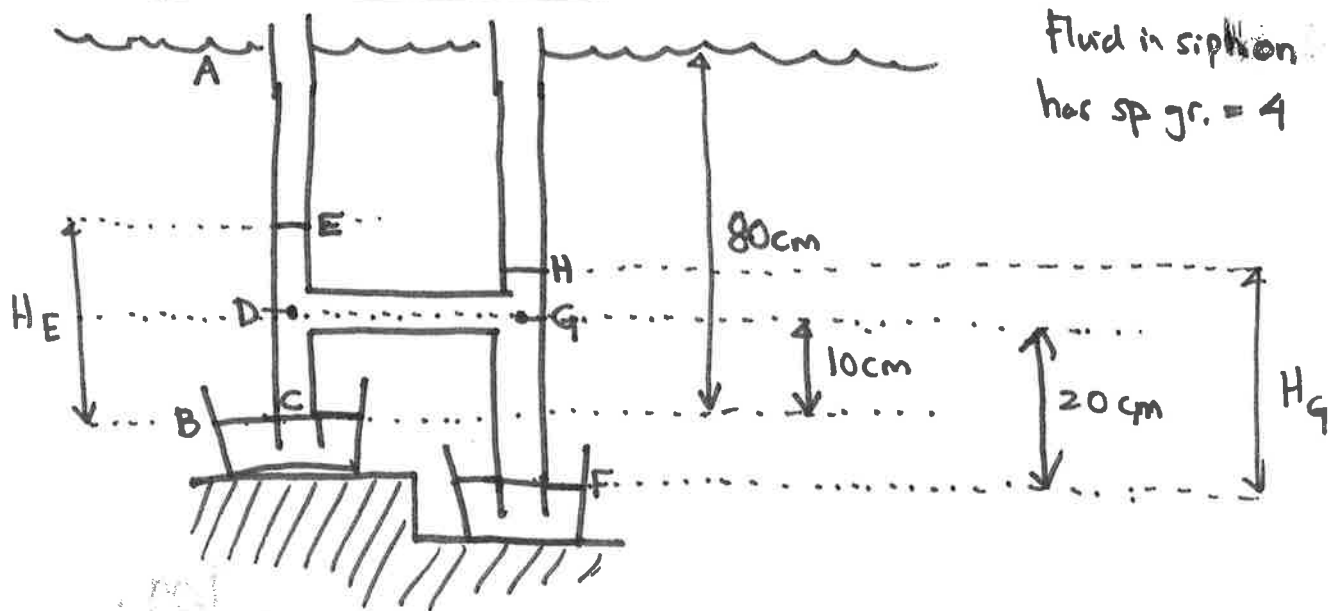


### Ex 16.1 Valved Siphon



a)  $P_A = 0 \text{ atm (ambient pressure)} = 0 \text{ mm H}_2\text{O}$

$P_B = 800 \text{ mm H}_2\text{O}$

$P_C = 800 \text{ mm H}_2\text{O}$

$P_D = 400 \text{ mm H}_2\text{O}$

$H_E = 200 \text{ mm}$

b)  $P_F = 900 \text{ mm H}_2\text{O}$

$P_G = \left(\frac{25}{225}\right) 900 \text{ mm H}_2\text{O} = 100 \text{ mm H}_2\text{O}$

$H_G = 225 \text{ mm}$

c)  $P_D > P_G$ , so when the valve is opened, fluid flows rightward

d)  $H_E$  will never equal  $H_G$  unless the height of the fluids in the submerged buckets are equalized